

timbertrends

Avenida del Pino, 270
Pinar de Campoverde
Pilar de la Horadada
03191, Alicante, Spain

Phone/Fax: 00 34 966 762 988
E-mail: nick@timbertrends.net

Improved Timber Utilisation Statistics 2005

**An Updated Study
for the Forestry Commission**

**by Nicholas Moore
*timbertrends***

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Introduction:

An initial study of the utilisation of sawn softwood – imported and UK produced – by main market for the year 2004 was produced for the Forestry Commission by Nicholas Moore of *timbertrends* in May 2006.

This latest study is intended to update this original work in order to assess changes that have occurred in timber's main markets in 2005 and to provide an indicative measure for 2006.

The original aim of the study was to investigate the nature and apparent accuracy of existing available data, with a view to producing an estimate of wood consumption in the UK, by principal market sector and to identify where gaps in knowledge existed.

The reason for the carrying out this work was due to the **absence of information on the utilisation of timber by major market was believed to be a significant problem for the sector as a whole and from discussions held by the Forestry Commission Committee, the Expert Group on Timber and Trade Statistics, it was broadly agreed that there was a need for indicative figures.**

Before this work on timber utilisation, no recent or reliable statistics existed on this subject.

Forestry and timber industry organisations, as well as businesses in the sector, regularly receive enquiries about the production of wood and the consumption of timber in the UK, with most enquirers keen to obtain information about usage within the principal market sectors, i.e. construction, packaging/pallets and fencing/timber garden products.

Until the publication of the initial report for the year 2004, it had not been possible to provide an accurate response to such enquiries.

The objectives of the 2004 study, delivered through the provision of a final report, were:

- to identify and analyse the type and accuracy of current sources of information available
- to identify the methods of data collection employed
- to determine differences and/or inconsistencies that may exist between sources and
- to identify gaps in available information.

Consequently, from available information, estimates of consumption of sawn softwood in 2004 by main market: namely, construction, pallets & packaging, fencing and outdoor uses and other markets were made, but similar estimates could not be made for sawn hardwood because of the lack of available information.

The 2004 study, reporting on sawn softwood utilisation by main market provided the first estimates of their kind for many years, thereby answering the fundamental question of consumption - or utilisation - by broad market destination.

The success in measuring the volumes of sawn softwood entering the main markets in 2004 led to requests from the sponsoring body, the Forestry Commission of Great Britain and the Commission's Expert Group on Timber and Trade Statistics Committee, and other trade organisations to update the findings of the 2004 report for 2005.

Purpose of this Study:

The purpose of this latest study is to *update the existing content of the initial report, for the year 2004, "Improving Timber Utilisation Statistics"*.

Study Objectives:

1. To update the analysis of the type and accuracy of the sources of information available; note changes to methods of data collection employed; report on changes to the differences and/or inconsistencies between sources and also in the identification of gaps in available information.
2. Update the estimate of consumption of sawn softwood by main market: construction, pallets & packaging, fencing & outdoor uses and other markets for 2005.
3. To make further enquiry on the possibility of collecting data to determine the utilisation of sawn hardwoods.

Methodology:

Desk and telephone research and a limited survey conducted by e-mail and fax were the methods used to meet the objectives of this update.

Information was gathered from official published statistics (e.g. housing data from the Department of Communities and Local Government), the selected members of the Forestry Commission's Expert Group on Timber and Trade Statistics (EGTTS) and also from a collection of third parties.

The official statistics used in this report included import data on wood products from Her Majesty's Revenue and Customs; Housing Statistics from the Department of Communities and Local Government (DCLG), Construction Statistics from the Department of Trade and Industry (DTI) and PRODCOM data from the Office of National Statistics (ONS) which covered both construction markets and the manufacture of pallets.

These data, in combination with timber usage data and information from third parties enabled updated estimates to be made on the utilisation of sawn softwood in the main markets under review. The involvement of third parties was once again invaluable in gathering information on usage trends in various market places. Information was requested from the following sources.

The Forestry Commission
Timber Trade Federation
UK Timber Frame Association
United Kingdom Forest Products Association
Timber Decking Association
TIMCON
TRADA
Department of Communities and local Government (DCLG)
Department of Trade and Industry (DTI)
Charles Ransford & Son Ltd

To determine if information on sawn hardwood utilisation was available, Committee Members the National Hardwood Division of the Timber Trade Federation were requested to reply by e-mail or fax to a short questionnaire.

Objectives and Initial Findings:

Objective 1

The first objective of this study was to update the analysis of the type and accuracy of the sources of information available; note changes to methods of data collection employed; report on changes to the differences and/or inconsistencies between sources and also in the identification of gaps in information.

Table 1 below describes the content of information available and its supplier. Those items marked with an asterisk in the column labelled, "Latest Information" have been updated since the initial study of last year.

Table 1: Type of Information Available & Used

Respondent	Specific Content of Information	Supplier of Information	Latest Information
Timber Committee (UNECE)	The UK Timber Market Statement	Forestry Commission	2005*
Timber Trade Federation	Import & Export Statistics End-use study 1985 updated	<i>timbertrends</i> TTF	2005* 1989
UK Timber Frame Association	Timber usage data in new house building	UKTFA	2005*
	Mix of Housing Types	UKTFA/NHBC	2005*
United Kingdom Forest Products Association	Input to the Forestry Commission Sawmill Survey	Forestry Commission	2005*
Timber Decking Association	Market Development by Value	TDA	2006*
TIMCON	Pallet & Packaging Volumes	PRODCOM / TIMCON	2005*
CPA	Construction Industry Trends, Trade Surveys and Forecasts	CPA	2005

Contact was made with some of the other original respondents to the 2004 study, but little or no further information was available to inform this report.

The information supplied by the seven organisations shown above has, once again, been used to provide useful background comment on each of the markets under review or, specifically in calculation of market sizes.

Specific data used in the calculation of market sizes was supplied by the Timber Trade Federation (TTF), the United Kingdom Forest Products Association (UKFPA), the United Kingdom Timber Frame Association (UKTFA), the Timber Decking Association (TDA), the Pallets and Packaging Association (TIMCON) and the Forestry Commission.

The first objective of this latest study was to update the analysis of the type and accuracy of the sources of information available and also to identify any changes to methods of data collection employed.

The only major change in methodology between this study and the previous study has been in the calculation of pallet and packaging volumes. In the previous report, information was supplied on behalf of TIMCON, the pallets and packaging association by John Mead & Associates. A change in working relationships, brought about by retirement, has necessitated further review of data for the year 2005 and for previous years.

The first objective of this latest study was also required to update the continuing gaps that exist in information necessary to measure timber utilisation in the UK.

Estimates of timber utilisation in 2005 and indications of development into 2006 have been made in this latest study, by drawing together the known information from a variety of sources mentioned above, but apart from this study, there would appear to no other publicly available measurement of timber utilisation by main market in the UK.

This and the previous study concentrated upon the utilisation of sawn softwood by main market. However enquiry was once more made into the availability of information on the market destinations of sawn hardwood. This study is able to provide confirmation that there is a continuing paucity of information in this area. This is commented upon separately under the findings for “Objective 3” below.

Objective 2

The second objective of this study was to update the estimate of consumption of sawn softwood by main market: construction, pallets & packaging, fencing & outdoor uses and other markets for 2005.

Using available information of timber usage from those organisations re-contacted and updating information from the previous study, estimates of timber utilisation by main market for sawn softwood in 2005 have been made.

Objective 3

The third objective of this latest study was to make further enquiry on the possibility of collecting data to determine the utilisation of sawn hardwoods.

This was carried out with the cooperation of the Timber Trade Federation and its Committee Members of the National Hardwood Division of the Federation.

Members were invited to respond to a short questionnaire on sawn hardwood utilisation and the findings, provided below in the Executive Summary for this report, confirm that little information is available on sawn hardwoods and disappointingly, the probability of rectifying this weakness in utilisation data is very low.

Executive Summary

With the objectives achieved and the initial findings identified (above), timber utilisation for sawn softwood by main market in 2005 has been determined. However, further investigation into the possibility of determining similar information for sawn hardwoods has revealed that the likelihood of providing any meaningful timber utilisation information is small.

Softwood

As with the 2004 study, some specific market information was made available from which usage estimates have been made for the main timber markets of construction, packaging, fencing and outdoor and 'others'.

Updated information was available from the Forestry Commission and the pallets and packaging association, TIMCON, which enabled estimates to be made of the size of the pallets and packaging market for sawn softwood.

Information previously made available by the Forestry Commission, the Timber Decking Association and private companies on the fencing and outdoor markets (and construction and 'other' markets) has facilitated the updating of the information on utilisation of sawn softwoods in this market also.

Estimates of the market for 'other' markets were again derived from the totals declared by the Forestry Commission of UK produced sawn softwood entering these markets; from an understanding of the general health of some of the largest of the 'other' markets (e.g. furniture) and from the work of previous studies.

Consequently, the subtraction of these 'knowns' from the grand total of sawn softwood produced in the UK and imported would leave a residual total for the quantity of sawn softwood used by the construction industry. The 2005 estimates are presented alongside the information for 2004 in table 2 below, in order to show the changes in utilisation over the two years.

Table 2: Estimated Softwood Utilisation by Main Market by Volume, 2004 & 2005

000s cbm	UK Producers		Imports		Total	
	2004	2005	2004	2005	2004	2005
Construction	781	826	5,977	5,534	6,758	6,360
Pallets & Packaging	733	742	1,536	1,645	2,269	2,387
Fencing & Outdoor	804	835	200	180	1,004	1,015
Other Markets	47	47	213	203	260	250
TOTAL	2,366	2,450	7,926	7,563	10,292	10,013

NB: Amendments of Official Statistics since the previous report has resulted in slight changes in some totals.

Total consumption of sawn softwood in the UK fell 279,000m³ or around 2.7% in 2005, with imported consumption down 363,000m³ or 4.6% and domestically produced consumption higher by 84,000m³ or 3.6%. This resulted in the overall share of domestically produced sawn softwood gaining a 24.5% share of all softwood consumption in 2005, compared to 23.0% in 2004.

The calculation of apparent consumption assumes that most sawn softwood exports were produced by UK sawmillers.

The outcome from this work of piecing together the information available from updated usage data with published data (e.g. softwood usage in pallets with PRODCOM data) has been to provide updated estimates of the main market destinations for sawn softwood in 2005.

Detailed comparisons, showing growth rates and further explanation of some of the reasons behind these changes in consumption, or utilisation, is provided in the section of this report, “Main Findings”.

Estimates were made of softwood usage in the packaging and pallets market, in the fencing and outdoor use markets, 'other' markets and in the new home building market.

These estimates, when subtracted from total consumption would reveal the grouped remainder of construction markets defined as 'RMI and Other construction markets' which includes the Repair, Maintenance and Improvement (RMI) markets in housing and non-housing construction, Infrastructure Projects and all Other Non-housing New Work.

This balancing figure in the RMI and Other construction markets was then tested against the growth in of construction activity from the DTI and other published sources and viewed against the work of previous utilisation studies dating back to the mid-1980s.

Confirming the findings of the 2004 study, and as shown in the main body of this report, the indicative volumes provided for the construction market appear to be reasonable.

This sub-division and verification of the construction market has enabled a slightly more detailed breakdown of softwood utilisation by market shown in table 2 to be made and this is shown in table 3 below.

Table 3: Estimated Softwood Utilisation by Main Market and Construction Sector by Volume, 2004 & 2005

000s cbm	UK Producers		Imports		Total	
	2004	2005	2004	2005	2004	2005
Construction	781	826	5,977	5,534	6,758	6,360
New Housing	94	96	587	577	681	673
RMI & Other	686	729	5,391	4,958	6,077	5,687
Pallets & Packaging	733	742	1,536	1,645	2,269	2,387
Fencing & Outdoor	804	835	200	180	1,004	1,015
Other Markets	47	47	213	203	260	250
TOTAL	2,366	2,450	7,926	7,563	10,292	10,013

The fall in softwood utilisation in the construction market is explained by marginally lower consumption in the new housing sector and a significant (6.4%) decline in volume in the RMI and Other sectors of construction.

As will be described in more detail in the main findings of this report, softwood utilisation in the new housing was lower in 2005, despite an increase in the number of homes started and completed in total and despite a rising proportion of timber frame housing which utilises considerably greater amounts of sawn softwood than housing constructed from masonry and other non-timber frame methods. The fundamental reason for lower utilisation in this sector was because less softwood was utilised per unit built as the shift away from low-rise to medium and higher-rise developments continued.

In the RMI and Other sectors, lower softwood utilisation was due to less repair and maintenance activity.

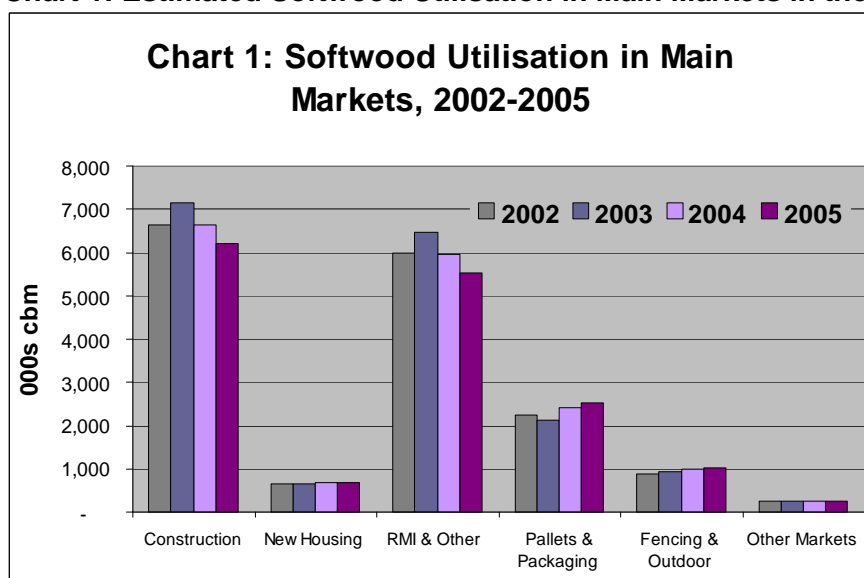
The fall in softwood consumption in construction reduced overall utilisation in 2005 to a little over 10 million cubic metres, but within this total, increases in utilisation have occurred in the packaging and pallets market and also in the fencing and outdoor market.

As noted in the previous report, the major area of weakness in this study for sawn softwood is the lack of information available for measuring the collection of markets defined as 'Others' and the RMI and Other Construction market.

However, it is useful to repeat the contention that any margin of error in quantification of the market for 'others' does not significantly affect the reliability of the estimate derived for the construction market. Importantly, the verification tests conducted on the estimates of softwood usage in the construction provide confirmation of the scale of softwood utilisation in this market.

A graphical presentation of the development of main markets for sawn softwood between 2002 and 2005 is given in chart 1, below.

Chart 1: Estimated Softwood Utilisation in Main Markets in the UK, 2002-2005

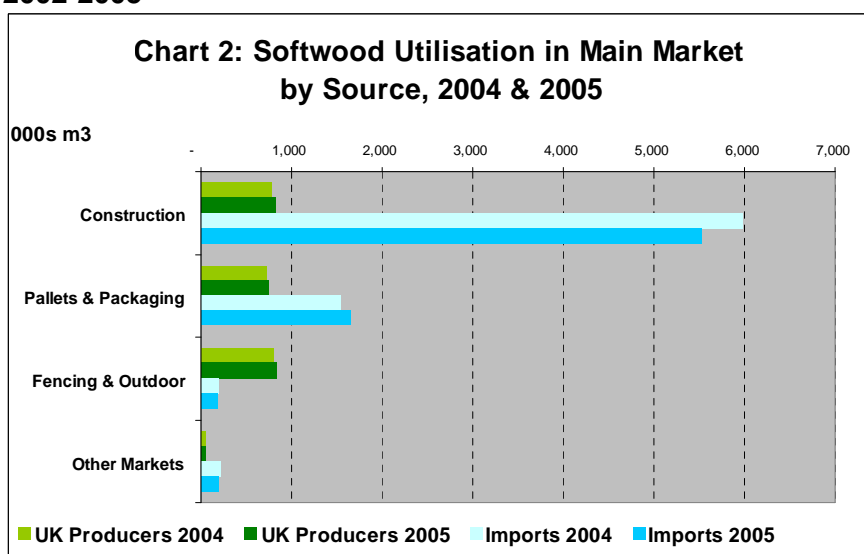


The importance of the construction market (further sub-divided in chart 1) is clear and despite a declining level of utilisation for the third consecutive year, construction in total still accounted for 63.5% of all softwood consumption (down from 69.5% in 2002). The proportions by market and source are shown in table 4 below.

Table 4: Estimated Softwood Utilisation by Main Market by Source, 2004 & 2005

%	UK Producers		Imports		Total	
	2004	2005	2004	2005	2004	2005
Construction	33.0%	33.7%	75.4%	73.2%	65.7%	63.5%
New Housing	4.0%	3.9%	7.4%	7.6%	6.6%	6.7%
RMI & Other	29.0%	29.8%	68.0%	65.6%	59.0%	56.8%
Pallets & Packaging	31.0%	30.3%	19.4%	21.8%	22.1%	23.8%
Fencing & Outdoor	34.0%	34.1%	2.5%	2.4%	9.8%	10.1%
Other Markets	2.0%	1.9%	2.7%	2.7%	2.5%	2.5%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

By volume, the changes within market and by source are shown in chart 2.

Chart 2: Estimated Softwood Utilisation in Main Markets in the UK by Volume, 2002-2005

Again, the importance of the construction market can be identified and the relative strengths of the UK domestic production sector and the import sector are viewed from chart 2.

The share of softwood consumption by market by source is shown in table 5.

Table 5: Estimated Share of Softwood Utilisation by Main Market by Source, 2004 & 2005

%	UK Producers		Imports		Total	
	2004	2005	2004	2005	2004	2005
Construction	11.6%	13.0%	88.4%	87.0%	100.0%	100.0%
Pallets & Packaging	32.3%	31.1%	67.7%	68.9%	100.0%	100.0%
Fencing & Outdoor	80.1%	82.3%	19.9%	17.7%	100.0%	100.0%
Other Markets	18.2%	18.6%	81.8%	81.4%	100.0%	100.0%
TOTAL	23.0%	24.5%	77.0%	75.5%	100.0%	100.0%

The relative strength of UK domestic production in the pallets and fencing markets is confirmed, as is the dominance of imported material in construction. It should however be noted that in spite of supplying the great majority of sawn softwood to the timber frame new housing market, imported sawn softwood utilisation in the total construction market fell in 2005 while domestically produced material supply was higher.

Softwood Utilisation Development into 2006

The timing of this updated study (research conducted in the Winter of 2006 and early Spring of 2007) has permitted an indicative measure of softwood utilisation in 2006.

The supply difficulties experienced in 2006 in the UK and in many other countries has created significant product shortages in some of the main markets throughout the year.

One consequence has been the shortfall in the supply of imported sawn softwood, especially those grades destined for packaging and pallets and fencing and other outdoor uses. Provisional import data for 2006 indicated that total sawn softwood imports fell to a level just above 7 million cubic metres. Despite log supply difficulties in some parts of the UK, it would appear that when the output from UK sawmilling is published by

the Forestry Commission, it will be seen that UK production has risen, to possibly more than 3 million cubic metres for the first time. Despite this increase from UK domestic producers, severe supply shortfalls remained.

The markets that experienced the greatest difficulties with supply in 2006 have been the pallets and packaging and fencing and outdoor markets. Reduction in the availability of imported goods would indicate that these two markets, despite continuing good demand, will have grown only slightly in 2006, if at all.

The downturn in construction, especially for repair and maintenance activity in both private and public sectors in 2006 will be seen to have driven consumption of softwood lower in 2006 in these markets, resulting in a further overall decline in softwood utilisation.

As a consequence, the share of softwood consumption from UK domestic producers is likely to have risen again in 2006, while imported share is expected to be lower.

These, and associated developments are reviewed in a little more depth in the section of this report, "Development of Sawn Softwood Utilisation in 2006".

Hardwood

Publicly available information on sawn hardwood usage is, as reported in the previous study on timber utilisation, extremely scarce.

The only information that continues to be available - from which a number of conclusions have been made - is the known total volumes produced by UK sawmills (from the Forestry Commission's Sawmill Survey), the volumes imported as determined from import and export trade statistics (and reported by the Timber Trade Federation) and empirical evidence of the use of hardwood from the hardwood trade.

Below this 'top line' level which identified consumption of all sawn hardwood at 805,000m³ in 2004 and 693,000m³ in 2005 (production less exports plus imports), there is little information available from which to estimate hardwood usage by market.

The Timber Trade Federation agreed to help determine whether information on timber utilisation could be gained from timber importers through consultation with the Committee Members of the Federation's National Hardwood Division.

Imports of sawn hardwood comprise 95% of hardwood consumption in the UK; hence it was of vital importance to understand the availability of information from this sector.

A short questionnaire (Annex 1) was provided to the Committee Members to enquire whether any market information existed and whether Members would be able to supply their own company's sales data by suitable market description.

The majority of Members responded, with 10 replies (9 usable) from a possible 16. The significant conclusion to arise from the results of this short survey was that not all sawn hardwood importing companies record their sales by end-use market destination (half of those responding) and for those companies that do have this type of information, only one was prepared to provide it at this time.

The prospect of gathering quantifiable data to convert to utilisation statistics is therefore slim.

This small investigation did however reveal an assessment of the relative importance of some of the main uses to which the different types of sawn hardwoods are put.

For both temperate and tropical hardwood, joinery applications are unquestionably the 'most important' to those companies responding. Other constructional uses, such as flooring also scored highly in terms of their relative importance, supporting the findings from the Forestry Commission that a little more than 80% of British hardwoods are destined for construction markets.

The results of this small investigation are provided below, in the section, "Main Findings - Hardwood"

Main Findings:

Hardwood

The lack of information available on the market destinations of sawn hardwood, determined in the 2004 report, prompted a different approach to understand if any information existed or could be generated.

With the great majority of sawn hardwood usage in the UK sourced from imports, the hardwood importing committee members of the Timber Trade Federation's National Hardwood Division (NHD) were contacted.

The purpose of this investigation was to understand if hardwood traders gathered information on markets and if so, whether it would be provided for the purposes of measuring sawn hardwood utilisation.

Information Supplied by the National Hardwood Division of the Timber Trade Federation.

A short questionnaire (Annex 1) was provided to the committee members to enquire whether any market information existed and whether Members would be able to supply their own company's sales data by suitable market description.

The majority of Members responded, with 10 replies (9 usable) from a possible 16. The significant conclusion to arise from the results of this short survey was that not all sawn hardwood importing companies record their sales by end-use market destination (half of those responding positively) and for those companies that do have this type of information, only one was prepared to provide it at this time.

The future prospects of gathering quantifiable data to convert to utilisation statistics are therefore slim.

This small investigation did however reveal an assessment of the relative importance of some of the main uses to which the different types of sawn hardwoods are put.

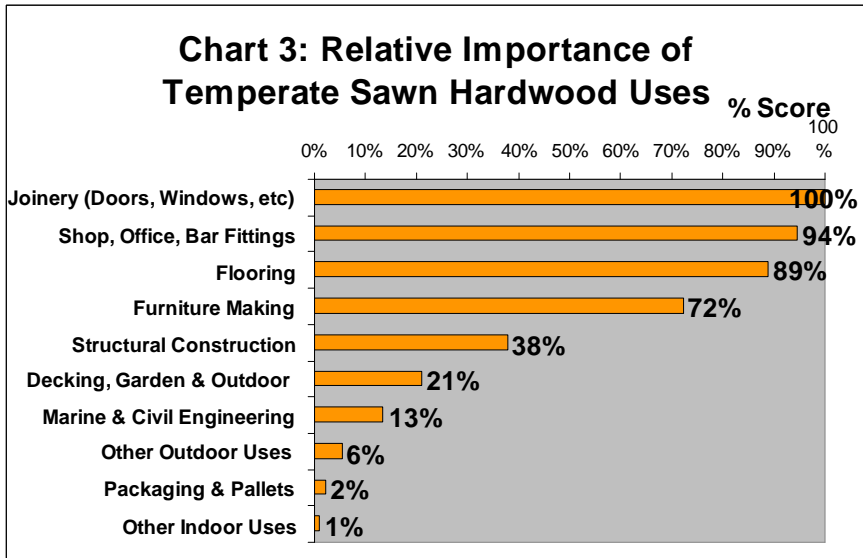
For both temperate and tropical hardwood, joinery applications are unquestionably the 'most important' to those companies responding. Other constructional uses, such as flooring also scored highly in terms of their relative importance, supporting the findings from the Forestry Commission that a little more than 80% of British hardwoods are destined for construction markets.

To provide an assessment of the relative importance of each of the main uses, a simple scoring system was applied to the possible responses to a number of questions, e.g. "*In your opinion, how **important** are the following uses for sawn **temperate** hardwoods?*"

The extent of each of the uses described was therefore measured with a possible maximum rating of importance of 100% (all respondents replying that the described use was considered to be "Very Important") to 0% (all respondents replying that the described use was considered to be "Not At All Important").

For the main uses of temperate hardwoods, chart 3, below shows the relative importance of each use.

Chart 3: The Relative Importance of Temperate Sawn Hardwoods

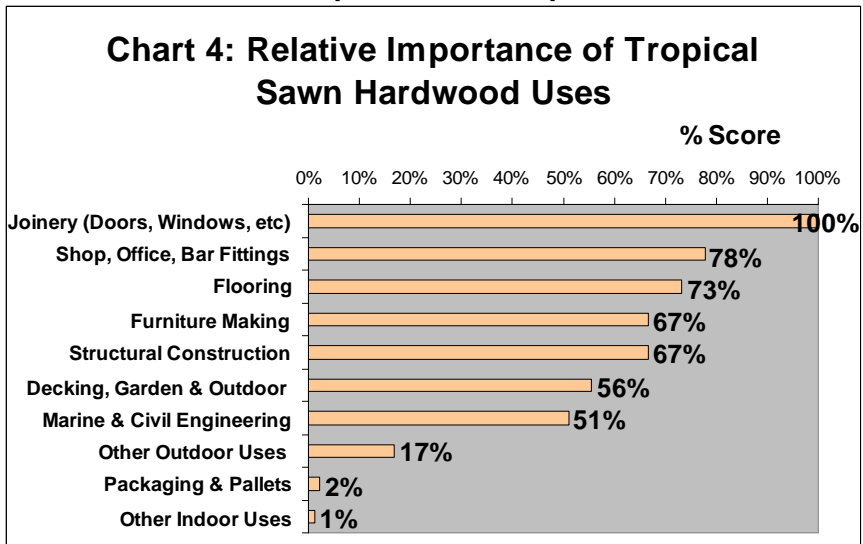


Joinery applications were considered to be very important by all respondents, hence the 100% rating in chart 3 above.

Other constructional uses: shop, office and bar fittings, flooring applications and structural uses also featured highly.

The relative importance of the uses of tropical hardwoods was also determined and this is shown in chart 4.

Chart 4: The Relative Importance of Tropical Sawn Hardwoods



A similar view of the importance of different uses emerges and for tropical hardwoods, structural uses, decking, garden and other outdoors uses and marine and civil engineering uses are considered to be considerably more important, compared to the ratings for temperate hardwoods.

Should these ratings of relative importance be representative of the entire market for sawn hardwoods, inferences can be made of the volumes consumed; however, quantification remains, at this time, unavailable.

Each of the members of the NHD were asked whether they would be prepared to supply information on markets, should such information exist within their own companies, but the response was disappointing.

In response to whether this type of information existed, 3 of the 9 respondents stated they did collect this type of information, 3 stated they did not and 3 did not answer the question.

However, when asked if they would supply this information (if it existed) 7 of the 9 respondents replied negatively. Only 1 company would be prepared to supply this information. The other respondent did not answer this question.

Consequently, the ability to gather any detailed utilisation statistics for the hardwood market appears to be severely limited.

In 2004, through production, export and import statistics the apparent consumption of sawn hardwood in the UK was identified to be 805,000m³ of which 759,000m³ was imported (*timbertrends* information), 61,000m³ produced by UK sawmills and, according to Forestry Commission data, 15,000m³ was exported.

This volume was a little less than 1% lower than the 811,000m³ consumed in the UK in 2003.

In 2005, consumption had fallen substantially to 693,000m³, a decline of 14%.

Imports declined to 660,000m³, UK production fell to 54,000m³ and exports rose, according to data from the Forestry Commission, to 21,000m³. Of the main species imported in 2005, the different varieties of meranti, virola and mahogany featured highly while for temperate species, oak accounted for around a third of the total. Customs data for 2005 did not provide a comprehensive listing for species, but a separate enquiry has determined that large quantities of poplar and birch were imported from Latvia, in addition to alder and aspen from that country.

Reviewing the general trend in end-use markets provides a little more insight into the utilisation of sawn hardwoods. In 2005, according to the Department of Trade and Industry's (DTI) construction statistics, industrial and commercial refurbishment and new work was higher than in 2004, indicating that activity in shop, office and the bar fittings applications and flooring and joinery applications in the commercial construction sector was higher in 2005.

This increase in the volume of activity may well have resulted in higher utilisation of hardwoods destined for these applications in the commercial construction market.

Higher volumes of sawn hardwood are also believed to have been used in the decking market in 2005.

Lower levels of activity in housing markets, especially the repair, maintenance and improvement sector of the housing market may well have had the opposite effect on consumption of sawn hardwoods.

Although a little more intelligence has been gathered on sawn hardwood utilisation for 2005, there remains a serious gap in information available for members of the timber industry and others interested in the market development of sawn hardwoods.

Softwood

Utilisation of UK produced sawn softwood by main market was supplied by the Forestry Commission from the work conducted on behalf of domestic producers in the UK, and as with the 2004 study, estimates have been made on the utilisation of imported material through reference to a number of timber industry organisations and representative bodies and through the use of official statistics.

Main Markets

The main markets for sawn softwood are construction, pallets and packaging, fencing and outdoor and the collection of the many other destinations, classified as 'Other'.

The reduction in the overall consumption of softwood in 2005 and the estimates of utilisation by market, compared to the revised totals for 2004, as shown in table 3 is repeated as table 6 below.

Table 6: Estimated Softwood Utilisation by Main Market and Construction Sector by Volume, 2004 & 2005

000s cbm	UK Producers		Imports		Total	
	2004	2005	2004	2005	2004	2005
Construction	781	826	5,977	5,534	6,758	6,360
New Housing	94	96	587	577	681	673
RMI & Other	686	729	5,391	4,958	6,077	5,687
Pallets & Packaging	733	742	1,536	1,645	2,269	2,387
Fencing & Outdoor	804	835	200	180	1,004	1,015
Other Markets	47	47	213	203	260	250
TOTAL	2,366	2,450	7,926	7,563	10,292	10,013

The proportions of UK produced and imported softwood, as a percentage of the total for each source in each year, is shown in table 7 below.

Table 7: Estimated Proportion of Softwood Utilisation by Main Market, by Source, by Volume, 2004 & 2005

%	UK Producers		Imports		Total	
	2004	2005	2004	2005	2004	2005
Construction	33.0%	33.7%	75.4%	73.2%	65.7%	63.5%
Pallets & Packaging	31.0%	30.3%	19.4%	21.8%	22.1%	23.8%
Fencing & Outdoor	34.0%	34.1%	2.5%	2.4%	9.8%	10.1%
Other Markets	2.0%	1.9%	2.7%	2.7%	2.5%	2.5%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

From the updated survey for 2005, the most significant change was in the share of utilisation by the construction industry, which accounted for a decreasing proportion of all softwood consumption, at 63.5% of all softwood consumed. This reduction in share, brought about by a real reduction in volume (over 400,000m³ as shown in table 6) was countered by an increase in volume in the pallets and packaging market and the fencing and outdoor market.

By re-casting table 7 into a view of how the individual shares for each of the main markets were comprised, from the domestic and import sectors, an appreciation of the gradual advance of domestically produced consumption over imported consumption can be given, as shown in table 8.

Table 8: Share of Softwood Utilisation within Main Market, by Source, by Volume, 2004 & 2005

000s cbm	UK Producers		Imports	
	2004	2005	2004	2005
Construction	11.6%	13.0%	88.4%	87.0%
New Housing	13.9%	14.3%	86.1%	85.7%
RMI & Other	11.3%	12.8%	88.7%	87.2%
Pallets & Packaging	32.3%	31.1%	67.7%	68.9%
Fencing & Outdoor	80.1%	82.3%	19.9%	17.7%
Other Markets	18.2%	18.6%	81.8%	81.4%
Total	23.0%	24.5%	77.0%	75.5%

A key finding from table 8 is the advance, albeit gradual, of UK domestically produced sawn softwood in the construction market. Volume of domestically produced sawn softwood consumed by the construction market in total increased in 2005, which resulted in the share rising to 13% of all construction industry utilisation.

The share of domestically produced sawn softwood consumed by the new housing market increased slightly to 14.3% of the total as the volume of imported sawn softwood fell. The increased share of softwood consumption in new housing was achieved through a volume reduction from the import sector and slightly higher volume of UK domestically produced consumption.

The advance in the share of domestically produced softwood in the RMI and Other sector of the construction market was achieved through increases of domestically produced softwood supplied, coupled with lower volumes of imported material.

Increasing volumes from UK sawmillers destined for the construction industry were recorded in the latest Forestry Commission publication, "United Kingdom Timber Statistics", but despite the further development of the domestic sector in supplying the construction industry, especially for repair and refurbishment, domestic producers have yet to make any significant inroads in the supply of sawn softwood to the timber frame industry in the UK.

Further analysis of developments in construction markets is provided in the section, "The Construction Market" later in this section of the report.

Overall, domestically produced softwood gained market share in 2005 (to reach 24.5%) as lower volumes of softwood were imported.

The Packaging Market

Packaging is one of the markets quantified by official Government statistics through the series of 'PRODCOM' information sets. Estimates of timber utilisation are made through the use of these statistics and adaptation of the work originally provided by John Mead & Associates for TIMCON, the packaging and pallets association.

The estimated volume of sawn softwood consumed by the packaging market (consumption of new pallets, cases, drums etc.) in 2005 was, as shown in the tables above, 2,387,376m³. This represents a growth of just over 5% in this market in 2005.

This volume was calculated from the PRODCOM totals for pallets, cases, boxes, crates, cable drums, casks and barrels manufactured in the UK, based on UK manufacturers'

sales and exports. No allowance has been made for stock changes and for the purposes of this report are treated as having a neutral impact on UK sales and exports.

A further, serious weakness in the official statistics is the inability of the data collection methods of Government statistics to distinguish between manufactured pallets and other forms of packaging and that were previously manufactured and subsequently re-used.

This is an area where further work is recommended as the impact on estimates of softwood usage could be significant. It is likely that the estimates of softwood utilisation in the packaging market provided in this report are overstated.

Until better data is available – either from PRODCOM or other source – TIMCON believe that it would be unwise to estimate the extent of the errors in official statistics and despite inherent weaknesses in the data, the PRODCOM totals have been used in this report. The statistical basis behind the scale and growth of the packaging and pallets market therefore remains the same as in the previous utilisation report and as shown in other publications.

TIMCON also believe that the softwood usage data (per average pallet) may also be a little too high, it being based on relatively old and limited information.

Consequently, while this report makes no amendment to the totals of pallets and other packaging manufactured in the UK, the average softwood usage data has been slightly amended to take account of current and typical products. This has the effect of reducing the volume of softwood utilisation by around 5% and has been retrospectively applied to the work of the previous report.

The volume of sawn softwood destined for packaging and sourced from UK sawmillers, as provided by the Commission and confirmed by TIMCON shown in tables 3 and 6, was around 742,000m³ in 2005, up from 733,000m³ in 2004. From the estimates of timber usage in the entire pallets and packaging market in 2005, the quantity of imported softwood utilised was, by deduction, a volume of around 1,645,000m³ in 2005, up from 1,536,000m³ in 2004.

The Fencing and Outdoor Market

The fencing and outdoor applications market presents a more difficult problem in attempting to quantify softwood utilisation. The study brief called for other outdoor applications to be joined with fencing products to provide a broader definition for this particular market. Consequently, this market area will include not just fencing products, but decking, sheds, pergolas and similar constructions, but not garden furniture.

This market definition is not ideal as there are many different characteristics between the members of this agglomeration and with quite different types of raw material purchased. The decking market is one example which itself is perhaps better described as 'landscape joinery'.

Changing this grouped market into separate individual markets must be a consideration in any future work of this kind.

Information from the Forestry Commission permitted an estimate of domestically produced material consumed by this grouped market of 836,000m³ in 2005, up from 804,000m³ in 2004.

To attempt to quantify the volume of imported material, the Timber Decking Association and trade sources were contacted once again for this study.

The outcome of the work conducted in 2004 indicated that imported material accounted for approximately a quarter of the UK market. However, in 2005, it is likely that volumes are lower, consistent with the fall in import volume of the grades of material used by this market, especially in the fencing sector. Hence, an estimate of 180,000m³ of imported softwood was added to the UK produced total to arrive at the total consumption of sawn softwood in this market.

Consequently, and as shown in tables 3 and 6, the volume of UK produced sawn softwood used in the fencing and outdoor applications markets in 2005 was 1,015,000m³, up marginally from 1,004,000m³ in 2004.

Other Markets

A similar method to that used in the 2004 report was employed in quantifying the collection of 'Other' markets. These markets comprise all that is not normally classified as construction, packaging or fencing and outdoor. Some of the markets that fit beneath this 'umbrella' are furniture, mining, transport, boat building, ladders, signage and hoardings, exhibition contracting, theatre/concert/events set building, picture framing, domestic and commercial articles (clock bases, plaques, ornamentation) and model making.

Only limited published information exists on the scale and characteristics of some of these individual markets and virtually no data is available on timber usage.

In order to arrive at an estimate of softwood utilisation in this collection of markets for 2005, the work of previous studies on the subject of timber utilisation was used alongside estimates of domestically produced softwood consumed by 'Other' markets, as measured by the Forestry Commission.

Acknowledgement of the organisations involved in previous work in this area is repeated from the 2004 study and shown below.

The Timber Trade Federation (TTF 1985 – updated for 1989) the work of Peter Grimsdale of the Trussed Rafter Association (TRA 1988), Anders Baudin, courtesy of Roger Cooper at the University of Wales (Baudin 1990) and the Timber Research and Development Association (TRADA 1995).

From observation over the years in question, it is clear that the scale of some of the markets has declined (e.g. mining) or the market demand for softwood within these markets has declined. Many applications previously using softwood have been replaced by other materials, notably aluminium and plastics and more recently composites have taken precedence over timber in some markets. Volumes consumed have fallen significantly over the last thirty to forty years with, especially, mining, vehicle production and other transport related markets substantially smaller by 2005. Further support for the contention that softwood consumed by this collection of other markets has declined significantly over the years is provided by the decline in UK furniture manufacturing in recent years.

Estimates of domestically produced sawn softwood consumed by these 'Other' markets were derived from the regular survey of UK sawmillers conducted by the Forestry Commission. In tables 3 and 6, 'Others' consumed 47,000m³ of domestically produced

sawn softwood in 2004 and it is believed that this volume is similar to that consumed in 2005.

If the reduction in softwood imports in total is reflected in the market for 'Others', the volume of imported softwood consumed in 2005 would amount to around 203,000m³.

Combining domestic supply with imported, the estimated total for this collection of 'Other' markets in 2005 was approximately 250,000m³, a reduction of just over 10,000m³ from 2004.

As reported in the 2004 study the estimate for the collection of 'Other' markets is the weakest, in terms of supporting evidence, but a reasonable estimate of the one remaining market, the construction market, would help to confirm that this estimate is of an appropriate scale.

The Construction Market

The construction market is often defined by the collection of building and repair classifications as used by the Department of Trade Industry (DTI). In this timber utilisation report, these classifications have been consolidated into the two categories of "New Housing" and "Repair, Maintenance and Improvement and Other" (RMI & Other). This second category includes RMI Housing, RMI Other Work, Infrastructure Projects and all Other Non-housing New Work.

This simple differentiation facilitates the use of a combination of data sources to arrive at a relatively accurate assessment of timber utilisation in the first of these two categories, "New Housing".

When this 'known' softwood usage in the "New Housing" sub-sector of construction is added to the estimates for the packaging, fencing and outdoor and 'other' markets and deducted from the overall volume of softwood consumed, the balance is the volume consumed by the "RMI and Other" construction sub-sector.

As a check on the reliability of these estimates, the relative overall performance of these two construction market sectors can be matched against the estimated softwood consumed by these sectors, to help determine whether the softwood volume estimates are in line with market performance.

The estimated volume of sawn softwood consumed by the sub-sector market for "New Housing" in the UK in 2005 was 673,000m³ compared to the revised 2004 total of 681,000m³ (DCLG provided substantial amendment of housing data in August 2006).

The derived total softwood utilisation in the "RMI and Other" sectors of the construction market were, as shown in tables 3 and 6, 5,687,000m³ in 2005 compared to the revised 2004 total of 6,077,000m³.

Both construction sectors consumed less softwood in 2005, "New Housing" volumes fell by 1.2% and "RMI and Other" by 6.4%.

The volume of softwood entering "New Housing" was derived from a series of calculations using official published new house building data from DCLG - previously supplied by the Office of the Deputy Prime Minister (ODPM) - and from the National House Building Corporation (NHBC). These data were combined with usage data per type of dwelling as previously supplied by the United Kingdom Timber Frame Association

(UKTFA), TRADA, and the Trussed Rafter Association (TRA) and, importantly, were updated.

As reported in the 2004 study, there are a number of influences, or ‘drivers’ or softwood utilisation that determine the quantities of sawn softwood consumed by construction markets.

In the “New Housing” sector, housing starts in the UK in 2005 were (calendar year lagged to take account of timber supply) higher than in 2004 by around 1%. Within the mix of different house building methods in 2005, it is known that timber frame housing made significant progress and while timber frame housing starts increased in 2005, the volume of other forms of building, such as masonry constructed homes, fell and especially in the private sector housing market.

Timber frame housing consumes more than double the amount of softwood per unit than masonry homes, yet even with an increase in timber frame housing and a reduction in masonry construction (giving an overall slight increase in housing starts) total softwood utilisation in the “New Housing” sector fell in 2005.

This occurred despite higher softwood utilisation (greater volume sold) to the timber frame market which can be partly confirmed by examining the type of softwood imported to the UK in 2005.

The great majority of the softwood used in timber frame home manufacturing is imported and much of this is high quality, further processed material. The volume of further processed whitewood imported in 2005 was higher than in 2004 against a backdrop of overall lower softwood imports.

The assumption that timber frame manufacturing consumed more sawn softwood is supported by these import data. Therefore, despite higher utilisation in the timber frame sector of the “New Housing” market, overall softwood volume fell. This is attributable to a number of factors, one of the most significant being an acceleration of the trend reported in the 2004 study of a fast changing landscape of new house building, with fewer detached homes and many more flats under construction than in previous years.

The quantity of softwood used in flatted developments is, unit for unit, substantially less than in detached or similar low-rise building.

Another important factor in lower softwood utilisation in new house building is product substitution, where newer products are replacing some traditional applications for sawn softwood. It is believed that the majority of housing starts in the UK now use I-beams in place of softwood joists in the construction of floors. Admittedly, many of these newer products have a softwood content, but the volumes used are less.

In the “RMI and Other” sectors, less detailed information is available on softwood usage and the uses to which sawn softwood is put are innumerable. Calculation of usage by sub-sector (e.g. new commercial work) or by application (replacement joinery) in such a huge market is outside the scope of a study such as this, however, by matching known import and domestic production volumes with the trend of overall activity in these sectors, conclusions can be drawn on the levels of utilisation.

The estimate of the fall in softwood consumption in 2005 of 6.4% is supported by examining the (equivalent) volume development of RMI and similar sectors from information supplied by the DTI.

The repair, maintenance and improvement sectors (RMI) are further sub-divided into “Housing” and “Non-Housing” which in turn are sub-divided into “Private” and “Public”.

Comparing similar time periods for softwood sales and construction activity in 2005, private RMI housing activity (as measured by the value of work done at constant 2000 prices) fell by 2.3%. Public RMI housing activity fell by 7.4% - although this has subsequently reduced on a calendar year basis. Activity in the public non-housing RMI sector fell by 3.9% and activity was lower by 2.6% in the private non-housing RMI sector.

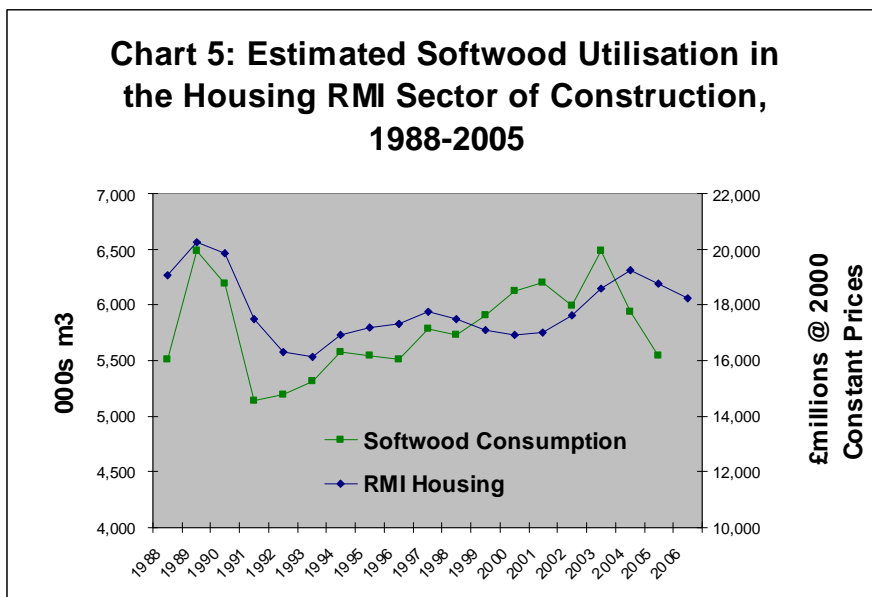
These measures, of course, include all manner of building activity of which timber is just a relatively small part; nevertheless, if less repair work is being carried out, it is understandable that less softwood will be consumed.

Intelligence of the “New Housing” sector is more comprehensive than that in the “RMI and Other” sector and if the comparison of activity reported by the DTI in the new housing sectors is consistent with the trend of new house building, as reported by DCLG, this will serve to support the method of matching imported and domestically produced softwood volumes with RMI activity as provided by the DTI.

This proved to be the case. *Public* new housing starts as reported by DCLG, were higher in 2005 by over 15%. The DTI construction statistics reported that *public* new housing activity increased in 2005 by 20% (seasonally adjusted). DCLG data for *private* new housing starts reported a fall of 0.4% and the DTI data for *private* new housing gave an increase of just 2%.

Although the two data sets (for new housing) are not strictly comparable, there is sufficient consistency between the two to suggest that a similar connection exists in the RMI sectors which would indicate that changes in activity will have an impact on the volume of timber used. To demonstrate this graphically, the estimated quantity of sawn softwood utilised since 1988 in the UK RMI housing sector has been plotted against the overall development of the RMI housing sector. There appears to be a clear correlation between the two and this is shown in chart 5.

Chart 5: Estimates of Softwood Utilisation in the RMI Sector of Construction



The movements in the volume of softwood are more pronounced than the overall activity in the RMI housing sector and this would be expected, with the RMI housing sector

substantially greater in scale. There would appear to be a relationship between the two however.

An unequivocal cause and effect relationship cannot be proved through the work of this study, but from chart 5, the movements in the RMI housing sector would appear to have an affect on the volume of softwood consumed. Statistically, the coefficient of correlation is around 0.56¹ (+1 or – 1 shows perfect positive or negative correlation) which indicates there is a relationship between the two measures.

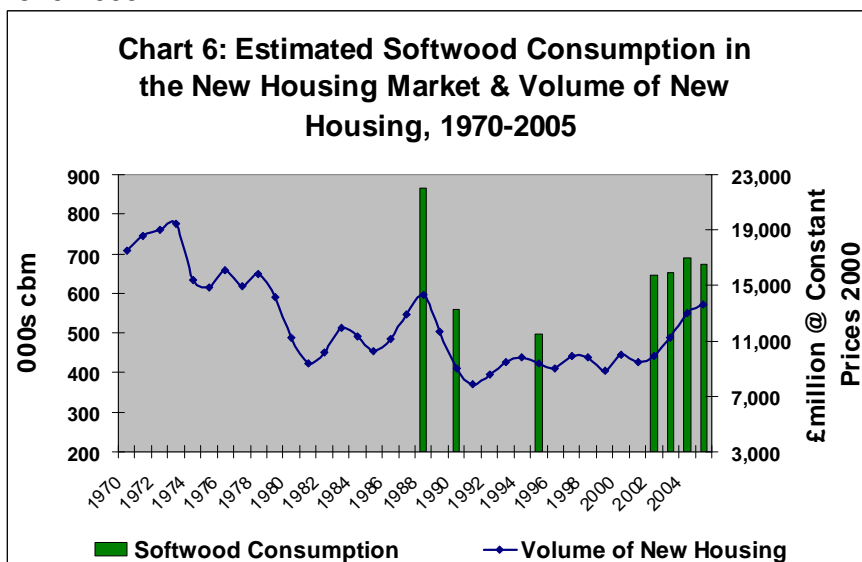
The conclusion to be drawn is that at times of higher levels of construction activity, softwood consumption is likely to be higher and conversely, when construction volumes dip, then so would softwood consumption, assuming the conditions that have existed to form this relationship continue without major disruption. Of course, one form of major disruption could be product substitution. Should competing products (to timber) replace different applications for timber, then the relationship between RMI housing activity and softwood utilisation could be broken. Equally, a growing penetration of, for example timber windows, in place of aluminium or plastic could see a change (strengthening) of the relationship between softwood use and RMI activity.

New Housing

The relationship identified between sawn softwood consumption and RMI housing activity would be expected to be repeated for the relationship between sawn softwood consumption and new housing activity, whilst understanding that the applications of the product tend to be different in each sector.

The evidence for this relationship is shown in chart 6.

Chart 6: Estimated Softwood Utilisation in the New Housing Market in the UK, 1970-2005



The final green bar in the chart above, depicting softwood utilisation, is for the year 2005: the time series only showing even years for sake of clarity.

¹ Where a change in one measure (e.g. softwood) is associated with a change in another (RMI), indicating that there is a relationship between the two measures.

In the chart above, the estimated softwood utilisation in the market for new housing in the UK is plotted against the volume of new housing activity as measured by the value of new housing at constant 2000 prices, using the same source of data sets as used in chart 5.

It should be noted that the final four 'softwood consumption' bars in chart 4 are the estimates from this timber utilisation study while the other three bars refer to the estimates derived from the work of Peter Grimsdale of the TRA in 1988, the Anders Baudin work of 1990 and the TRADA work from 1995.

The work of these other studies used different methodologies to this current work, but when combined with this more recent work, evidence that activity in the sector has an influence on the quantity of sawn softwood used is provided.

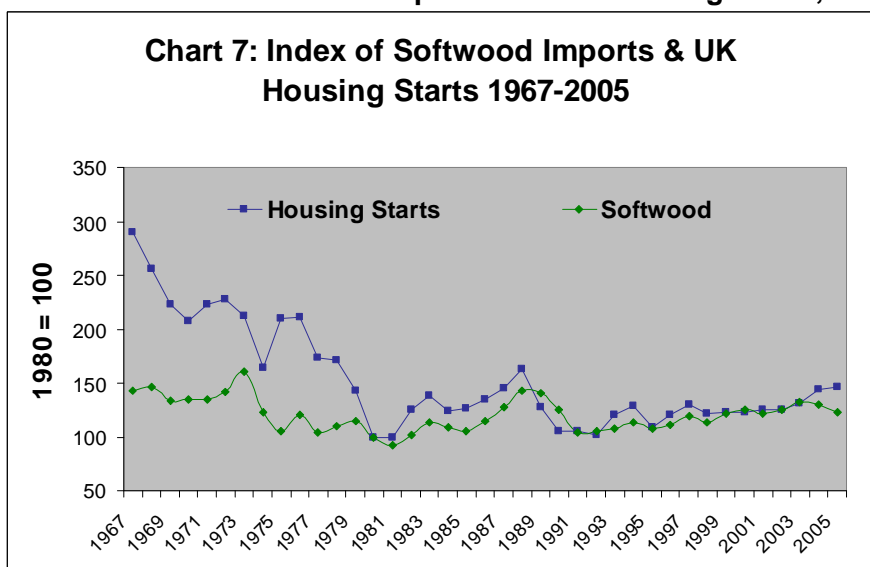
An alternative, and more practised method of reviewing the new housing market, in order to detect the possible outcome on softwood consumption, is through the official statistics provided by DCLG on housing starts.

The statistical correlation between housing starts and (all) softwood imports has been relatively good in the past and even with the shift away from the construction of detached dwellings, the co-efficient of correlation stood at 0.62 in 2005 (0.63 in 2003).

The difficulty in attempting to verify utilisation of softwood in the new housing market through matching housing starts with *all imports* is one of relative scale.

If the estimates of softwood utilisation in new housing are broadly correct, this would represent only roughly 10% of all softwood imports, currently. Conclusions drawn on the development of softwood utilisation in new housing on the basis of the relationship between *all* softwood imports and housing starts would therefore appear unrealistic, nevertheless, this connection has been made for many years by some in the timber trade and is repeated here for sake of completeness, in chart 7 below.

Chart 7: Index of Softwood Imports and UK Housing Starts, 1967-2005



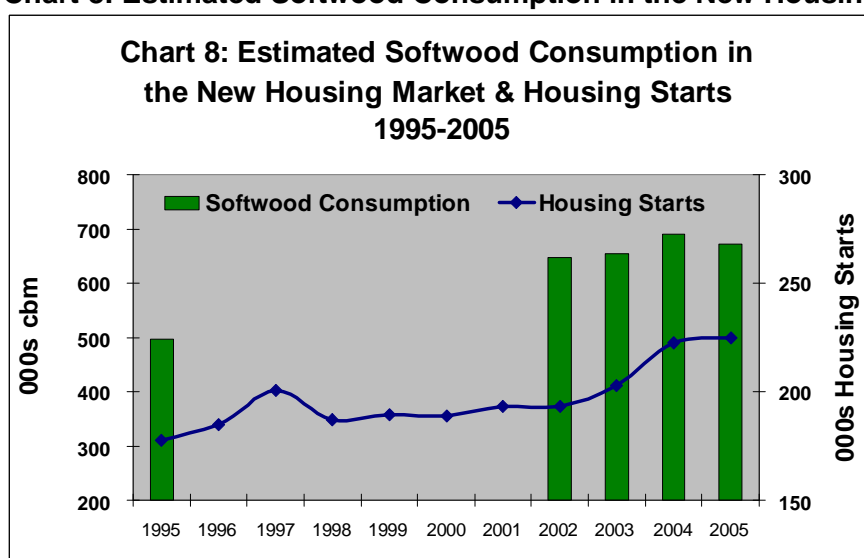
Perhaps the relationship between softwood imports and housing starts has actually strengthened over the period shown in chart 7 as at the early part of the period under review, softwood was being used for many more applications than even the vast number of uses for softwood in today's world. New technologies and newer forms of plastics and

metals were substituted for wood during the 1960's and 1970's and some of timber's important manufacturing markets (e.g. mining, transport, furniture) were much larger thirty to forty years ago.

Consequently, in terms of relative importance, new housing has probably become more significant and if so, this would help to explain the much stronger correlation between housing starts and softwood imports from the early 1980's to the present day.

Despite the doubts cast over the relationship of softwood imports with housing starts, it does lend credence to the use of housing starts as the multiplier when calculating softwood utilisation. Simply, if the number of the different types of dwellings started is multiplied by the average use of softwood for each type of dwelling, an estimate can be made (when all housing types are summated) of softwood utilisation. This is shown in chart 8 below.

Chart 8: Estimated Softwood Consumption in the New Housing Market, 1995-2005



Growth in softwood utilisation from 2002 appears to have been driven by the increasing number of dwellings started, but the significant feature in chart 8 is the fall in softwood consumption in 2005 against a relatively static development in housing starts for that year.

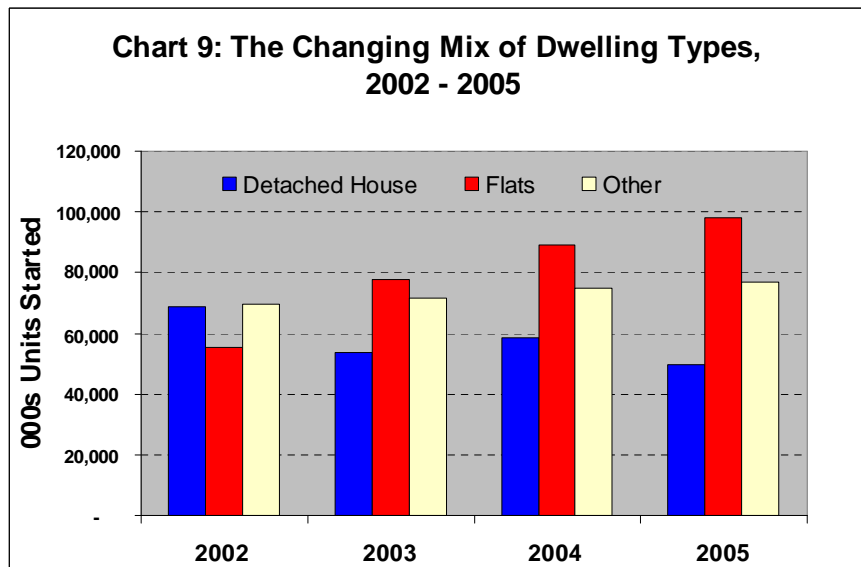
As shown in tables 3 and 6 previously, the estimated fall in softwood consumption in the new housing market in 2005 was 1.2% and this has, in the main, been attributable to the changing mix in dwellings, or housing types.

The number of detached dwellings started in 2005 was sharply lower than in 2004.

As revealed previously, the amount of sawn softwood used in an average detached unit is over two and a half times greater than an average sized flat, therefore, the substantial fall in the numbers of detached units started in 2005 compared to the substantial increase in the number of flats started has resulted in a significant shift in softwood utilisation.

The changing mix of housing types between 2003 and 2005 is shown in chart 9, below.

Chart 9: The Changing Mix of Dwelling Types Built in the UK New Housing Market, 2002-2005



The number of new detached dwellings in 2005 fell below 50,000 as the number of flats grew to reach almost 100,000. With twice the number of flats started compared to detached dwellings, the impact on overall average softwood usage was significant.

Overall, the volume of new housing starts rose by 1% in 2005. This increase of 1% was generated by a 10% rise in flatted developments and a 15% decline in detached dwellings. All other building types grew by 2.5%.

The volumes of softwood consumed by new housing fell in 2005 by 1.2%.

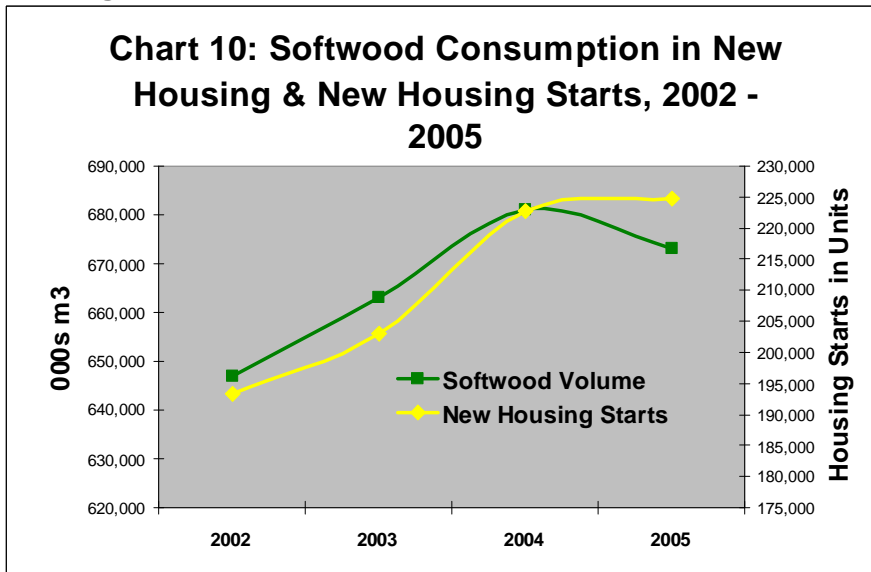
In chart 9, the trend development of each of the main housing types is clearly shown.

From 2002, the volume of detached dwellings has fallen as flatted developments have risen strongly each year.

Total growth in housing starts since 2002 has helped to maintain softwood utilisation at relatively constant levels during 2002, 2003 and 2004, but in 2005, the 15% fall in detached units coupled with the 10% rise in flatted developments was of sufficient scale to bring about fall in softwood volume consumed.

Therefore, despite a continuing increase in housing starts in 2005 (albeit a small rise) the changing proportion of housing starts by dwelling type has resulted in lower softwood usage. This is shown graphically in chart 10.

Chart 10: The Short-term Trend of Softwood Volume Consumed in the UK New Housing Market, 2002-2005



The decline in softwood utilisation in new housing, the first fall for at least three years, shown in chart 10 provides detail of recent developments, but should be viewed in conjunction with the longer-term trends previously provided in chart 8 above.

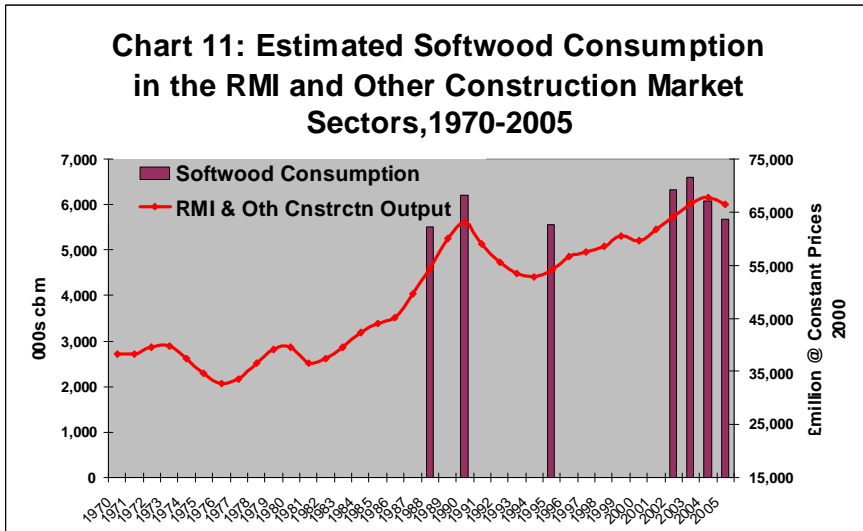
RMI & Other Construction Markets

Consistent with the methodology used in the 2004 study, if all other market estimates are of reasonable accuracy, the balance between total softwood consumption in all markets and the estimated consumption within the packaging, fencing and outdoor, the other and (as revealed above) the new housing market, would represent the volume of softwood utilisation in the “RMI and Other” construction market sector.

The Department of Trade Industry (DTI) classifications used to assemble the data for the performance of the “Repair, Maintenance and Improvement and Other” (RMI & Other) market sector includes RMI Housing, RMI Other Work, Infrastructure Projects and all Other Non-housing New Work.

The long-term trend of activity in this sector is matched against the volume of softwood consumed (as determined from this study) and the corresponding estimates from previous studies, as shown in chart 11 below.

Chart 11: Estimated Softwood Utilisation in the RMI and Other Construction Market in the UK, 1970-2005

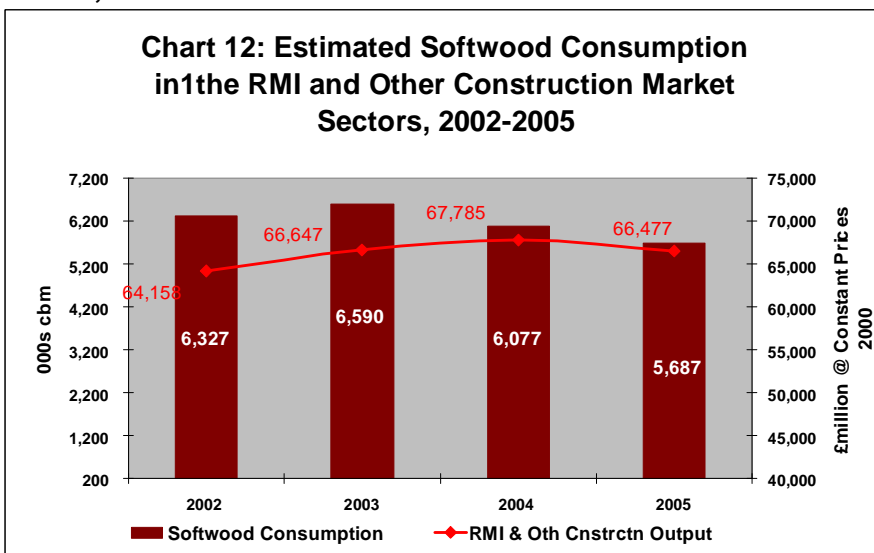


The relative sizes and trends of development of softwood utilisation estimates and volume performance of the RMI and Other market sectors continues to follow the expected pattern of softwood utilisation - changing in step with the overall activity in these market sectors.

For 2005, as shown in chart 11 above, softwood utilisation is lower, consistent with the lower activity of the market sectors.

The most recent developments are shown in chart 12 below.

Chart 12: Estimated Softwood Utilisation in the RMI and Other Construction Market, 2002-2005



The RMI and Other market sector is large and consists of a number of sub-sectors that have experienced varying fortune over the years, therefore, caution needs to be exercised when reviewing these utilisation trends.

Nevertheless, in 2005 the fall in overall activity in these construction sectors was accompanied by a fall in softwood utilisation. The apparent anomalous fall in softwood utilisation in 2004, while construction activity increased, can be partly explained by the large 'jump' in new public sector non-housing construction of over 15%, which is a market sector of lesser importance in terms of softwood consumption.

Development of Sawn Softwood Utilisation in 2006

The timing of this updated study (research conducted in the Winter of 2006 and early Spring of 2007) has permitted an indicative measure of softwood utilisation in 2006.

Many official statistics used for this work were not available for the whole year 2006 and UK domestic timber production data was, at time of writing, unavailable, but with provisional import volumes known, partial housing data and DTI construction statistics available and through conversation with selected timber representative bodies and members of the timber trade, an assessment has been made of what the general development of softwood utilisation in 2006 was likely to have been.

It would appear that 2006 will be seen to have been a year of inconsistencies and relatively dramatic change.

The timber industry experienced severe material shortages, with concomitant rising prices and variable demand from timber using markets.

Total sawn softwood consumption is likely to have fallen below 10 million cubic metres for the first time for many years; this despite increasing production from the UK sawmilling sector. Provisional estimates for softwood imports in 2006 indicate that total volume will be around 7.1 million cubic metres, a fall of 6%. Production of sawn softwood in the UK may exceed 3 million cubic metres for the first time, however, once the rising level of sawn softwood exports are subtracted from the availability of UK production and import volumes, the estimated total consumption of sawn softwood is likely to be in the region of 9.7 million cubic metres.

Should this estimate be correct, this would mean that 2006 was the third consecutive year where utilisation of sawn softwood fell.

In 2006 specifically, the UK was not unique in suffering severe shortages of log availability and sawn material. Globally, lower production and rising demand has conspired to provide a market which is, disconcertingly, out of balance.

Demand, generated by a generally rising level of growth in the global economy (the rapid growth in China and other Asian countries, the continuing economic growth in the USA in 2006, the re-awakening of some European economies and the better domestic demand in eastern Europe, Russia and Middle East) has created pressure on producers to supply increasing volumes of softwood at a time of log raw material shortages and, in some leading timber supply countries, a lowering of production capacity.

This has resulted in rapidly rising prices, following a period of many years of sawn timber price deflation.

The UK is not immune to such global impacts and prices of sawn softwood have risen strongly in 2006, driven by product shortages, which have created supply difficulties.

Sawmillers in the UK have been able to supply some of the shortfall in volume that resulted from lower import volumes, but the UK productive capacity and product offering

has been unable to compensate for a million cubic metres less of sawn softwood imported to the UK over the last three years.

High volume consumers of specific grades of softwood in the packaging and pallets and fencing markets have experienced severe product shortages, which with substantial cost increases (non-timber costs also) has threatened the commercial future of these businesses, especially smaller suppliers.

However, while some markets continued to experience good levels of demand in 2006, the construction market, in general, demanded less sawn softwood. This was due to continuing weakness in the repair, maintenance and improvement (RMI) sectors of the industry and particularly housing RMI. These sectors of construction are – as the information in this report confirms – the largest consumers of sawn softwood and lower activity from within these sectors is the main reason for lower softwood utilisation.

In contrast, the predicted higher number of new homes started in 2006, an increasing proportion of which will have been of timber frame construction, may raise slightly softwood utilisation in the new homes building sector of construction. The number of housing starts recorded in 2006, prior to amendment by DCLG, is around 233,000, an increase over 2005 by approximately 2.5%.

However, led by a predicted decrease in softwood utilisation in construction of around 5% in total, and aided by the restrictions of supply to the packaging and fencing markets, sawn softwood utilisation is likely to record a further fall, by between 3% and 4% in 2006.

The effect by main market will be to witness the continuing lowering of share of consumption taken by construction. Early indications suggest that construction in total will consume approximately 62% of all sawn softwood in 2006, down from very nearly 70% in 2002.

The effect for the main protagonists will be to further increase the share of softwood utilisation by UK domestic producers. UK produced sawn softwood accounted for around 23% of all consumption in 2002 and should current estimates of the final outturn from UK sawmillers be correct, this share will have climbed to around 27% of the total by the end of 2006.

Continuing Weaknesses in Timber Utilisation Statistics

It was stated in the 2004 report that sawn softwood utilisation estimates by market for 2002 to 2004 were provided with a reasonable degree of confidence. This confidence in the reliability of the estimates in the packaging, fencing and outdoor and new housing markets was derived from the good information provided by third parties and the ensuing results of calculations that are consistent with expectations within the different market places.

However, closer investigation of the packaging and pallets market for this updated 2005 report has revealed a further weakness in available data.

The estimates of the number of pallets manufactured in the UK, as provided by official Government statistics in the PRODCOM data series, is thought by informed sources in the pallets and packaging market to include more than pallets manufactured over the period measured. Within declared totals are believed to be repaired pallets, re-cycled pallets and also volumes from non-manufacturers, companies mainly involved in the distribution of pallets.

The utilisation of timber (over a fixed period of a year) in pallets would, of course be exaggerated by the inclusion of products that are not manufactured in that year.

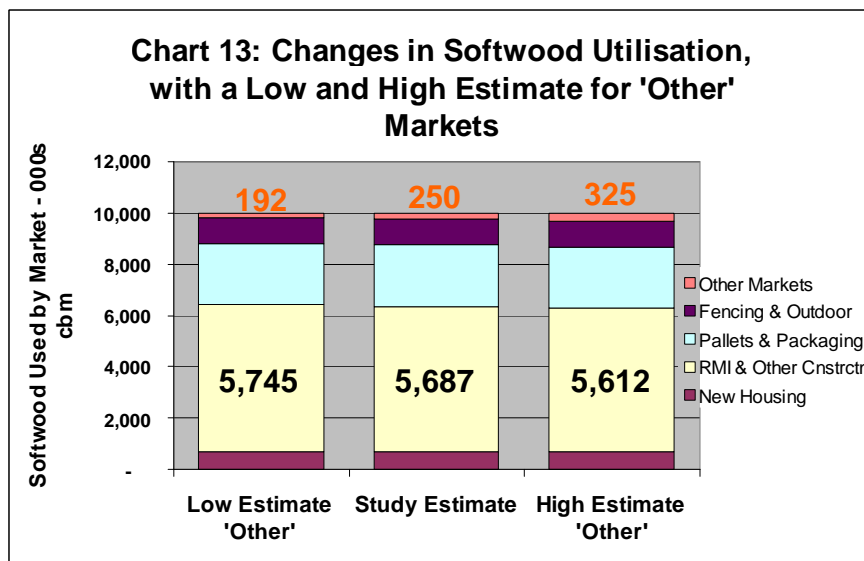
Discussions held with officers of the packaging and pallets association, TIMCON, has led to revision of softwood utilisation in this market and discussion on the accuracy and scope of official statistics.

Whilst recognising that there is an exaggeration of the number of pallets which are manufactured, the extent of this exaggeration is unknown and attempts to quantify it would be unproductive with the current state of knowledge. The only likely resolution to this problem is to establish dialogue between interested parties in the timber and packaging industries and the DTI.

Another area of weakness in this study for sawn softwood is in the available information for the collection of markets defined as 'Others' and the RMI and Other Construction market.

Estimates for the 'Others' market have been provided through this study, but are based on very limited information. The only available information on this market has come from the UK sawn softwood production sector as analysed and published by the Forestry Commission. This information, coupled with knowledge of the general trends within each of the main sub-markets, has allowed estimates to be made. Softwood utilisation in 'Others' is fortunately small, in comparison to the main markets, and any possible large errors in calculation in this market do not substantially affect the size calculations of the residual RMI and Other Construction market. Therefore, any errors in calculation of the 'Others' market has only a marginal affect on volumes in the RMI and Other Construction market.

To provide further evidence of this marginal affect, chart 13 below shows the likely margin of error in the 'Others' market if estimates of its scale was inaccurate by as much as 30% (either way).

Chart 13: The Effect of Quantification Errors in the 'Others' Market, 2005

The study estimate of softwood usage in the 'Others' market in 2005 was 250,000m³ which (assuming usage in other markets is known) leaves a residual volume for the large RMI and Other Construction market of just under 5.69 million cubic metres.

If the margin of error for the 'Others' market was as high as 30%, both above and below the study estimate, the impact on the size of the residual RMI and Other Construction market would be small; at only 1.0% if the estimate was 30% too low and 1.3% if the estimate of the size of the 'Others' market was 30% too high.

The estimates provided for the utilisation of sawn softwood in the main markets in the UK are therefore considered to be realistic.

The other and continuing weakness discovered through the work of this study is the lack of any information sufficient to provide estimates of utilisation of sawn hardwoods.

To eradicate this gap in knowledge, further discussion needs to take place with producers and distributors of sawn hardwoods in the UK.

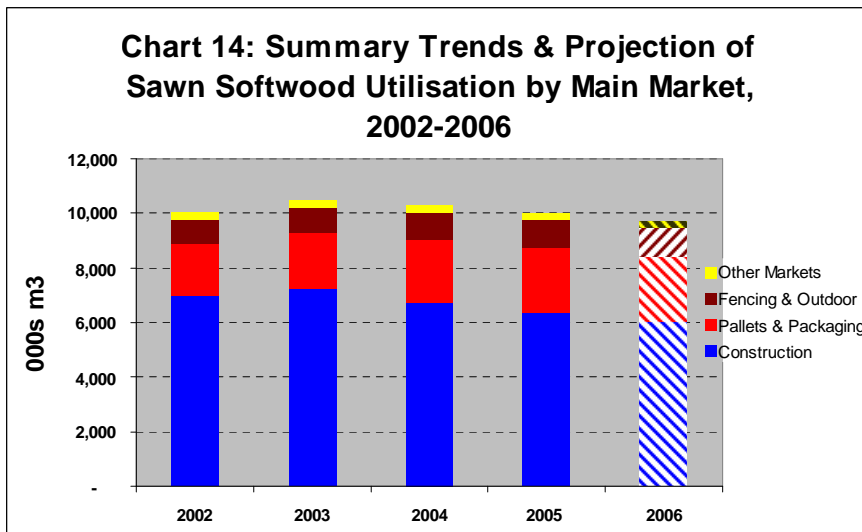
Summary Softwood Utilisation Trends & Projection

Sawn softwood utilisation by main market in the UK fell once more in 2005 and is projected to fall again, below the 10 million cubic metres level in 2006.

Utilisation statistics have been calculated over the period from 2002, during which time a number of discernible trends have emerged.

In chart 14, the five year development of the main markets is described, with a projection for the final year, 2006, inserted.

Chart 14: Summary Trends & Projection of Softwood Utilisation by Main Market, 2002-2006



The construction industry remains the single largest consumer of sawn softwood, but the downturn in repair, maintenance and improvement work (RMI) is likely to lower softwood volumes consumed by construction in total to below 6 million cubic metres in 2006.

As a result, total softwood consumption is expected to fall below the 10 million cubic metres mark in 2006.

Significant and far-reaching events have adversely affected overall utilisation of sawn softwood during 2005 and 2006, making the immediate future unclear, however, the National Softwood Division of the Timber Trade Federation has forecasted a small recovery in imported softwood volume in 2007 and should UK producers continue the expansion seen over the past few years, it is possible that the period 2005 and 2006 will be seen as the 'low point' of softwood utilisation in this decade.

With UK economic growth forecasted to continue to expand; with UK manufacturing, wholesale and retail distribution predicted to grow; with home building programmes expected to provide more homes over the next few years and with generally rising levels of consumer and public expenditure driving RMI activity, prospects for gradually rising levels of softwood utilisation from 2007 may begin to be realised.

ANNEX 1**SAWN HARDWOOD MARKETS - IMPORTANCE & SALES**

Please place a tick or a cross in the appropriate boxes in each of the 4 questions below.

Question 1:

In your opinion, how **important** are the following uses for sawn temperate hardwoods?

Temperate Hardwoods

Importance	Very Important	Fairly Important	Not Very Important	Not At All Important
Uses/Applications				
Structural Construction				
Flooring				
Joinery (Doors, Windows, Stairs etc)				
Decking, Garden & Outdoor Structures				
Marine & Civil Engineering				
Packaging & Pallets				
Other Outdoor Uses (please specify)				
Furniture Making				
Shop, Office, Bar Fittings				
Other Indoor Uses (please specify)				

Question 2:

In your opinion, how **important** are the following uses for sawn tropical hardwoods?

Tropical Hardwoods

Importance	Very Important	Fairly Important	Not Very Important	Not At All Important
Uses/Applications				
Structural Construction				
Flooring				
Joinery (Doors, Windows, Stairs etc)				
Decking, Garden & Outdoor Structures				
Marine & Civil Engineering				
Packaging & Pallets				
Other Outdoor Uses (please specify)				
Furniture Making				
Shop, Office, Bar Fittings				
Other Indoor Uses (please specify)				

Question 3:

Is your company able to **identify sales** of sawn hardwoods into any of the uses/applications defined in Questions 1 and 2?

Sawn Hardwoods		Yes Temperate		Yes Tropical		No Temperate		No Tropical	
Uses/Applications	Volumes (m ³) or Values (£) – Y or N	Volume	Value	Volume	Value				
	Structural Construction								
Flooring									
Joinery (Doors, Windows, Stairs etc)									
Decking, Garden & Outdoor Structures									
Marine & Civil Engineering									
Packaging & Pallets									
Other Outdoor Uses (please specify)									
Furniture Making									
Shop, Office, Bar Fittings									
Other Indoor Uses (please specify)									

Question 4:

Would your company be willing to provide information you have (confidentially and only for the purpose of aggregating to market totals)?

	Yes	No
My company would be willing to provide market/sales data		

Thank you for completing the Questions above, please either save this file to disk, open your e-mail by clicking on survey@timbertrends.net, attaching this file and send. Alternatively, please print this form and fax to *timbertrends* at 0034 966 762 988.

Acknowledgements

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