# **Business Health in the Forestry and Wood Industries**

Summary results of the 2004 Survey of Business Health in the Forestry and Wood Industries

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Annex 1 – Questionnaire

# SURVEY OF BUSINESS HEALTH IN THE FORESTRY AND WOOD INDUSTRIES – SUMMARY REPORT

#### 1. INTRODUCTION

#### 1.1 Background

This report presents results from the 2004 survey of business health in the forestry and wood industries. In 2000, a previous survey was conducted with the aim of obtaining benchmark information on the health and financial viability of forest industry businesses<sup>1</sup>. Following that survey, it was agreed that a shorter follow-up survey should be conducted every 3 - 4 years.

This survey has a similar industry scope to the 2000 survey, and is focused on private sector forestry businesses from nurseries to primary wood processing. In addition, this survey also includes limited coverage of pulp and paper mills, and some secondary wood processors. In this survey, separate results are presented at the level of Britain as whole, together with results at country level - England, Scotland, and Wales. Results are also presented by industry sub – sector and by business size.

The survey that was conducted in 2000 resulted in a number of recommendations for improvements in survey methodology and coverage for future surveys focused on the business health of this sector. The methodology of this new survey is based on those recommendations. Because of the different methodology, the results of this survey are not directly comparable with the results from the 2000 survey.

#### 1.2 Objectives

The general aim of this survey was to obtain information on the recent past performance, and expected future prospects for businesses in the forestry and wood industries in Britain.

Specific objectives were to:

- Develop indicators of the business health of forestry and wood industry businesses, focusing on recent past performance, and expected future prospects.
- Obtain survey data that can be used as baseline information to monitor changes over time in the business health of businesses in the forestry and wood industries.
- Obtain feedback from forestry and wood industry businesses on their concerns and opportunities regarding business development.

<sup>&</sup>lt;sup>1</sup> Firn Crichton Roberts / John Clegg & Co (2000), Monitoring the Health and Financial Viability of Forest Industry Businesses: Business Survey Report to the Forestry Commission & Forest Industry Associations

#### 2. METHODOLOGY

#### 2.1 Sample Frame

The sample frame for this survey was obtained from the Inter-Departmental Business Register (IDBR). The IDBR is compiled and maintained by the Office for National Statistics (ONS). It includes all businesses registered with HM Customs and Excise for VAT, and all companies that operate a Pay As You Earn (PAYE) Scheme, as recorded in the Inland Revenue's PAYE registration records. This information is supplemented with information from Companies House, and information from Dun and Bradstreet for company structure. The IDBR is updated regularly, with new data added and other data revised, to record new data from surveys, and as companies open and close.

The IDBR is the single most comprehensive database of businesses in Britain. However, it is not fully comprehensive. It does not include businesses that do not operate a PAYE scheme nor are registered for VAT. In 2003/4, the VAT registration threshold was £58,000. Below the threshold, businesses may register voluntarily. Companies that have no employees are unlikely to operate a PAYE scheme. Therefore, the IDBR generally does not include businesses that both have a turnover under £58,000 and that have no employees.

The IDBR identifies businesses by Standard Industrial Classification - SIC (92) - code. The list of SIC codes was reviewed, in consultation with the Forestry Commission National Offices, and forest industry associations, to identify the sectors that could be considered as part of the forestry and wood industries, within the scope of this survey<sup>2</sup>. The SIC codes that have been included in this survey are listed below, together with the description of these codes<sup>3</sup>:

Division	Group	Description
02	0201	Forestry and logging
	0202	Forestry and logging related service activities
20 (primary)	2010	Saw milling and planing of wood
	2020	Manufacture of wood panels and boards
20 (secondary)	2030	Manufacture of builders' carpentry and joinery
	2040	Manufacture of wooden containers
	2050	Manufacture of other products of wood
21(Primary)	2110	Manufacture of pulp, paper and paperboard

<sup>&</sup>lt;sup>2</sup> This approach differs from the approach that was taken for the survey that was conducted in 2000. For that survey, a database of forest industry businesses was constructed by requesting data from 10 forest industry and trade associations, and from consulting with private companies and forest industry consultants. On this basis, and following adjustments for double counting through multiple industry association memberships, the total number of private sector businesses in the forest industries was estimated to be approximately 3,250. However, a different methodology was recommended for subsequent surveys.

<sup>&</sup>lt;sup>3</sup> Further information on the Standard Industrial Classification system is available at: <a href="http://www.statistics.gov.uk/methods\_quality/sic/contents.asp">http://www.statistics.gov.uk/methods\_quality/sic/contents.asp</a>.

The survey therefore focuses on forestry and wood businesses, from forest nurseries through to primary wood processing, including pulp and paper mills, and also includes some secondary processing businesses.

Forest owners have been excluded from this survey. The main reason for this is that woodlands may form only part of a larger enterprise or holding, and owners may not be able to easily distinguish the business health of their forest holding relative to the health of the rest of their business. The potential for extending the scope of the survey to cover all secondary processors, and businesses that may be indirectly dependent on forestry, such as the forest tourism sector was explored. However, it was concluded that the main focus of this survey should be on primary sector businesses, with a more limited sample of secondary sector businesses in SIC code 21 primary. Many businesses in the wider forestry and wood sectors are likely to have greater difficulty in gauging what proportion of their activities is related to forestry and wood, and many would not consider themselves to be part of these sectors. They are also more likely to be subject to conditions across a range of different economic sectors. As a further issue, most of the relevant businesses would be in other SIC codes that cover a range of different industry sectors. It would be difficult to identify which businesses, within these SIC codes should be surveyed.

It has been noted, in the past, that some forestry and wood businesses may not be assigned to a forestry or wood SIC code. This can occur, for example, if a specific business has other activities outside the forestry and wood industries. Some forestry businesses may instead be assigned in the IDBR records to other industry sectors, such as agriculture, transportation, or business services. For example, recent analysis of IDBR data on sawmills shows that a substantial proportion of the sawmill population is not allocated to the expected SIC. As a consequence, some forestry businesses will not be included in the SIC codes listed above, and also the listed SIC codes will include some businesses that are not involved in forestry or wood processing. The number of businesses in the selected SIC codes is therefore unlikely to provide a fully robust indication of the total number of forestry and primary processing businesses in Britain. However, this is an issue that also arises with other approaches to identifying the total number of forestry and wood industry businesses.

#### 2.2 Sampling

A stratified random sample was drawn from the businesses assigned to the selected SIC codes in the Inter-Departmental Business Register. The sample was stratified by country, SIC code, and business size (by employment) as recorded by information in the IDBR. For England, data was also stratified at a regional level, by Government Office Region.

Business location has been estimated from the postcode information presented in the Inter-Departmental Business Register. However, there may be limitations to using postcode information to provide a geographical

breakdown. In particular, larger businesses will be assigned to the country / region in which their head office is located.

A smaller sample fraction was used for small businesses. An aspect of statistical survey control good practice is to reduce the burden on smaller businesses. This also enabled the sample to include all the large primary businesses in the forestry and primary wood processing sectors. A more limited sample was selected of businesses in the SIC codes that correspond to secondary wood processing.

The proportion of businesses that were sampled were:

- 100% of all "large" businesses in SIC 02, SIC 20 (primary), and SIC 21 (primary)
- 40% of all "small" businesses in SIC 02, SIC 20 (primary), and SIC 21 (primary)
- 20% of "large" businesses in SIC 20 (secondary) in England, and 40% of these businesses in Scotland and Wales
- 10% of "small" businesses in the remainder of SIC 20
- 5% of businesses with zero employees in SIC 02 and SIC 21(primary)
- 20% of businesses with zero employees in SIC 20 (primary)
- 40% of businesses with zero employees in SIC 21 (primary)

In this sample design, "large" businesses are defined as businesses with 10 or more employees, and "small" businesses are defined as businesses with 1 to 9 employees. A key aim of the sample design was to obtain reasonable sample sizes in each of the SIC codes, that would be able to provide statistically robust results.

The sample sizes for the survey are shown in table 1.

**Table 1: Sample Sizes** 

	02	20 Primary	20 Secondary	21 Primary	Total
Businesses with 10 or more employees:					
England	64	224	221	115	624
Wales	2	13	19	7	41
Scotland	24	35	45	14	118
Businesses with 1 - 9 employees:					
England	729	260	523	96	1608
Wales	83	15	24	4	125
Scotland	294	33	38	4	368
Businesses with 0 employees:					
England	49	35	71	10	164
Wales	7	3	3	1	13
Scotland	20	6	3	0	31
All businesses:					
England	453	450	673	211	1787
Wales	38	26	40	11	113
Scotland	174	62	79	18	333
Total GB sample	665	537	792	239	2,233

A total of 2233 businesses were selected, from a total identified population of 11,402 businesses in the selected SIC codes, and a questionnaire was sent by post to the selected businesses in the middle of 2004. Reminders were sent to non-respondents. A total of 857 questionnaires were returned. Of these, 624 were completed, representing an overall response rate of completed questionnaires of approximately 28%. (This compares with a response rate of approximately 18% for the survey that was conducted in 2000).

It is apparent that the response rate among businesses that actually come within the scope of the survey is likely to be higher than 28%. Many respondents noted that the questionnaire was not relevant to their business, and this highlights possible limitations with use of the Inter-Departmental Business Register for identifying the population of forestry and wood industry businesses.

The survey results that are presented in this report are based on the 624 questionnaires that were completed and returned.

#### 2.3 Questionnaire

The questionnaire used in the survey was developed in consultation with the Forestry Commission National Offices, and with forest industry associations.

This questionnaire is shorter than the questionnaire used in the 2000 survey, and focuses on the key issues that were identified in that survey. A copy of the questionnaire is included in appendix 1.

The questionnaire covers the following main areas

- Basic business characteristics of respondents (main activity, employment, turnover)
- Change in annual business turnover and profitability in the past three years
- Change in average number of people employed in the past three years
- Expectations of change in turnover in the next three years
- Expectations of change in economic conditions in the forestry and wood sector over the next three years
- Expectation of business performance over the next three years
- Main obstacles to business success
- Main opportunities for business development in the forestry and wood sector over the next three years

#### 2.4 Weighting

The results presented in this report have been weighted to be representative of the population under consideration.

All tables in this report showing weighted results also provide a base showing total unweighted counts. It should be noted that, in these tables, the results and bases can not be used to calculate the number of respondents that gave a specific answer.

Tables also show the percentage (or number) of responses for which a specific question was not completed. This is shown as "missing" in the corresponding table.

#### 2.5 Statistical Significance

The survey results need to be considered in the context of the level of total response, and the number of responses by sector and size band. Because the figures are based on a sample of the population, a range of uncertainty (a confidence interval) is associated with the results. This should be taken into account when the results are interpreted.

The confidence intervals associated with the survey results will vary for each question and for each sub-sample. However, the following table provides indicative 95% confidence intervals that might be expected for results by country and by sector (SIC code). These are expressed as percentage points; for example a result of 40% for the forestry sector would have a 95% confidence interval of 40% +/- 12%, which means a range of 28% to 52%.

	Confidence Interval
Country	
England	+/- 7%
Wales	+/- 44%
Scotland	+/- 18%
Sector (SIC code)	
02: Forestry	+/- 12%
20 (primary): Primary wood processing	+/- 9%
20 (secondary): Secondary wood processing	+/- 8%
21 (primary): Pulp and paper manufacture	+/- 44%

In some cases, there are apparent differences between sectors, business size or countries, but, because of the small number of respondents, it is difficult to know if these results would hold for larger numbers of businesses within these categories. While the response sizes might not be large enough for such results to be statistically significant, these results might provide an indication of possible differences.

Where results are presented as percentages, the figures have been independently rounded and therefore may not add up to 100.

#### 3. CHARACTERISTICS OF RESPONDENTS

This section provides information on the characteristics of the businesses that responded to the survey.

#### 3.1 Completed Responses

A total of 857 questionnaires were returned, of which 624 were completed. This consisted of 479 completed responses in England, 114 in Scotland, and 31 in Wales. This represented an overall response rate of 28%. The overall response rates differed slightly between the three countries, and were 27% in England, 34% in Scotland, and 28% in Wales.

The number of completed questionnaires that were returned is shown in table 2, below, by SIC code, country, and business size groups.

In table 2, "small" refers to businesses with 1 to 9 employees, while "large" refers to businesses with 10 or more employees. The employment data used in this table is obtained from the Inter Departmental Business Register records.

Table 2: Number of Completed Responses, By SIC Code and Business Size

	England	Wales	Scotland	Total (GB)
All Sectors				
Total	479	31	114	624
No employees	37	3	9	49
Small	262	13	63	338
Large	180	15	42	237
02				
Total	143	11	68	222
No employees	12	2	6	20
Small	109	9	53	171
Large	22		9	31
20 Primary				
Total	133	9	22	164
No employees	12	1	3	16
Small	49	2	5	56
Large	72	6	14	92
20 Secondary				
Total	188	9	17	214
No employees	13			13
Small	101	2	5	108
Large	74	7	12	93
21 Primary				
Total	15	2	7	24
No employees				0
Small	3			3
Large	12	2	7	21

#### 3.2 Standard Industrial Classification Codes and Main Business Activity

Respondents were asked to state the proportion of their turnover accounted for by a number of different business activities that form part of the forestry and wood industry, within the scope of this survey. The business activities that were listed in the questionnaire are

- Tree / woodland management
- Forest nurseries
- Timber haulage
- Timber harvesting
- Manufacture of pulp / paper
- Manufacture of primary wood products

Table 3 shows the number of businesses, in each SIC code, reporting a specific business activity as representing the largest proportion of their turnover.

Table 3: Number of Respondents by Business Activity\*

	SIC Code				
	02	20 Primary	20 Secondary	21 Primary	
Total	222	164	214	24	
Main business activity					
Tree / woodland management	95	2	2		
Forest nurseries	16		1		
Timber haulage		3	6		
Timber harvesting	65	12	9		
Manuf. of pulp/ paper				23	
Manuf. of primary wood products	10	99	144		
Less than 50% in above cats.	32	20	19		
Missing	4	28	33		

	Locat	Total		
	England	Wales	Scotland	
Total	479	31	114	624
Main business activity				
Tree / woodland management	71	2	26	99
Forest nurseries	11		6	17
Timber haulage	8		1	9
Timber harvesting	54	5	27	86
Manuf. of pulp/ paper	15	2	6	23
Manuf. of primary wood products	206	15	33	254
Less than 50% in above cats.	55	4	12	71
Missing	59	3	3	65

<sup>\*</sup> Business activity representing the largest proportion of turnover

Table 3 indicates that, in SIC 02, around 43% of businesses that provided a response to this question reported their main business activity, as a share of turnover, was tree / woodland management, while around 29% reported that timber harvesting was their main activity.

In SIC 21 (primary), all, except one, of the respondents reported that manufacture of pulp / paper was their main activity.

In SIC 20 (primary), 60% of respondents reported that manufacture of primary wood products as their main business activity. In SIC 20 (secondary), around 67% or businesses reported manufacture of primary wood products as their main business activity. Around 11% of respondents indicated that less than 50% of their turnover is accounted for by the listed categories.

Overall, these results indicate that the selected SIC codes can be regarded as an adequate indicator of main business activity for the purposes of this survey. On this basis, further results have been analysed according to SIC code only. However, it should be noted that many of these businesses cover a range of different industry sectors and activities.

# 4. CHARACTERISTICS OF FOREST AND WOOD INDUSTRY BUSINESSES

This section provides information on the characteristics of forest and wood industry businesses, obtained from weighting the survey responses so that they are representative of businesses in the forestry and wood industries as a whole. This provides a background for analysis of the questions relating to business health that are reported in the subsequent sections.

In the tables and analyses that follow, the sub - sectors corresponding to each SIC codes are assigned an abbreviated title for presentational purposes.

Standard Industrial Classification (SIC) Code	Abbreviated Title
02:	Forestry
20 (primary):	Primary Processing
20 (secondary):	Secondary Processing
21 (primary):	Pulp and Paper

#### **4.1 Industry Composition by Country**

Table 4 shows information on the percentage of businesses in each country that correspond to each sub - sector. This shows that, in England, 68% of forestry and wood industry businesses, within the scope of this survey, are in the secondary processing sector, while 21% are in the forestry sector. By contrast, in Scotland, the largest proportion of businesses - 55% - are in the forestry sector, while 36% are in the secondary processing sector.

**Table 4: Industry Composition By Country** 

	Location of Business				
	England	Wales	Scotland	Total	
Base	479	31	114	624	
Sub -Sector					
Forestry	21%	41%	55%	27%	
Primary Processing	10%	10%	8%	9%	
Secondary Processing	68%	48%	36%	63%	
Pulp and Paper	1%	1%	1%	1%	

#### 4.2 Employment

In this survey, businesses have been divided into three size categories, based on the level of employment reported in the questionnaire response:

- "Micro" businesses with 1 to 9 employees
- "Small" businesses with 10 to 49 employees
- "Medium" / "Large" businesses with 50 or more employees

These size categories are consistent with the Department of Trade and Industry (DTI) classification of business size.

Respondents were requested to provide employment information in terms of Full Time Equivalent (FTE) including sub contractors.

According to the results, presented in table 5, 80% of forestry and wood industry businesses have 1 to 9 employees, while 15% have 10 to 49 employees, and a total of 5% have 50 or more employees. Only 1% has a level of employment of 250 or more. These results indicate that the forestry and wood industries predominantly consist of micro and small businesses.

Table 5: Number of People Employed (Full Time Equivalent, Including Subcontractors)

	Sub-Sector			
	Forestry	Primary Processing	Secondary Processing	Pulp and Paper
Base	222	164	214	24
Employment (FTE)				
1 to 9	91%	69%	78%	24%
10 to 49	6%	23%	18%	25%
50 to 249	3%	7%	4%	21%
250 or more	0%	1%	0%	29%

	Location of Business			All
	England	Wales	Scotland	
Base	479	31	114	624
Employment (FTE)				
1 to 9	80%	86%	81%	80%
10 to 49	16%	11%	11%	15%
50 to 249	4%	2%	6%	4%
250 or more	0%	0%	2%	1%

The forestry sector has a smaller percentage of businesses in the 10 to 49 size group, and a larger percentage in the 1 to 9 size group, compared with the other sectors. These results indicate that the forestry sector mainly consists of micro businesses.

There is a more even distribution between the employment size categories in the pulp and paper sector, compared with other sectors. In the pulp and paper sector, 21% of businesses have 50 to 249 employees, and 29% of businesses have 250 or more employees, indicating that this sector has a different employment profile compared with the other forestry and wood sectors.

The distribution of businesses between the employment size categories is broadly similar between countries.

It should be noted that the results from this survey, regarding employment, differ from the reported number of employees in the IDBR. The main explanations for this are that differing definitions of employment are used, and the level of employment is likely to have changed since the employment records reported in the IDBR were compiled.

#### 4.3 Turnover

Respondents were asked to report their turnover in one of eight different bands. The results from this are presented in table 6. It can be seen, from the results, that turnover of forestry and wood industry businesses covers a wide range. Approximately 28% of businesses have a turnover below the 2004 / 5 VAT registration threshold of under £58,000, while a total of 11% have a turnover of £1 million or over, and 2% have a turnover of £10 million or over.

**Table 6: Annual Business Turnover** 

	Sub-Sector				
		Primary	Secondary	Pulp and	
	Forestry	Processing	Processing	Paper	
Base	222	164	214	24	
Annual business turnover					
Under £58,000	45%	16%	23%		
£58,000 - under £100,000	22%	13%	13%	12%	
£100,000 - under £250,000	15%	19%	21%	12%	
£250,000 - under £500,000	8%	13%	17%		
£500,000 - under £1 million	4%	10%	12%	16%	
£1 million - under £5 million	3%	16%	9%	8%	
£5 million - under £10 million	0%	5%	1%	6%	
£10 million or over	3%	5%	1%	46%	
Missing		2%	3%		
		Location	of Business		

		All		
	England	Wales	Scotland	
Base	479	31	114	624
Annual business turnover				
Under £58,000	29%	30%	23%	28%
£58,000 - under £100,000	16%	7%	15%	15%
£100,000 - under £250,000	20%	10%	17%	19%
£250,000 - under £500,000	12%	42%	18%	14%
£500,000 - under £1 million	10%	3%	13%	10%
£1 million - under £5 million	9%	5%	6%	8%
£5 million - under £10 million	2%		0%	1%
£10 million or over	2%	1%	7%	2%
Missing	3%	2%	0%	2%

Table 6 shows that there are some notable differences between sub - sectors, regarding business turnover. For example, a total of around 60% of businesses in the pulp and paper sector have a turnover of over £1 million, and 46% have a turnover of £10 million or over. This compares with 6% of all businesses in the forestry sector with a turnover of over £1 million. More than two-thirds of businesses in the forestry sector have a turnover under £100,000. A general pattern that is apparent is that a larger proportion of respondents in the forestry sector have a level of turnover in one of the smaller turnover size categories, compared with businesses in the other sub-sectors, indicating that these tend to be smaller businesses.

The distribution of businesses between size bands is generally similar in the three countries, but there are some apparent differences. A higher proportion

of businesses in Wales are in the £250,000 – under £500,000 size band, compared with England and Scotland, but a smaller proportion of businesses in Wales have a turnover over £500,000.

These results, together with the results regarding employment, should be considered within the limitations of the Inter Departmental Business Register records, which excludes businesses that are both not registered for VAT and do not operate a PAYE system. These results may therefore underestimate the proportion of forestry and wood industry businesses with a level of turnover under the current VAT registration threshold, and underestimate the proportion of businesses with no employees.

#### 4.4 Type of Timber Used

Respondents were asked to report the proportion of their turnover that is based on softwood and on hardwood, and the results from this are shown in table 7.

Table 7: Turnover Based on Softwood / Hardwood

		Sub-	-Sector		
	Forestry	Primary Processing	•	Pulp and Paper	
Base	222	164	214	24	
% of business turnover					
At least 75% softwood	50%	48%	42%	29%	
Mixed softwood & hardwood	21%	20%	33%	41%	
At least 75% hardwood	20%	29%	23%	8%	
Missing	8%	3%	2%	22%	
		Location	of Business		All
	England	Wales	Scotland		
Base	479	31	114		624
% of business turnover					
At least 75% softwood	40%	82%	60%		45%
Mixed softwood & hardwood	30%	7%	29%		29%
At least 75% hardwood	26%	7%	9%		23%

4%

Table 7 shows that, for around 45% of businesses, turnover is based mainly on softwood, while for 23%, turnover is mainly based on hardwood, and 29% use similar proportions of both. This pattern is broadly followed in most of the sub - sectors. The main exception to this is the pulp and paper sector.

4%

4%

In terms of comparison between the countries, it is notable that a higher percentage of businesses in England have a turnover mainly based on hardwood, and a smaller proportion based on softwood, compared with Wales and Scotland.

Regarding the source of the timber that is used, table 8 shows that, for 36% of all businesses, turnover is mainly based on domestic timber. For 47% of

businesses, turnover is mainly based on imported timber. However, there are considerable differences regarding this between sub - sectors. In the forestry sector, domestic timber accounts for the majority of turnover for 87% of businesses. In the secondary processing sector, and the pulp and paper sector, imported timber accounts for 67% of turnover, and 76% of turnover respectively. Overall, these results indicate that, as would be expected, imported timber is substantially more important, and domestic timber is substantially less important, for processors than for forestry businesses.

Table 8: Turnover Based on Domestic / Imported Wood

		Sub -	- Sector		
		Primary	Secondary	Pulp and	
	Forestry	Processing	Processing	Paper	
Base	222	164	214	24	
% of business turnover					
At least 75% domestic	87%	48%	13%	2%	
Mixed domestic / imported	1%	10%	12%	4%	
At least 75% imported	1%	38%	67%	76%	
Missing	11%	5%	7%	18%	
		Location	of Business		All
	England	Wales	Scotland		
Base	479	31	114		624
% of business turnover					
At least 75% domestic	30%	46%	67%		36%
Mixed domestic / imported	11%	3%	1%		9%
At least 75% imported	51%	48%	24%		47%
Missing	8%	2%	8%		8%

There is also a contrast between the three countries, in terms of the source of timber. In England, for 51% of businesses, turnover is mainly based on imported wood, and, for 30%, turnover is based mainly on domestic wood. In contrast, in Scotland, for 24% of businesses, turnover is based mainly on imported wood, and 67% have a turnover that is mainly based on domestic wood. The main reason for this may be the different composition of businesses in England and Scotland. That is, a larger proportion of businesses in Scotland are in the forestry sector, compared with England. In turn, this is the sector in which the largest proportion of businesses has a turnover that is mainly based on domestic wood.

#### 5. RECENT BUSINESS PERFORMANCE

The main aim of this survey was to obtain information on the recent past performance, and expected future prospects, of businesses in the forestry and wood industries.

There are a number of business surveys conducted that collect similar information, on recent past performance and expected future prospects, across a range of other business sectors. These include surveys conducted by the Confederation of British Industry (CBI), the Federation of Small Businesses, and the Small Business Service (an agency of the Department of Trade and Industry). However, these surveys do not provide significant coverage of the forestry and primary wood processing industries.

There are possible limitations to assessing the business health of a firm, or a business sector, on the basis of a one - off survey. However, an approach that has been widely used in similar surveys is to ask respondents to assess their business performance in terms of comparative change, compared with recent past performance. For a number of questions in this survey, responses were requested in terms of multiple choice: "increase", "decrease", "stay about the same". This type of question should be relatively straightforward for businesses to respond to, and not require detailed analysis of business and financial data. This information can also be useful for providing baseline information, and for comparing the results from different surveys over time, to assess relative changes in business performance.

Information on three aspects of recent past business performance was obtained by this survey: change in business turnover; change in profitability; and change in level of employment. The results from this have been analysed according to country, business size, and sub - sector.

#### **5.1 Change In Business Turnover**

Respondents were asked how their annual business turnover had changed in the past three years.

Table 9 shows that, among all forestry and wood industry businesses, annual business turnover has remained about the same for 52% of businesses. For 32% of businesses, annual turnover has increased over the past three years, while turnover has decreased for 15% of businesses.

**Table 9: Change in Business Turnover in Last Three Years** 

		Stayed			
	Increased	about the	Decreased	Missing	Base
		same			
All Businesses	32%	52%	15%	1%	624
By Country					
England	34%	50%	15%	1%	479
Scotland	24%	67%	9%	0%	114
Wales	14%	51%	33%	2%	31
By Business Size					
micro 1-9	27%	55%	16%	2%	383
small 10-49	50%	39%	11%	0%	173
medium/large	59%	37%	4%	0%	68
By Sub - Sector					
Forestry	31%	43%	23%	3%	222
Primary Processing	42%	41%	17%	1%	164
Secondary Processing	30%	58%	11%	1%	214
Pulp and Paper	59%	22%	19%	0%	24

There is an apparent relationship between business size group and change in turnover. The proportion of businesses for which turnover had increased is lower among micro businesses, compared with small and medium / large businesses. For example, turnover has increased over the past three years in 59% of medium / large businesses, compared with only 27% of micro businesses reported an increase. Conversely, turnover has decreased in 4% of medium / large businesses, compared with 16% of micro businesses.

There are also some differences between sub - sectors. For example, in the forestry sector, turnover has increased over the past three years in 31% of businesses, compared to 59% of businesses in the pulp and paper sector.

#### 5.2 Change in Profitability

Respondents were asked how the profitability of their business had changed in the past three years. Profitability was defined in the questionnaire as "turnover minus costs".

Table 10 shows that profitability has stayed about the same for 47% of all businesses, while 31% of all businesses have experienced a decrease in profitability, and 20% have experienced an increase.

There are differences in the change in profitability according to business size. For micro businesses, 32% reported a decrease, and 18% reported an increase. Among medium / large businesses, 20% reported a decrease, and 30% reported an increase.

There are also notable differences between changes in profitability and changes in turnover. For example, while profitability has increased in 20% of all businesses, turnover has increased in 32% of all businesses. Similarly, while 31% of businesses have experienced a decrease in profitability, this compares with the 15% of businesses for which turnover has decreased.

Given the definition of profitability in the questionnaire, this suggests that, for many respondents, costs may have increased at a steeper rate than turnover. However, a further possibility may be that response bias is affecting these results, to the extent that some businesses may be less inclined to report that profitability has increased.

**Table 10: Change in Profitability in Last Three Years** 

	Increased	Stayed about the same	Decreased	Missing	Base
All Businesses	20%	47%	31%	3%	624
By Country					
England	21%	46%	30%	3%	479
Wales	8%	16%	74%	2%	31
Scotland	13%	62%	26%	0%	114
By Business Size					
micro 1-9	18%	47%	32%	4%	383
small 10-49	26%	44%	30%	0%	173
medium/large	30%	49%	20%	0%	68
By Sub - Sector					
Forestry	21%	40%	36%	3%	222
Primary Processing	23%	53%	22%	2%	164
Secondary Processing	18%	49%	30%	3%	214
Pulp and Paper	41%	27%	32%	0%	24

### 5.3 Change in Number of Employees

Respondents were asked how the average number of people employed by their business had changed in the past three years. Responses were requested in terms of Full Time Equivalent, including sub-contractors.

As table 11 shows, in 56% of businesses, the number of employees has stayed about the same. Eighteen percent of all businesses have increased their number of employees. The number of employees had decreased in 20% of all businesses.

There are some differences in the pattern of employment changes between business size groups. Among all micro businesses, employment has increased in 14%, while it has decreased in 21%, and in 57%, it had stayed the same. Among medium / large businesses, employment has increased in 36%, while it has decreased in 14%, and in 50% it had stayed the same.

In terms of comparison between countries, it appears that a higher proportion of businesses in England have increased the average number of people employed by their business. In England, the number has increased in 20% of "all" businesses, compared to 9% in Scotland, and 4% in Wales.

Table 11: Change in Average Number of People Employed Over the Last Three Years

	Increased	Stayed about the same	Decreased	Missing	Base
All Businesses	18%	56%	20%	6%	624
By Country					
England	20%	53%	20%	7%	479
Wales	4%	52%	29%	15%	31
Scotland	9%	70%	21%	0%	114
By Business Size	18%	56%	20%	6%	624
micro 1-9	14%	57%	21%	7%	383
small 10-49	32%	48%	19%	1%	173
medium/large	36%	50%	14%	1%	68
By Sub - Sector					
Forestry	19%	47%	28%	6%	222
Primary Processing	18%	63%	18%	1%	164
Secondary Processing	18%	58%	17%	7%	214
Pulp and Paper	10%	61%	29%	0%	24

#### 6. EXPECTED FUTURE CHANGES IN BUSINESS PROSPECTS

A key aim of the survey was to obtain information on the expectations of businesses within the forestry and wood industries regarding future changes in business prospects.

As with the questions regarding recent past performance, this survey focused on relative changes in business performance, using questions formulated as multiple choice. Such questions are used in a number of different business surveys to assess the level of business confidence in specific economic sectors. This approach can be particularly useful for comparison of results with future or past surveys over time. The results obtained by this survey provide baseline information against which changes in expectations of business performance can be compared in future surveys.

Judgements regarding expected future changes in business performance are based on knowledge of the individual business and sectors. They are also likely to rely on the subjective assessments and perceptions of the respondents, and these assessments may not be straightforward to form. Respondents' perceptions of future business prospects, or the external operating - environment, at the time of completing the questionnaire, may differ from other possible perceptions of the situation. However, these perceptions may be important for guiding future business decisions regarding issues such as expansion and investment.

Information on three issues relating to expected future business performance were collected: expected future change in business turnover; expected future change in economic conditions affecting the forestry and wood industries; and expectation of future business performance.

#### **6.1 Expected Future Change in Business Turnover**

Respondents were asked how they expect the turnover of their business will change in the next three years. The results from this are presented in table 12.

Among all businesses, 38% expect turnover to stay about the same, and 33% expect an increase in business turnover, while 9% expect a decrease. A total of 20% of businesses do not know. This pattern is similar to the percentages of businesses reporting the corresponding changes in turnover in the past three years.

Expectations regarding future changes in turnover are less positive among micro businesses, compared with small businesses and medium / large businesses. For example, 26% of micro businesses expect an increase in turnover, and 10% expect a decrease. By comparison, 56% of small businesses expect an increase in turnover, while only 3% expect a decrease. Among medium / large businesses, 69% expect an increase in turnover, and 5% expect a decrease.

There are also some differences between sub - sectors. For example, a larger proportion of businesses in the primary processing sector expect an increase in turnover (46%), compared with the forestry sector (30%). Similarly, only 8% of businesses in the primary processing sector expect a decrease in turnover, compared with 18% of businesses in the forestry sector. These patterns are broadly similar between the three countries.

Table 12: Expectation of Change in Business Turnover in the Next Three Years

	Increase	Stay about the same	Decrease	Don't know	Missing	Base
All Businesses	33%	38%	9%	20%	1%	624
By Country						
England	32%	39%	8%	20%	1%	479
Wales	17%	30%	3%	50%	0%	31
Scotland	43%	35%	12%	10%	1%	114
By Business Size						
micro 1-9	26%	40%	10%	22%	1%	383
small 10-49	56%	27%	3%	14%	1%	173
medium/large	69%	23%	5%	0%	3%	68
By Sub - Sector						
Forestry	30%	38%	18%	10%	4%	222
Primary Processing	46%	31%	8%	16%	0%	164
Secondary Processing	31%	38%	5%	25%	0%	214
Pulp and Paper	45%	35%	6%	14%	0%	24

#### **6.2 Expectation of Future Business Performance**

Respondents were asked how well, overall, they expect their business will do in the forestry and wood sector over the next three years.

Table 13 shows that, in total, 12% of businesses expect that they will do "very well". A total of 31% indicated that they expect their business will do "well, but could do better". On the other hand, 9% expect that their business will "have significant problems" and 13% indicated concern about survival of their businesses. A total of 32% of businesses reported that they do not know.

There are some differences between the countries, for specific sub - sectors. For example, in the forestry sector, 22% of all businesses are concerned about survival of their business. However, in England, 25% of businesses in this sub - sector are concerned about survival of their business. This compares with 9% of businesses in this category in Scotland.

The proportion of businesses that expect that their business would "do well, but could do better" is significantly higher in Scotland across all sub - sectors, compared with England, although the proportions expected to "do very well" is slightly lower. Similarly, the proportion of businesses in Scotland indicating concern about survival of their business is lower in Scotland, across all subsectors, compared with England.

It is notable that a substantial proportion of businesses responded "do not know" to this question. A similar observation can be applied to the previous questions regarding future expected change in turnover, and expected change in economic conditions affecting the forestry and wood sectors. This might suggest uncertainty regarding changes in the operating environment and future business performance. As future economic and business conditions can not be known for certain, this might be expected. It might also be the case that many businesses do not routinely consider their operations over this time scale, instead focusing on shorter-term priorities.

Table 13: Expectation of Business Performance in the Forestry and Wood Sector Over the Next Three Years

	Very well	Well, but could do better	Have significant problems	Concern about survival of business	Don't know	Missing	Base
All Businesses	12%	31%	9%	13%	32%	3%	624
By Country							
England	14%	27%	8%	14%	34%	3%	479
Wales	8%	22%	24%	20%	26%	0%	31
Scotland	6%	54%	11%	6%	23%	1%	114
By Business Size							
micro 1-9	11%	28%	9%	14%	35%	3%	383
small 10-49	16%	42%	6%	9%	26%	1%	173
medium/large	26%	40%	14%	7%	11%	3%	68
By Sub - Sector							
Forestry	12%	32%	19%	22%	9%	5%	222
Primary Processing	17%	42%	11%	9%	20%	1%	164
Secondary Processing	12%	28%	5%	10%	43%	2%	214
Pulp and Paper	0%	27%	19%	4%	50%	0%	24

#### 6.3 Expected Future Change in Economic Conditions

Respondents were asked how they expect economic conditions affecting the forestry and wood sector will change in the next three years.

Table 14 shows that, in total, 15% of businesses expect economic conditions to improve, while 31% expect conditions to stay about the same, and 15% expect conditions to decline. A total of 35% of businesses do not know.

Expectations are more positive in the larger business size categories, compared with micro businesses. A total of 13% of micro businesses expect conditions to improve, while 17% expect conditions to decline, and 30% expect conditions to remain about the same. Among all small businesses, 20% expect conditions to improve, while 10% expect conditions to decline, and 35% expect conditions to remain about the same. Among medium / large businesses, 39% of businesses expect economic conditions to improve.

In terms of sub - sectors, expectations of the change in economic conditions appear to be more negative among businesses in the forestry sector. In this sub - sector, 31% of businesses expect economic conditions to worsen, while 18% expect economic conditions to improve. By comparison, in the secondary processing sector, 9% of businesses expect economic conditions to worsen. However, these results should also be viewed with regard to the proportions of businesses in each category that indicate they do not know how economic conditions will change. This is substantially lower in the forestry sector compared with the other sub - sectors.

Table 14: Expectation of Change in Economic Conditions Affecting the Forestry and Wood Sector Over the Next Three Years

	Increase	Stay about the same	Decrease	Don't know	Missing	Base
All Businesses	15%	31%	15%	35%	3%	624
By Country						
England	17%	31%	15%	36%	2%	479
Wales	3%	32%	4%	43%	18%	31
Scotland	13%	34%	23%	29%	1%	114
By Business Size						
micro 1-9	13%	30%	17%	38%	3%	383
small 10-49	20%	35%	10%	32%	3%	173
medium/large	39%	45%	9%	8%	0%	68
By Sub - Sector						
Forestry	18%	29%	31%	13%	8%	222
Primary Processing	15%	32%	12%	39%	1%	164
Secondary Processin	14%	32%	9%	44%	1%	214
Pulp and Paper	27%	25%	6%	42%	0%	24

#### 7. OBSTACLES AND OPPORTUNITIES FOR BUSINESS DEVELOPMENT

In addition to obtaining information on recent past performance, and expected future prospects, a further aim of this survey was to obtain information on current obstacles to business success, and also opportunities for business development.

#### 7.1 Obstacles to Business Development

Respondents were asked to indicate what are the biggest obstacles to the success of their business at present. A list of possible obstacles was listed. Respondents were invited to select up to three different obstacles. The list presented in the questionnaire consisted of the following:

- Cash flow
- Obtaining finance
- Developing new business opportunities
- Keeping up with new technology
- Employing / retaining staff
- Management / business skills
- Economic environment

Respondents were also invited to state other obstacles that were not included in this list.

As table 15 shows, among all businesses, "cash flow" was identified most often as an obstacle to business success. "Employing and retaining staff", the "economic environment", and "developing new opportunities" were also identified frequently as obstacles to business success.

The obstacles that were identified the most times are similar between different business size, different sectors, and between countries. However, there are some differences. Cash flow appears to be less of a problem, according to the survey results, among medium / large businesses, relative to the smaller business categories. Conversely, employing / retaining staff appears to be less of a problem among micro businesses than in the larger business categories.

A total of 11% of businesses indicated "other" obstacles to business success. The other obstacles that were identified by respondents can be summarised as:

- Increasing cost of inputs
- Taxation
- Competition from imports
- Government regulations
- Insurance costs
- Low timber prices

It is notable that several of these other factors directly relate to costs associated with business activities. It is also notable that these are all factors

that relate largely to the external operating environment, rather than internal business processes or management.

Table 15: Obstacles to Success of Business, by Business Size (Includes Multiple Responses)

	Cash flow	Obtaining finance	Developing new opportunities	Keeping up with new technology	Employing/ retaining staff	Management/ business skills	Economic environment	Other	Missing	Base
All Businesses	22%	3%	14%	8%	19%	5%	16%	11%	2%	1193
By Country										
England	23%	3%	13%	8%	19%	6%	16%	10%	2%	889
Wales	20%	2%	21%	2%	23%	3%	6%	23%	0%	57
Scotland	14%	6%	18%	10%	19%	2%	21%	9%	1%	247
By Business Size										
micro 1-9	23%	3%	14%	9%	17%	4%	16%	11%	2%	726
small 10-49	17%	3%	14%	6%	29%	9%	13%	8%	1%	328
medium/large	13%	4%	16%	5%	26%	6%	23%	8%	0%	139
By Sub - Sector										
Forestry	16%	5%	17%	4%	18%	7%	18%	13%	2%	453
Primary Processing	17%	4%	14%	7%	19%	4%	18%	15%	2%	302
Secondary Processing	25%	2%	13%	10%	20%	4%	15%	9%	1%	389
Pulp and Paper	13%	1%	20%	12%	9%	4%	32%	6%	2%	49

#### 7.2. Opportunities for Business Development

As a further area of analysis, the survey also sought to obtain information on the views of forestry and wood businesses regarding the main opportunities for development of their business in the forestry and wood industry over the next few years. An open-ended question was used to obtain this information, and this question received a range of different written responses. The following section provides a qualitative summary of these responses.

The opportunities that were identified by respondents can be separated into "internal" factors, that can be directly influenced by individual businesses themselves, and "external" factors relating to the business environment in which they operate.

Regarding internal factors that are specific to individual businesses, the following general areas were identified repeatedly as offering opportunities for business development:

- Investment in implementing and keeping up with new capital and machinery;
- Finding new business and extending customer base;
- Increasing value added;
- Expanding range of services and products;
- Improving quality of service;
- Promotion and marketing.

These opportunities were frequently related to specific situations that individual respondents are currently facing, and the specific market sectors in which they operate.

In terms of external factors influencing the forestry and wood sector, a wide range of external factors were identified by respondents as offering opportunities for business development in the next few years. Some of these factors related to the potential emergence of new opportunities, while others related to the removal of factors that specific respondents indicated they regard as barriers to business development. Some respondents noted that they believed their main opportunities for business development would be outside the forestry and wood industries.

The issues that were identified by respondents are summarised in table 16 (which includes multiple responses):

Table 16: Main External Opportunities for Business Development (includes multiple responses)

ISSUE IDENTIFIED	% OF RESPONSES
Increased Demand for Wood Products	9%
Amenity and Environment Based Forestry	8%
Wood Fuel / Wood Energy Markets	8%
Competitiveness Against Imports / Less Competition From Imports	8%
Reform of Forestry Grants / Higher Forestry Grants	7%
Access to Suitable Trained / Skilled Labour	7%
Increased Planting, Maintenance and Harvesting	7%
Increase in House Building and Construction	7%
Higher Timber Prices	6%
Awareness of Wood As a Sustainable Resource / Increased Competitiveness Against Alternative Materials	5%
Lower Burden From Regulation / Bureaucracy	5%
Increased Availability of Good Quality Timber	5%
Agricultural Policy Reform / Agri -Environment Schemes	5%
Effective Support From Forestry Commission / Government	5%
Awareness of Environmental Benefits of Forests	4%
Forestry Certification	2%
Tax Relief for Forestry Activities	2%
Total Number of Responses	428

The issues that were most often mentioned by respondents can be related to three general areas of demand for wood products, demand for forest management activities, and government policy and support towards the forestry and wood sector.

A range of specific opportunities were identified, covering issues such as amenity / conservation based forestry, wood fuel / wood energy markets, expansion of house building and construction activities, increasing competitiveness against imports, and awareness of wood as a sustainable resource.

In terms of government policy and support for the forestry sector, several respondents highlighted a desire for reform of forestry grants, including simplification and also an increase in the level of grant payments. A number of respondents indicated a desire for effective support from government in general, while a desire for a lower burden from regulation was also noted. Opportunities emerging from agricultural policy reform were mentioned a number of times.

Several respondents identified the importance of increasing awareness of the environmental and sustainability benefits of forestry and wood products. Some respondents identified opportunities offered by forestry certification.

Separately, problems associated with obtaining suitably trained and skilled employees were highlighted by a number of respondents.

The survey did not aim to obtain respondents views on whether they believed these opportunities would actually occur, or whether they represented changes that respondents considered would be desirable for the development of their business. However, it is apparent that responses consisted of both of these. The diversity of responses to this question in part reflects the range of businesses that responded to the survey, their focus on different sub-sectors within the forestry and wood industries, and their different positions in the supply chain.

#### 8. CONCLUSIONS

Overall, the results from this survey indicate that a substantial proportion of businesses in the forestry and wood industries have stayed about the same over the past three years, in terms of the measures of turnover, profitability, and employment. However, performance has differed between industry subsectors, different business sizes, and countries. Micro businesses and businesses in the forestry sector, as opposed to processing, appear to have performed less well, compared with other business categories. Expectations of performance over the next three years are reasonably positive, with a total of over 70% of businesses expecting their turnover to either increase or stay the same, and a total of around 40% expecting to do "well" or "very well" in the forestry and wood sector. However, this also varies between business categories. This might illustrate the diverse range of pressures and opportunities that are faced by specific businesses and sub - sectors, within the forestry and wood industries.

This survey has generated a substantial amount of data and information regarding forest and wood industry businesses. The results obtained by this survey provide baseline information for a number of indicators of business health in the forestry and wood industry. Future surveys will be in a position to monitor the direction and extent to which these indicators have changed over time.

#### **ANNEX 1: QUESTIONNAIRE**

1.	Approximately what per of the following activities		f your total	business to	urnover comes froi	m each			
	Tree and Woodland Management and Consultancy		%	Timber	Harvesting	%			
	Forest Nurseries		%	Manufa	acture of Pulp / Pape	r %			
	Timber Haulage		%	Manufa Produc	acture of Primary W ts	ood %			
2.	Approximately what pe and what percentage is			iness turnov	er is based on sof	ftwood,			
	Softwood	%	Ha	ardwood	%				
3.	Approximately what pe					grown			
	Grown in UK %		lm	ported	%				
4.	What was the annual tu	ırnover of y	our busines	ss in the last	financial year? (tid	ck one)			
	Under £58,000		£250,000 Under £5		£5 million – Under £10 m	nillion			
	£58,000 – Under £100,000	£500,000 Under £1		£10 million o	rover				
	£100,000 –								
5.	How has your annual business turnover changed in the last three years? (tick one)								
			By ho	w much (app	roximately)?				
	Increased		% inc	rease					
	Stayed about the same								
	Decreased		% de	% decrease					
6.	How has the profitabiliast three years? (tick o		r minus co	sts) of your	business changed	I in the			
			By ho	ow much (app	proximately)?				
	Increased			rease	,				
	Stayed about the same								
	Decreased		% de	crease					

7.	<b>How many people are employed by your business?</b> Please calculate as Full Time Equivalent (for example, 1 full time employee = 1; 1 part time employee working 1 day per week = 0.2 etc.), and include subcontractors. (tick one)							
	1- 9		50 - 249					
	10 - 49		250 or more					
8.	How has the average number of people employed by your business changed over the last three years? Please calculate as Full Time Equivalent, and include subcontractors. (tick one)							
	_		By how much (app	roximately)?				
	Increased		% increase					
	Stayed about the same							
	Decreased		% decrease					
9.	How do you expect the turyears? (tick one)  Increase  Decrease	Sta	your business will y about the same	I change in	the next three			
10. How do you expect economic conditions affecting the forestry and wood sector will change in the next three years? (tick one)								
	Increase	Sta	y about the same					
	Decrease	Dor	n't know					
11. How well do you expect your business will do in the forestry and wood sector over the next three years? (tick one)								
	Very well	We bet	II, but could do ter	Have proble	some significant			
	Concern about survival of business	Dor	n't know					

12.	What are the biggest obstacles to the success of your business at present? (please tick up to 3)							
	Cash flow	Keeping up with new technology	Management / business skills					
	Obtaining finance	Employing, training and keeping staff	The economic environment					
	Developing new business opportunities	Others (please specify)						
13.	What are the main opporture and wood sector over the ne		your business in the forestry					
14.	. Any other comments that you wish to make would be welcome.							