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# REGULATIONS AND SMALL BUSINESS IN THE EU, USA, AND UK: A REVIEW

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*This paper provides a review of the literature on the compliance costs of regulations, borne by small firms in the EU, USA, and the UK. The paper concludes that although, in many advanced economies governments have been attempting to reduce the burden of regulations on business, there is little evidence of tangible progress. All of the countries studied offer best practice guidelines for assessing the costs of proposed regulations. However, despite the best efforts of government de-regulation and simplification initiatives which in some cases began in the early 1980's, there is little evidence that progress is being made in reducing or even containing the burden of regulations affecting small businesses in the countries reviewed.*

JEL N° H 290, K 200

## 1. Objectives

The purpose of this study is to provide a review of the literature on the impact of regulations on small firms in the EU, USA, and the UK.

This paper is arranged into four sections. Section two offers definitions of compliance costs. Section three presents the results of research studies on the levels of regulatory costs that have been conducted in the EU, USA, and the UK. Finally, section four presents the conclusions arising from this literature review.

## 2. Background and Definitions

Improving the business environment is considered to be of the highest priority, as the level of regulation imposed by governments is claimed to be one of the major obstacles to business success (UNICE, 1995). Small businesses are more severely affected than large companies because small firms are less proficient in dealing with the complexities of regulation and are unable to spread the costs of compliance across large scale operations.

The OECD (2000) has categorized regulations into three areas, which form the basis of this study:

- (a) Employment Regulations cover the hiring and firing of employees, complying with health and safety standards, the provision of facilities (e.g. for the disabled), statistical reporting of employment related data, social security and pensions rights and other employee related benefits such as, maternity and sick leave.
- (b) Environmental Regulations include licensing, permits, planning and environmental impact assessments; complying with regulations governing hazardous substances and materials; process and product quality standards; pollution control and product regulations; environmental reporting and testing; and administration requirements related to the environment, environmental levies etc.
- (c) Tax Regulations covering business taxes / corporate income tax, sales taxes and other taxes.

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<sup>1</sup> Acknowledgements: The authors wish to express their thanks to the Small Business Service and the Leverhulme Trust for funding this research. The views set out in this paper are not necessarily those of the sponsoring organizations.

2.1. Techniques for Estimating the Impact of Regulations

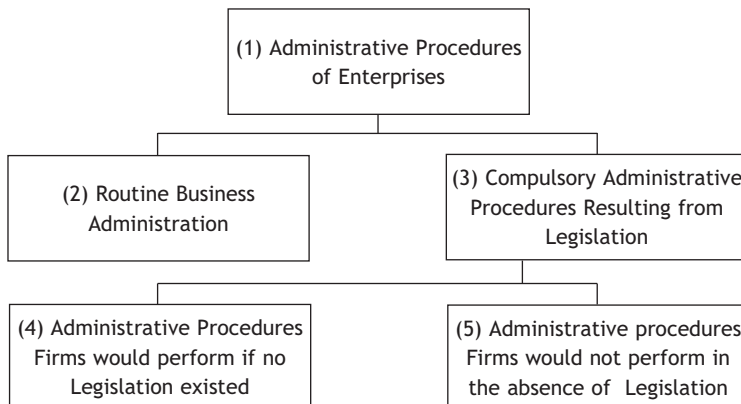
A variety of approaches can be adopted to estimate the impact of regulations. The most widely recognized technique is cost-benefit analysis (Froud et al, 1998; Pearce, 1998). Despite criticism, supporters of cost-benefit analysis claim that it is the best available technique to inform policy decisions and so improve economic efficiency (Pearce, 1998; Lutter, 2000; Hahn, 1998; Hahn/Litan, 1998).

Hahn and Hird (1991) describe five general approaches to estimating the costs of regulations. First, econometric studies that measure output markets directly or use production and cost functions to assess the impact of regulatory change. Second, expenditure evaluations that rely on surveys of businesses to determine compliance costs. Third, engineering approaches that estimate the cost of installing equipment directly in order to comply with a regulation. Fourth, productivity studies that estimate the difference between observed changes in productivity over time and those that would have occurred in the absence of a regulation. Finally, general equilibrium models are used to examine how a perfectly competitive market responds to a new policy, e.g. through changes in the levels of output or employment as a result of a new regulation.

The benefits of regulations are generally measured using two approaches. First, asking people what they are willing to pay for changes in regulatory standards. Second, inferring from observed behavior the amount actually paid for such changes (e.g. the value that workers place on safety is assumed to be the wage premium received by those working in more dangerous circumstances).

There are also a variety of general approaches to valuing the burdens of environmental regulations (Hahn/Hird, 1991; Hazilla/Kopp, 1990; Robinson, 1995; Ruteledge/Vogan, 1995). Approaches not already mentioned above include actuarial techniques; professional judgment based upon expert opinions; decision analysis such as probability distributions that are used in structuring expert judgment; and valuation approaches i.e. legal and economic techniques for placing monetary values on environmental consequences (usually used for the purposes of assessing compensation). In the Netherlands, a measurement instrument for administrative burdens (EIM, 1997) has been developed based upon a theoretical framework for assessing the compliance costs resulting from legislation (see Figure 1).

Figure 1: The Theoretical Framework



Source: EIM Small Business Research and Consultancy 1997

These techniques have been adapted and applied in reducing the administrative burdens on business through the Dutch "ACTAL" initiative (ACTAL, 2005). The Dutch Model for evaluating the administrative costs of regulations (often referred to as the Standard Cost Model) is now being adopted in the UK and it is reported that adaptations are also being used by nine EU states (BRTF, 2005). Figure 2 below presents an example of how the Standard Cost Model estimates the total costs of a regulation.

Figure 2: The Standard Cost Model for assessing the aggregate cost of a regulation

#### The Mechanics of the Standard Cost Model

Each information obligation associated with every regulation is separately identified. The regulatory burden imposed by each information obligation in euros per year is then estimated using the formula:

$$N \times W \times T$$

N = the number of businesses affected by the obligation

W = the hourly tariff of those involved in meeting the information obligation (formalized into low, medium or high)

T = the number of hours taken to meet the administrative obligation in a year

Multiplying the time taken by a business to fulfill the information obligations of a regulation by the appropriate hourly tariff and by the number of businesses affected allows the aggregate cost to business of meeting the information obligations of that regulation to be estimated.

For example, 1,000 farmers (N) might spend an average of five hours per year (T) informing the relevant Government Ministry of notifiable diseases under section 88 of the Animal Health Act 1981. If the average cost of a farmer's time were 75 Euros per hour (e.g. medium), the estimated Administrative Burden to business of that section of the Animal Health Act would be £ 50,000 Euros per annum.

The Standard Cost Model provides a stylized estimate of the Administrative Burden. It does not pretend to measure the true level of the Administrative Burden. Rather, it produces a standardized set of numbers which when aggregated together gives the government an overall picture of regulation, thereby enabling it to identify actions that will reduce the burden.

Source: BRTF 2005

### 3. Evidence on the Regulatory Burden

#### 3.1. The Costs and Benefits of Regulations in the EU

Before considering regulatory burdens in the EU, three issues require discussion. First, recent developments in the EU with regard assessing the costs and benefits of regulations, since regulatory reform has recently increased in importance. For example, the 2004 Four Presidencies initiative has been extended to six Presidencies and sets out a series of joint proposals designed to place regulatory reform at the heart of the EU agenda, spanning 2004, 2005 and 2006.

As a consequence of this momentum, procedures for competitiveness-testing of new EU regulations have been developed and Member States have agreed proposals for simplifying existing EU law in 2005. In response to these developments in the EU, Finance Ministers have called for further action to measure and control the administrative burden associated with new and existing laws, which the Commission will implement in a pilot phase starting in 2005.

According to the UK government (Pre-Budget Report, 2004) half of all significant new regulations affecting UK businesses originate in EU law. The European Movement claims this to be a gross exaggeration with a figure of only eight percent of UK regulations originating with the EU. More

recent evidence (Ambler, Chittenden and Hwang 2005) shows that the true figure for the UK, by value and volume, is roughly in the middle. If the UK is typical then EU may account for around one quarter of all new regulations enacted by member states.

Second, EU law making seeks uniformity across member states but the differing national legal codes make that difficult if not impossible. The EU tries to overcome this issue by having four types of legislation<sup>2</sup>. Regulations, which are directly applicable and binding in all EU Member States without, in theory, the need for any national implementing legislation. Directives, which bind Member States as to the objectives to be achieved within a certain time limit while leaving national authorities the choice of form and means to be used. Decisions, which are binding for those to whom they are addressed. Decisions do not require national implementing legislation. A Decision may be addressed to any or all Member States, to enterprises or to individuals. Finally, recommendations and opinions, which are not binding. These classifications will change to some extent if the new EU constitution is adopted. Directives will become Framework Laws.

As a consequence of Directives being implemented in national legislation in accordance with the procedures of the individual EU states it has been suggested that some member states are quite efficient at translating the requirements into national law whilst other governments "gold-plate" EU Directives adding to the compliance burdens placed on businesses (Ambler et al, 2004). In order to test this popular assertion Ambler et al develop a metric called the Transposition Ratio (TR) that is based upon the word-length of national legislation divided by the word-length of the EU directive. The TR is then calculated and compared for France, Germany, Portugal and the UK for Directives that came into force during 1998 to 2002.

The TRs for the 87 directives considered are given in Table 1. The first data row shows the averages across all 87 directives studied, but that is open to challenge since only 17 directives were transposed in the five year period in all four countries. Table 1 shows that the pattern for these common directives is similar to all of the Directives implemented, and the UK "gold plates" much more than France or Portugal and slightly more than Germany.

Table 1: Transposition ratios 1998 - 2002

	Germany	France	Portugal	UK
All 87 directives	2.78	0.95	1.86	2.26
17 Common directives	3.15	0.68	1.66	3.72

The authors acknowledge that the TR is a less sophisticated measure than comparing compliance costs between member states. However, since data on comparative compliance costs does not exist, the study presents a logical first attempt to assess the differential impact of EU Directives. The point is made that these differences partially undermine the workings of the single market, since they result in regulatory variety between countries that is likely to favour domestic competitors.

Third, the EU has embarked upon an ambitious programme to conduct Extended Impact Assessments (EIAs) for all major initiatives in the annual work programme (Com, 2002, 276). Recently, Vibert (2004) assessed the EU's regulatory impact assessment processes by investigating 20 EIAs produced

<sup>2</sup> Web site of the European Commission Representation in the United Kingdom, [www.cec.org.uk/info/pubs/bbriefs/bb37.htm](http://www.cec.org.uk/info/pubs/bbriefs/bb37.htm)

in 2003, the first year that the Commission prepared these documents. The resulting EIA scorecard discussed three aspects of EIAs: quantification of costs and benefits, procedural aspects and lessons-learned. However, this research did not consider the nature of proposals for which EIAs were prepared.

Overall the results of this study are encouraging as they demonstrate that the EU is committed to appraising the economic, social and environmental aspects of major regulatory proposals. The first 20 EIAs also provide evidence that the process of preparing EIAs does influence the content of new regulations (Table 2)

Table 2: Lesson learning in the preparation of EIAs

Changes to proposed regulations	Yes	No
Regulation rejected	0	20
Redesigned	10	10
Measurement against targets	16	4
Compliance with Lisbon principles	13	3*

\* Totals do not add up to 20 because a competitiveness assessment is not always appropriate  
Source: adapted from Vibert (2004) page 9

However, as Vibert acknowledges (Vibert, 9), it is worrying that none of the 20 proposed regulations were withdrawn even though in three cases the benefits were found to be unclear. There are perhaps similarities here with the UK experience of Regulatory Impact Assessments where in many cases officials complete all of the steps required by the government's guidelines (Cabinet Office, 2002) except attempting determine whether the benefits of proposed regulations exceed the regulatory costs (Ambler et al, 2005).

Turning now to regulatory burdens in the EU, the European Commission (2004a) has conducted a survey of businesses across the member states to determine the level of compliance costs and the impact of taxation on companies' decisions and activities. The survey covered 696 businesses across 14 of the 15 member states; a disappointing number of responses given the difference in tax legislation across member states and that the results should be representative of 16.4m businesses across Europe. As a result of this weakness the authors suggest the results are not fully representative of the EU. Despite the weaknesses in the study there are two key findings that emerge from the quantitative analysis. The first, perhaps expected, is that tax compliance costs, as a proportion of turnover, are larger for SMEs than large companies. Large companies face weighted total absolute compliance costs estimated at € 1,460,000 corresponding to 0.02% of turnover and 1.9% of taxes paid. SMEs face weighted total absolute compliance costs estimated at € 203,000 corresponding to 2.6% of turnover and 30.9% of taxes paid.

Secondly the research finds that cross-border activity leads to higher compliance costs. This is similar to the findings of Gupta and Mills (2003) in their study of US businesses operating across-states subject to differing tax systems. The authors suggest that a proposed pilot system for SME "home state taxation" (European Commission (2004b), may have some value in promoting cross border activities and enabling SMEs to take advantage of the EU single market.

Comparative evidence from another survey of SMEs carried out in 2002 offers insights into the effects of employment legislation in the EU (Hart, 2003). Overall, owner-managers of SMEs in the

UK, France and Germany regard the balance of individual employment rights (IER) to be favourable to the employee. Almost three-quarters of French owner-managers and a half of German owner-managers view the impact of the IER legislation as a constraint to employing new staff. This compares with two-fifths of UK owner-managers who expressed a similar view. Indeed, SMEs in France were significantly less likely to employ part-time workers than in Germany and the UK which may reflect a very pragmatic solution on the part of French owner-managers to ensure that they are not "captured" by the legislation.

While in France and Germany there were no significant differences in the results by size of firm, in the UK the owner-managers of larger SMEs (employing 50 or more) were more likely to report that the IER legislation was a constraint on their ability to recruit workers. Overall, therefore, there are clear differences between the three EU Member States in this study that reflect the pace, and more importantly the intensity, of the adoption of EU directives concerning regulation of the labour market. There is also evidence to suggest that environmental regulations can lead to considerable direct and indirect costs for businesses. Environmental considerations play an important part in all EU countries and thus the various governments have proposals concerning the principles of an environmental policy (del Brío/Junquera, 2003). Despite limited research in this area, there have been a number of government initiatives at the European level such as the Eco-Management and Audit Scheme (EMAS) and the international Environmental Management System (EMS). These have been designed to provide all businesses with the means to develop systematic approaches to improve their environmental impact. However, while such initiatives claim to be significant and pertinent to small businesses, very few small firms make use of them (Hilary, 2004). These initiatives may go some way to improving the environmental impact of businesses in the EU. However, there is little empirical evidence about the burden of environmental regulations on small businesses in most European countries, even though the little evidence there is shows that environmental regulations tend to favour large firms (del Brío/Junquera, 2003).

#### **EU summary**

Pan-EU studies of compliance costs appear to be rare. Some research has been identified relating to the transposition of Directives into national legislation. What little comparative research there is tentatively indicates that taxation, employment and environmental issues are all areas in which small businesses are affected. However, the absolute and relative economic impact is less easy to judge. Overall, it appears that regulatory reform within the EU is gaining momentum, possibly in response to the economic pressures being experienced by major economies such as France and Germany and a desire to move towards the Lisbon goals. Realistically, change will require persistent and well resourced reform programmes over several decades, if the experiences of the USA and the UK (discussed below) can be used as a guide. Whether this initiative will attract sustained support from within the enlarged EU remains to be seen.

#### **3.2. The Compliance Cost and Benefits of Federal Regulations in the USA**

The best available evidence of the compliance costs of federal regulations are provided by the OMB (1997 - 2004). The OMB reports have been based on Regulatory Impact Analyses (RIAs) provided by federal agencies for major regulations, published reports, peer reviews and literature from outside the government. The reports aim to provide an estimate of the total annual costs and benefits of

regulations. However it must be noted that there are a number of methodological problems in these analyses (Chittenden/Kausser/Poutziouris, 2002).

Table 3 (below) presents data from the OMB (2000) report. It shows the breadth of the estimates of the total costs and benefits of regulation for the US economy in 1988, drawn from a variety of sources. Costs are estimated in the range \$84bn to \$100 bn and benefits between \$56bn to \$1,510bn. It should be noted that in the USA the largest area of compliance costs and benefits accrue from environmental regulations. In the other countries studied this area of regulation receives relatively little attention.

Table 3: Estimates of Total Annual Monetized Costs and Benefits of Social Regulation as of 1988 (billions of 1996 dollars)

Environment							
	Hahn & Hird (1991)	Environment Protection Agency	Combined Ranges (a)	Transportation	Labor	Other	Total
Costs	76 to	54 (b) 99	54 to 99	9 to 12	11 to 12 (d)	10 to 15	84 to 100
Benefits	22 to 180	1,450 (c)	22 to 1,450	34 to 60	Not available	Not available	56 to 1,510

Source: Calculations based on information from Hahn & Hird (1991) unless otherwise noted

- (a) Combined ranges from Hahn and Hird (1991) and EPA section 812 retrospective (1997)  
 (b) Includes water pollution control costs from Cost of Clean (1990), air pollution control costs from EPA's section 812 retrospective report (1997), less adjustments for 1988-1990 overlap  
 (c) Benefits from air pollution control only, based on EPA section 812 retrospective (1997)  
 (d) Based on total expenditures for safety and health rather than regulation induced expenditures

Note: the dollar figures in this table do not reflect benefits that were quantified but not monetized. They also do not reflect benefits and costs that were not quantified. Source: OMB 2000

Hopkins (1995) used a number of approaches to estimate the total costs of federal regulations for 2000. Hopkins methodology is a synthesis of disparate studies and assumptions that are calibrated by the results of other studies (Beale/Lin, 1998). This study was published in 1995 and forecast that in the year 2000 the total cost of federal regulations would be \$662 billion using 1991 dollars and \$721 billion using 1995 dollars (see Table 4). No estimates were made of benefits.

Table 4: Total Federal Regulatory Costs (dollars in billions)

Type of Regulation	1991 Dollars (billions)				1995 Dollars (billions)			
	1977	1988	1991	2000	1977	1988	1991	2000
Environmental	42	87	115	178	47	98	193	199
Other Social	29	30	36	61	32	34	68	68
Economic Efficiency Costs	120	73	73	73	149	86	77	77
Process	122	153	189	221	138	173	236	236
<b>Subtotal</b>	<b>313</b>	<b>343</b>	<b>413</b>	<b>533</b>	<b>366</b>	<b>391</b>	<b>574</b>	<b>580</b>
Economic Transfer Costs	228	130	130	130	288	158	142	141
<b>Total</b>	<b>540</b>	<b>473</b>	<b>542</b>	<b>662</b>	<b>654</b>	<b>549</b>	<b>716</b>	<b>721</b>

Source: Hopkins 1995

In a study for the Small Business Administration, (GAO, 1998; SBA, 1995) Hopkins extended this work to identify the costs borne by businesses of different sizes. Based on a sample of 360 businesses, Hopkins divided the total regulatory costs by the number of employees to determine the average cost per employee and multiplied this by 130 percent to represent the cost for the smallest firms. The remaining costs were allocated to the 20-499 and 500+ employee size firms. Table 5 indicates that the administrative (or process) costs associated with tax legislation appear to be the most significant compliance costs for small firms, however they represent less than half of all the regulatory costs borne by businesses employing up to 20 staff.

However the OA maintained that Hopkins' estimates of the burdens on small firms were overstated. The OA estimated that 20 percent greater-than average is more appropriate for all small firms, including those with zero employees. The Office of Advocacy data (see Table 5) illustrates that even when the analysis is done in this way, small firms still incur significantly higher costs per employee than larger firms. The figures in parenthesis are the estimates calculated by the OA. Using the Advocacy estimates, the total small firm burden is approximately \$5,000 per employee compared with \$3,400 per employee for firms with over 500 employees. In addition, using the estimates provided by Hopkins and the OA, the SBA (1995) reported that smaller firms incur between 63 and 67 percent of the total regulatory burden. Using the OA adjusted numbers, the regulatory burden for larger firms is \$148 billion (bn) compared with \$247bn for small firms<sup>3</sup>.

Table 5: Regulatory Burdens by Employment Size comparing Hopkins and (OA) data (1995 dollars)

Type of Regulation	Cost per Firm	Average Cost Per Employee	1-20 Employees	20-249 Employees	500+ Employees
Environmental	17,467	959	1,246 (1,151)	1,194 (1,115)	671 (767)
Other Social	9,224	506	658 (608)	630 (589)	354 (405)
Economic Efficiency	8,047	442	574 (530)	550 (514)	309 (353)
Taxation	28,261	1,551	2,017 (1,862)	1,931 (1,805)	1,086 (1,241)
Transfers	14,719	808	1,050 (970)	1,006 (940)	566 (646)
<b>Total</b>	<b>77,522</b>	<b>4,255</b>	<b>5,532</b> 86%greater <b>(5,106)</b> (50% greater)	<b>5,298</b> <b>(4,950)</b>	<b>2,979</b> <b>(3,404)</b>

Sources: derived from Hopkins and OA data

#### USA summary

In the USA there are many studies of the costs and benefits of regulations to the economy, to industry sectors and businesses of different sizes. A number of these studies use information from regulatory impact assessments (e.g. Hopkins, 1995) or extend national statistics using data from

<sup>3</sup> In the USA there are estimated to be 4.99 million firms with less than 20 employees; 5.56 million firms with between 20 and 500 employees; and 16,378 firms employing more than 500.



smaller samples (e.g. SBA 1995). The systematic collection of primary data from businesses is more rare, although such studies do exist (e.g. Dennis, 2001). The results in Table 5 show that, ignoring transfers between economic actors, tax regulations are the area creating the largest cost for small firms, followed by environmental regulations and other social regulations, which include employment provisions.

### 3.3. Compliance Costs of Regulations in the UK

The majority of studies in the UK involve the collection of primary data from businesses about the impact of regulations. However, in order to illustrate the cumulative impact of new regulations, the British Chambers of Commerce (BCC) provide a summary of the compliance cost estimates published in RIAs, since 1998. In particular the Working Time Directive (introduced in the UK in 1999) has imposed by the biggest additional cost that is now facing business amounting to £13.6 billion over the life of the current parliament (which was taken to run until mid 2005). Whilst, the BCC emphasize that the cumulative cost of regulations is most pertinent to the small business, their “Burdens Barometer” does not indicate the extent of the regulatory burden for small firms alone. The data relates to the whole economy and shows that regulations introduced by the government will cost UK businesses about £39 billion by mid 2005. Benefits are largely ignored as, in contravention of the governments own guidelines, RIAs quantify these for a minority of regulations. Studies by the SERT (formerly SBRT) have tracked business owners’ perceptions of the problems facing their businesses. Government regulations and paperwork have emerged as one of the most important problems for small firms (SERT, 2004). In 1990, just 3.1% of respondents rated government paperwork as the most important problem facing their business. This rose to 13% in the third quarter of 2004. Table 6 shows the number of responses and the change in proportions for government regulations and paperwork in the last six years.

Table 6: The Percentage of Small Firms Reporting Regulations as their Most Important Problem

Problem	Q3 (1999)	Q3 (2000)	Q3 (2001)	Q3 (2002)	Q3 (2003)	Q3 (2004)
Government Regulations and Paperwork	14%	13%	14%	16%	15%	13%
Number of Responses	507	758	720	1078	784	623

Source: SERT 2004 (vol. 20 No3)

In Quarter 3, 2004 the survey shows that the burden of red tape falls most heavily on the smallest firms. The survey suggests (see Table 7) that on average, small firms with one employee spend 6.6 more hours per person per month dealing with government regulations compared to firms employing 25+.

Table 7: Hours per Month spent on Government Regulations by Size of Business

Number of Employees	Total Hours	Hours Per Person	Responses	Non-Response
1	8.4	8.4	73	6
2	8.3	4.1	90	5
3 - 4	15	4.2	115	7

Number of Employees	Total Hours	Hours Per Person	Responses	Non-Response
5 - 9	20.4	3.1	135	9
10 - 14	26.4	2.4	62	0
15 - 24	35.2	1.8	48	2
25+	73.1	1.8	62	5
<b>Total</b>	<b>23.3</b>	<b>3.8</b>	<b>589</b>	<b>34</b>

Source: SERT 2004 (vol. 20 / No3)

The SERT quarterly surveys also indicate that taxation is the area of red tape that has caused the most work for small firms (see Table 8).

Table 8: Area of Red Tape that has caused the biggest increase over the past year in compliance Time by Employment Size of Business

Regulation	0	1-2	3 - 4	5 - 9	10 - 19	20 - 49	50+	Total
VAT	58%	70%	72%	63%	50%	32%	26%	60%
Employee Taxation	9%43%	43%	71%	68%	69%	66%	58%	55%
Health & Safety Regulations	23%14%	14%	19%	48%	50%	69%	68%	35%
Employment Regulations	7%	12%	21%	45%	48%	65%	74%	32%
Self-assessment Income Tax	70%	49%	35%	21%	5%	v2%	5%	31%
Other taxation	19%	28%	16%	13%	12%	v5%	21%	17%
Environmental Regulations	7%	6%	11%	6%	19%	17%	21%	10%
Storage and use of information	15%	10%	15%	7%	6%	v3%	11%	9%
Statistical Reports	8%	6%	6%	6%	12%	15%	32%	9%
Building & Planning	5%	4%	5%	2%	7%	5%	16%	5%
Other Regulations	3%	5%	6%	4%	7%	8%	11%	5%
Sample Size	74	141	107	129	84	65	19	623

Source: SERT 2004 (vol. 20 / No3)

The SERT survey is the most recent study that has captured the opinions of small businesses concerning a range of regulatory burdens. However, it must be noted that these findings are based on small firm respondents that are voluntarily registered with SERT. As a result it is often claimed that their responses may be subject to bias, although there is no objective data available to either support or refute this assertion.

While, most research in the UK has concentrated on the compliance costs of taxes, there has also been interest in other policy areas such as employment regulations and health and safety (SERT, 2004; FPB, 2000). It has been suggested that the introduction of new employment regulations such as the Working Time Directive (WTD), Working Tax Credit (WFTC), and Parental Leave have affected many businesses in the UK.

In a survey by The Forum of Private Business (FPB, 2000) the cost of administering employment regulations for firms with less than 10 employees is estimated to average £6,500 per year. The study found that nearly half of owner/managed businesses (47%) perceived an increase in their compliance costs for existing and new employment regulations. Table 9 shows that while the average weekly additional cost is greater for larger firms, smaller firms spend more time complying with employment regulations.

One surprising finding was that firms employing 20-49 employees had incurred the highest costs. This pattern is not repeated in the SERT studies (see table 8 above).

Table 9: Mean Number of Hours Spent on Compliance with Employment Regulations

Number of Employees	1 - 4	5 - 9	10 - 19	20 - 49	50 - 99	100+
Average Weekly Additional Hours	4.75	6.94	6.35	13.16	6.95	3.67
Average Weekly Additional Costs	£ 81.45	£ 84.80	£ 140.12	£ 184.18	£ 174.57	£ 133.33

Source: FPB 2000

The survey also indicated that the majority of small firms were concerned about the timing of new regulations introduced. Over 50% of very small firms reported that the government did not provide sufficient notification for new employment regulations introduced. In addition 64.1% of firms rated the quality of advice on new employment regulations introduced to be very poor. In response the UK government now introduces new employment regulations on two dates per year i.e. 1st April and 1st October. Thus enabling businesses and their advisers to anticipate and prepare for the introduction of new employment laws.

Of all the employment regulations, respondents reported that the WTD, WFTC and Stakeholder Pensions were causing the most problems in terms of the number of records that had to be maintained (see Table 10)

Table 10: Cause of the Most Problems for Record Keeping

Regulation	% of responses
Working Time Directive	38.7%
Stakeholder Pensions	38.1%
Working Family Tax Credit	36.20%
Employment Contract	34.6%
Time off Dependents	29%
Maternity Leave	27%
Paternity Leave	25.6%
Minimum Wage	18.8%

Source FPB 2000

However the data cited in Wessner (2004) shows that small firms in the UK report the lowest levels of regulatory barriers with respect to employment protection compared with other OECD countries except the USA. Thus it appears that it is the introduction of new regulations rather than international comparisons that sharpens business owners' predilection to complain about the burden of regulations.

### UK Summary

The evidence for the UK suggests that the area of red tape that has caused the greatest additional concern for small businesses is taxation (SERT, 2004). However, Employment and Health and Safety regulations are also of increasing importance, whilst at the present time environmental regulations are of primary concern to just 10% of UK small businesses. Of course, this may be about to change.

### 4. Conclusions

This section provides a brief comparison of the evidence relating to the compliance costs of regulations identified for the EU, USA and UK, and to draw conclusions. However, the extent to which it is possible to compare research methodologies and results across regulations by business size and country is limited because of the lack of consistency in the empirical data (Sandford, 1995). Therefore, the aim of this comparison is to consider the relative size of the additional burdens borne by small firms rather than seeking to identify absolute differences in compliance costs between the countries examined.

In section 3, details were provided of compliance costs by country. For the purposes of comparison, Table 14 illustrates the compliance and administrative costs of regulations for small firms by employee size or turnover. The impact of the regulations listed has been indexed (taking an index of 100 for large firms) in order to observe any patterns that may be evident. The results in Table 11 have been designed so that the greater the relative burden that small firms face, the higher the index.

Table 11: Data for Compliance and Administrative Costs of Regulations For Small Firms By Employee Size/Turnover

Regulation Examined	Author / Date	Large Firms Compliance Cost Per Employee 500 +	Small Firms Compliance Cost Per Employee 1-20	Small Firm Index
Environmental Regulations (total estimate)	Harvey 1998	\$671	\$1,246	185.7
Process Regulations (total estimate)	Harvey 1998	\$566	\$1,050	185.5
"Other" Social excl. Tax	(1) Small Business Administration (1995)	\$405	\$608	150.1
Taxation	(1) Small Business Administration (1995)	\$646	\$970	150.1
Taxation (PAYE & NIC)	Inland Revenue 1998	£49.3	£183.2	371.6
Taxation (VAT)	(2) Sandford 1989	For businesses with turnover >£10m 0.003%	For businesses with turnover between £500k and £1m 0.026%	866.7
Taxation	(4) European Commission 2004a	1.9% of taxes paid or 0.02% of turnover	30.9% of taxes paid or 2.6% of turnover	1626.3 based on taxes paid
Administration	ENSR 1995	1800 ECU	2500 ECU	138.8

Note:

- (1) Care must be taken in interpreting these statistics. It can be seen that, although the SBA claims to be offering an analysis by type of regulation and by size of business, the index for each of the categories quoted is identical, leading to doubt about the basis on which the figures have been prepared.
- (2) Compliance costs as a percentage of taxable turnover
- (3) The small firm index is not applicable because of the net benefits enjoyed by large firms
- (4) This survey received 694 replies from EU 14 countries, but the response rate was low

While these results indicate the disproportionate impact on smaller firms, it must be noted that the components of the compliance and administrative costs for individual regulations vary considerably within and across the countries. For example, the UK estimates for the costs of regulations take into account indirect benefits such as cash flow. However, the estimates provided by researchers and agencies in the US are usually based on direct costs alone.

Despite the methodological weaknesses and the differences between countries in estimating the compliance and administrative costs of tax regulations a number of general conclusions can be drawn. The findings have indicated that:

Our evidence suggests that the issues facing small businesses in relation to the compliance costs of regulations are comparable for each of the countries. For example, a lack of understanding amongst small firms of the regulatory requirements; frequent changes in regulations, and high fixed costs. The BRTF (2000) have considered a wide range of alternative approaches to reducing the burden of regulation on small firms. These approaches include the use of:

exemptions / voluntary registrations (or kite-marking); compensation where public sector administrative responsibilities are being transferred to the private sector; provision of compliance mechanisms (e.g. an automated payroll service to calculate withholding taxes for employees); incentives to comply (e.g. for electronic filing of VAT returns); individual opt-outs and simplified procedures for SMEs. The BRTF concluded that regulators should consider all of these alternatives and that additional effort should be invested in the rigorous preparation of Impact Assessments.

Finally, although governments have attempted to reduce the extent to which the burden of compliance falls more heavily upon small firms compared to bigger businesses, there is little evidence of progress. Of course it is impossible to predict the position of small firms in the absence of these government initiatives, small firms may incur lower levels of compliance costs than they otherwise would have done. However in the USA, for example, there is continued criticism of the rising levels of regulation (e.g. Beale/Lin, 1998) even though Congress embarked on regulatory reform before other countries (the Regulatory Flexibility Act of 1980 acknowledged the additional compliance burdens faced by small businesses). Overall, in the context of an environment in which the volume of regulation is growing in developed economies, it seems that governments have yet to discover how to reduce the relatively higher burden of compliance costs on small firms in a substantive way.

## References

- ACTAL (2005), [www.actal.nl/](http://www.actal.nl/), last accessed 29th April 2005.
- Ambler, T/Chittenden, F./Hwang, C. (2005), "Regulation: another form of taxation? UK Regulatory Impact Assessments in 2003/4, the British Chambers of Commerce, London, 2005, pp 28.
- Ambler, T/Chittenden, F/Obodovski, M. (2004), "How Much Regulation is Gold Plate? A Study of UK Elaboration of EU Directives", the British Chambers of Commerce, London, pp 24.
- Beale, H.B.R./Lin, K. (1998), "Impacts of Federal Regulations, Paperwork, and Tax Requirements on Small Business". A report prepared for the U.S. SBA Microeconomic Applications Inc. Washington D.C. September.

- BRTF* (2000), "Helping Small Firms Cope with Regulation: Exemptions and Other Approaches". The Cabinet Office, London.
- BRTF* (2005), "Regulation - Less is more: Reducing Burdens, Improving Outcomes." A report to the Prime Minister, available at: <http://www.brtf.gov.uk/reports/lessismoreentry.asp>
- British Chambers of Commerce* (2004), *Burdens Barometer*, London.
- Cabinet Office* (2002), "Better Policy Making; A Guide to Regulatory Impact Assessment", HMSO, London.
- Chittenden, F./Kauser, S./Poutziouris, P.* (2002), "The Regulatory Burdens of Small Business: A Literature Review", the DTI Small Business Service Research Series, October 2002, pp. 82, URN 02/1378 also available at: <http://rru.worldbank.org/PapersLinks/Innovations-Instruments-Regulation>.
- Com* (2002), 276, Communication from Commission on Impact Assessment, for further information see [http://www.europa.eu.int/comm/secretariat\\_general/impact/docs\\_en.htm](http://www.europa.eu.int/comm/secretariat_general/impact/docs_en.htm)
- del Bri'o, J.A./Junquera, B.* (2003), A review of the literature on environmental innovation management in SMEs: implications for public policies, *Technovation*, No. 23, 939-948.
- Dennis, W.J.* (2001), *Coping with Regulation*, NFIB National Small Business Poll, Vol. 1, 5, Washington.
- EIM* (1995), "Standard Cost Model for Fiscal Administrative Requirements" EIM/Business Results Reports, Zoetermeer.
- EIM* (1997), "How Can Administrative Burdens of Enterprises be assessed: Different Methods: Advantages and Disadvantages". EIM Small Business Research and Consultancy. A Paper Presented at the Conference On Quality of the European and National Legislation and the Internal Market, The Hague, 23-25 April.
- ENSR* (1995), "Administrative Burdens" in the European Observatory for SME's Third Annual Report.
- European Commission* (2004a), "European Tax Survey", Taxation Papers, Working Paper No.3/2004, available at: [http://europa.eu.int/comm/taxation\\_customs/taxation/taxation.htm](http://europa.eu.int/comm/taxation_customs/taxation/taxation.htm) accessed 5th April 2005
- European Commission* (2004b), "Outline of a Possible Experimental Application of Home State Taxation to Small and Medium Sized Enterprises", EU website, available at: [http://europa.eu.int/comm/taxation\\_customs/resources/documents/HST\\_Paper\\_June\\_04\\_EN.pdf](http://europa.eu.int/comm/taxation_customs/resources/documents/HST_Paper_June_04_EN.pdf) accessed 5th April 2005
- FPB* (2000), "58th Quarterly Survey of Private Business". The Forum of Private Business Quarter 2.
- Froud, J./Boden, R./Ogus, A./Stubbs, P.* (1998), "Controlling the Regulator" MacMillan Press.
- GAO* (1998), "Regulatory Reform: Agencies Could Improve Development, Documentation and Clarity of Regulatory Economic Analyses, U.S. General Accounting Office.
- Gupta, S./Mills, L.F.* (2003), "Does Disconformity in State Income Tax Systems Affect Compliance Cost Burdens?", *National Tax Journal*, Vol. 56, No. 2, pp. 355-371.
- Hahn, R. W.* (1998), "Government Analysis of the Benefits and Costs of Regulation", *Journal of Economic Perspectives* 12(4): 201-10.
- Hahn, R. W./Litan, R.E.* (1998), "An Analysis of the Second Government Draft Report on the Costs and Benefits of Federal Regulations". AEI Brookings Joint Center for Regulatory Studies, USA.
- Hahn, R. W./Hird, J.A.* (1991), "The Costs and Benefits of Regulation: Review and Synthesis", *Yale Journal on Regulation*, Winter 8(1) 233-78.
- Hart, M.* (2003), "Lloyds TSB/Kingston University European Small Business Survey", SBRC, Kingston University.
- Hazilla, M./Kopp, R.J.* (1990), "Social Cost of Environmental Quality Regulations: A General Equilibrium Analysis. *Journal of Political Economy*. 98. (4).
- Hilary, R.* (2004), Environmental management systems and the smaller enterprise, *Journal of Cleaner Production*, Vol 12, pp 561-569.
- Hopkins, T. D.* (1995), "Profiles of Regulatory Costs", Report to the U.S. Small Business Administration, Office of Advocacy.
- Lutter, R. W.* (2000), "An Analysis of the EPA's Proposed Lead Hazard Standards for Homes", AEI Brookings Joint Centre for Regulatory Studies. U.S.
- OECD* (2000), "The OECD Public Management Service Multi-Country Business Survey: Benchmarking Regulatory and Administrative Business Environments in S.M.E.s", Compliance Costs Symposium, Sydney.

- OMB (1997-2004), "Report to Congress on the Costs and Benefits of Federal Regulations" The White House. Washington D.C.
- Pearce, D. (1998), "Cost Benefit Analysis and Environmental Policy" Oxford Review of Economic Policy 14: p84-106.
- Pre-Budget Report (2004), Opportunity for all: The strength to take the long-term decisions for Britain, Presented to Parliament by the Chancellor of the Exchequer, December.
- Robinson, J. C. (1995), "The Impact of Environmental and Occupational Health Regulation on Productivity Growth in U.S. Manufacturing". The Yale Journal of Regulation.
- Ruteledge, G. L./Vogan, C. R. (1995), "Pollution Abatement and Control Expenditures, 1993". Survey of Current Business. May.
- Sandford, C. (1995), "Tax Compliance Costs Measurement and Policy", Fiscal Publications in Association With The Institute of fiscal Studies.
- Small Enterprise Research Team (2004), NatWest SERT Quarterly Survey of Small Business in Britain, Open University, Vol 20, No 3.
- Small Business Administration, SBA. (1995), "The Changing Burden of Regulation, Paperwork and Tax Compliance on Small Business: A Report to Congress", Office of Advocacy. Small Business Administration. Washington D.C.
- UNICE (1995), "The Union of Industrial and Employer's Confederations of Europe Regulatory Report": Releasing Europe's Potential Targeted Regulatory Reform.
- Vibert, F. (2004), "The EU's New System of Regulatory Impact Assessment: A Scorecard", European Policy Forum.
- Wessner, C. (2004), "Crossing the Valley of Death: the challenge of early-stage finance". Paper presented to the Cambridge-MIT Conference on Metrics: Evaluating Research and Science Based Programmes, Cambridge, UK.

### Kurzfassung

Gesetzliche Regulierungen und Kleinbetriebe in der EU, den USA und in Großbritannien:  
Eine Bewertung

Dieser Beitrag bietet eine Literaturübersicht über Kosten, die im Rahmen von gesetzlichen Regulierungen anfallen („compliance costs“), getragen von kleinen Unternehmen in der EU, in den USA und in Großbritannien. Der Artikel zeigt, dass, obgleich die Regierungen in vielen hoch entwickelten Wirtschaftssystemen versucht haben die Belastungen von gesetzlichen Regulierungen auf Unternehmen zu verringern, es wenig Beweise für konkrete Fortschritte gibt. Alle betrachteten Länder bieten optimale Verfahrensrichtlinien hinsichtlich des Festsetzens der Kosten für beabsichtigte Regulierungen. Trotz intensiver Bemühungen der Regierungen hinsichtlich Initiativen der Deregulierung und Vereinfachung, die in einigen Fällen in den frühen achtziger Jahren begannen, gibt es wenig Beweise dafür, dass es zu einer Verbesserung kommt, wenn man die Belastung der Regulierungen, für Kleinbetriebe in den besprochenen Ländern, verringert oder gar entfallen lässt.