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Timber Utilisation Statistics 2010 & 2011 Estimates

**An Updated Study
for the Forestry Commission**

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Introduction:

This report is part of a series of studies designed to provide estimates of the utilisation of sawn softwood in the main user markets.

An initial report produced in 2006 covering the year the year 2004 was followed by a further report produced in 2007, covering the year 2005. Since that time, the information on timber utilisation has been updated annually through a set of tables and charts accompanied by a brief commentary.

Sponsored by the Forestry Commission of Great Britain and through the guidance of the Forestry Commission's advisory group, the Expert Group on Timber and Trade Statistics, it was decided that a sufficient period of time had elapsed to warrant the writing of a further report in 2012 to encompass the information provided in the series of tables and charts up to 2010.

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 the **absence of information on the utilisation of timber by major market which 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 and trade bodies, 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 timber usage in the main timber-using markets.

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/outdoor products.

New, in this Report:

Accurate reporting on the immediate past year necessitates delivery of information on the main markets from, usually, official sources such as the Office for National Statistics.

In the case of house building data for the UK, a delay of eight months from the close of the previous year is required. Protracted delivery of other information has meant that the quantification of sawn softwood utilisation has regularly only taken place a full nine to ten months after the close of the year.

A new feature of this report is the provision of estimates of sawn softwood consumption by main market for the immediate past year, just three months after the end of the year.

These estimates have been made possible by a closer understanding of the dynamics within and current performance of each market and the utilisation of forecast information from industry associations, the Forestry Commission (through its contribution to the UNECE Timber Committee Joint Forestry Sector Questionnaire), economic forecasts as supplied by HM Treasury and from trade sources.

Whilst the accuracy of these estimates will not be known for a number of months, until publication of all the official data used to measure sawn softwood utilisation, it is believed

that indicative development of sawn softwood consumption by market for the immediate past will serve as a useful guide for industry and other interested parties.

Purpose and Scope of this Study:

The purpose of this report is to update the previous Timber Utilisation report published in March 2007, which reported on sawn softwood utilisation in the years 2004 and 2005.

The maintenance of data sets on each of the main end-use markets for sawn softwood since 2002 has taken place and this has enabled a time series to be established for sawn softwood usage in main markets covering the period 2004 to 2010.

Using a variety of sources, this report also provides estimates of the development of markets and sawn softwood usage in these markets for the latest year, 2011.

This report is concerned with use of sawn softwood that is supplied to secondary processors and fabricators (e.g. manufacturers, builders) by UK sawmillers and importers and merchants.

The term consumption, as used in this report, is apparent consumption defined as the addition of imports and UK production less exports. No allowance has been made for changes in stock levels.

Study Objectives:

1. To provide estimates of consumption of sawn softwood in the UK by main market: construction, pallets & packaging, fencing & outdoor uses and other markets for 2010 and present the trend in consumption by main market from 2002.
2. To provide an estimate of how sawn softwood consumption in the UK in the year 2011 may have changed compared to 2010 and previous years.

Methodology:

Desk research, conducted by e-mail, telephone and via the internet, were the main methods used to meet the objectives of this report.

Information was gathered from official published statistics, selected members of the Forestry Commission's Expert Group on Timber and Trade Statistics (EGTTS) and also from a number of third parties. Market research conducted for other purposes (than these timber utilisation studies) was also used selectively to inform on timber usage in those markets.

The official statistics used in this report included import data on wood products from Her Majesty's Revenue and Customs (HMRC); housing statistics from the Department for Communities and Local Government (DCLG), construction statistics from the Construction Products Association (CPA) and the Business, Innovation and Skills department of Government (BIS) and further construction data and packaging statistics from PRODCOM data which is published annually by the Office for National Statistics (ONS).

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
Timber Decking Association
TIMCON
The Construction Products Association
Department for Communities and Local Government (DCLG)
The Office for National Statistics (ONS)
Business, Innovation and Skills (BIS)
HM Revenue and Customs (HMRC)
Timber Companies

Executive Summary:

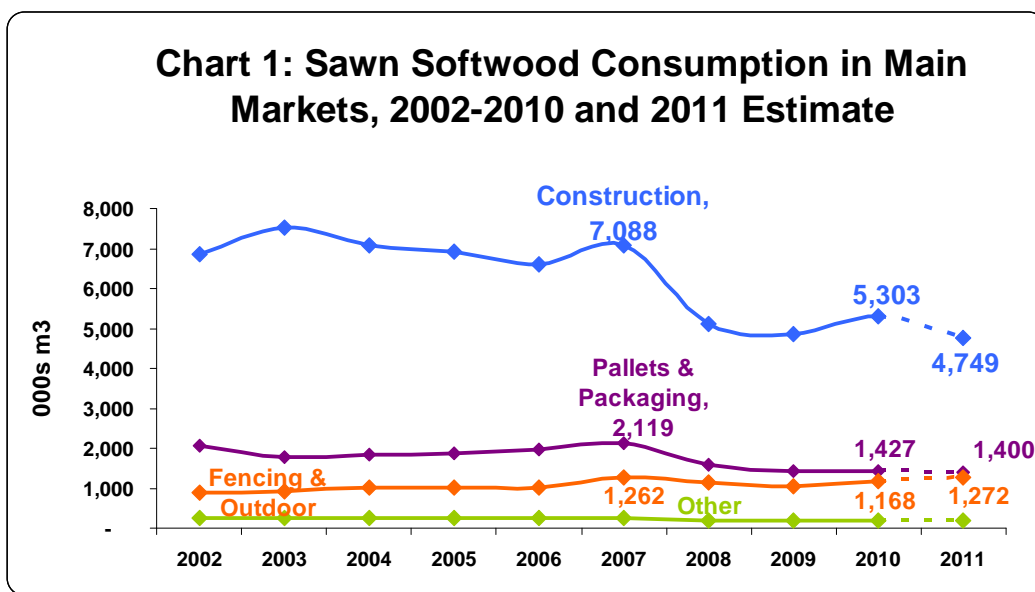
During the period covered by this report, 2002 to 2011, the construction industry has remained the largest market for sawn and planed softwood. Sawn softwood volumes have generally declined during the first decade of this century, although increased demand from construction experienced two years of higher utilisation, in 2003 and 2007. The onset of the recession in 2008 significantly reduced activity in this market and as a consequence, sawn softwood volumes used in construction experienced substantial decline. The new house building market was particularly badly affected and the repair, maintenance and improvement (RMI) sectors of construction, including housing RMI - traditionally a high volume market for sawn softwood products – also experienced lower levels of activity.

The other leading markets for sawn softwood products, the pallets and packaging industry and the fencing and outdoor uses market also experienced declines in volume following the recession, but by differing degrees.

Lower output in many industries adversely affected the demand for pallets and packaging materials and sawn softwood volumes declined accordingly. There has been a significant change in the type of production of pallet manufacturers in the UK since 2007, with greater quantities of repaired and re-manufactured pallets placed onto the market and fewer new pallets manufactured. With less sawn softwood used in a repaired pallet compared to a newly manufactured pallet, this has compounded the loss in volume over the last three years.

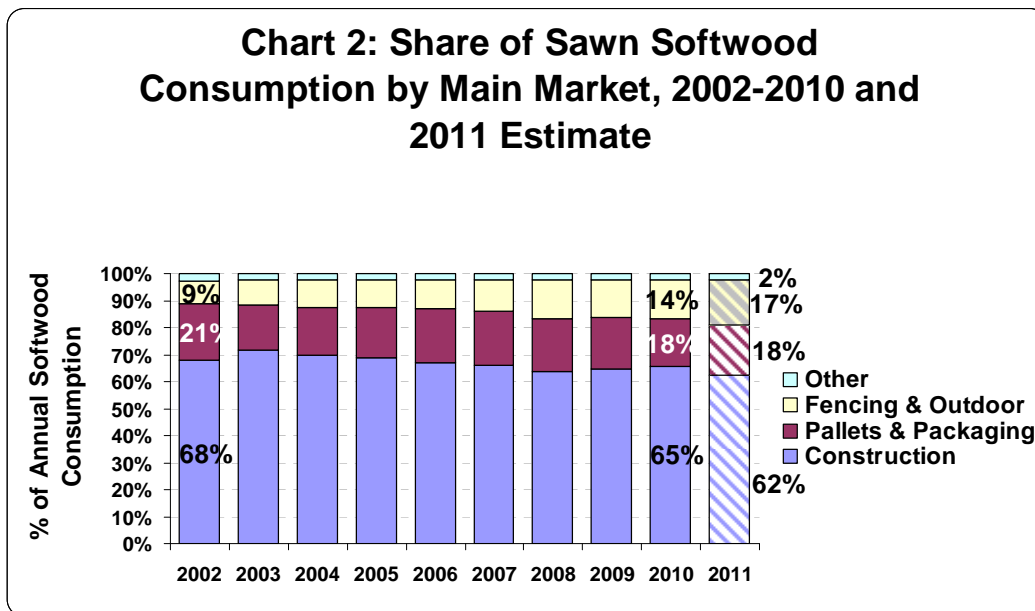
The fencing and outdoor uses market also suffered from poor economic performance of the UK, but to a lesser extent than some other market places, including construction and manufacturing. Consequently, while sawn softwood volumes have fallen from 2007, the extent of the loss in the fencing and outdoor market has been proportionately less than in other markets.

The development of each of the main markets for sawn softwood in the UK from 2002 is shown in chart 1 below.



The utilisation of sawn softwood in each of the main markets has varied over the ten year period, which includes estimates for 2011. The worst performing market has been

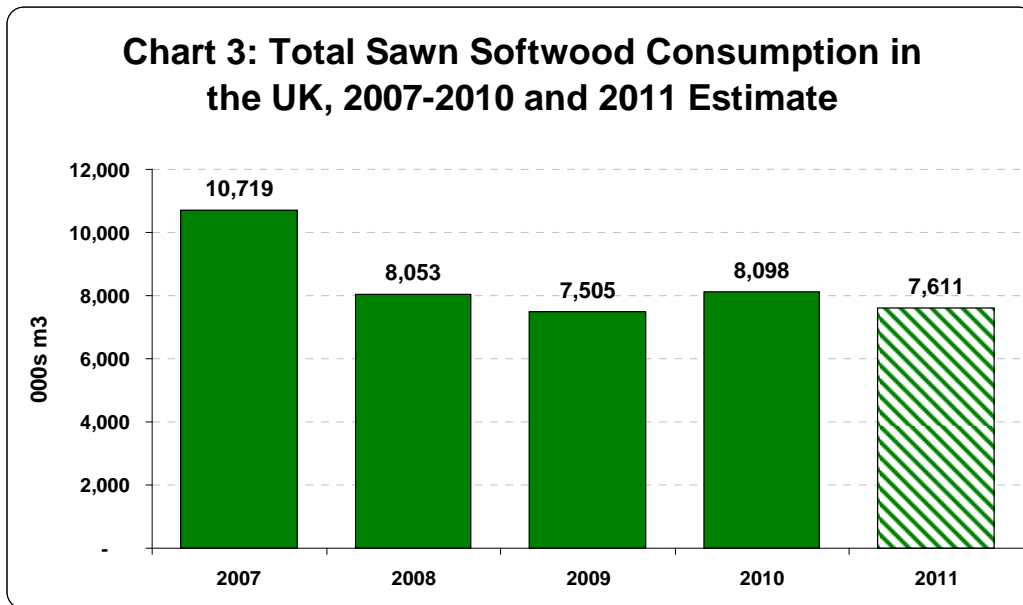
construction and the relative importance of this market, as expressed by share of sawn softwood consumption, is shown in chart 2 alongside the other main markets.



Despite the decline in the share of sawn softwood consumed at 62% of the total, construction remains the largest market. The rise in relative importance of the fencing and outdoor uses market has been somewhat exaggerated by the decline in volumes entering construction and the pallets and packaging market since 2007, but nevertheless, sawn softwood continues to be a popular choice of material for residential and agricultural fencing, decking, garden and landscaping products throughout the period.

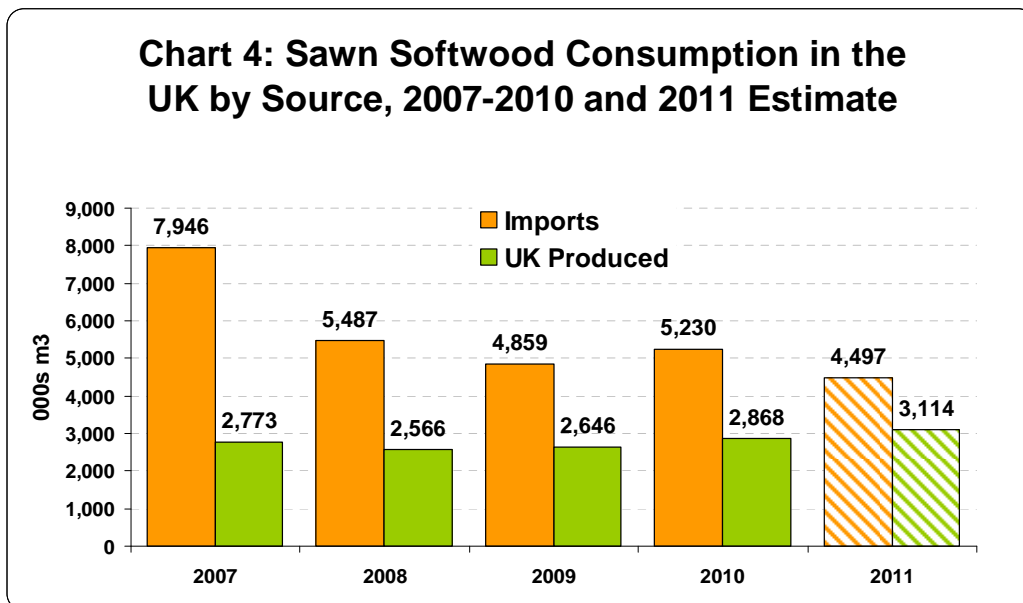
Sawn softwood utilisation, in similar fashion to the use of virtually every other raw material and product in the UK, has experienced mixed fortune in recent years.

Following the two years of decline in 2008 and 2009, a moderate recovery took place in 2010, but once final data is available for 2011, it is highly probable that sawn softwood utilisation will have fallen once again. The volumes consumed in the UK since 2007 are shown in chart 3 below.



The development of sawn softwood utilisation by source has not been consistent in the period under review however. The economic difficulties of the last three years and the downturn in construction specifically have adversely affected import volumes more than UK produced sawn softwood. As will be seen later in this report, imports account for the majority of the volume consumed by construction, therefore lower demand from construction sectors has a disproportionate effect on imported sawn softwood.

The changes in sawn softwood consumption since the peak of economic activity in 2007, the recession of 2008 and its aftermath are shown in the chart below.



The decline in import volumes and the consistent growth of UK produced consumption has resulted in the share of sawn softwood consumption supplied by UK producers to climb to an estimated 41% in 2011, from 26% in 2007. It is believed that this share for UK production will probably fall back a little should markets begin to achieve better rates of growth in the next few years and sawn softwood volumes return to higher levels.

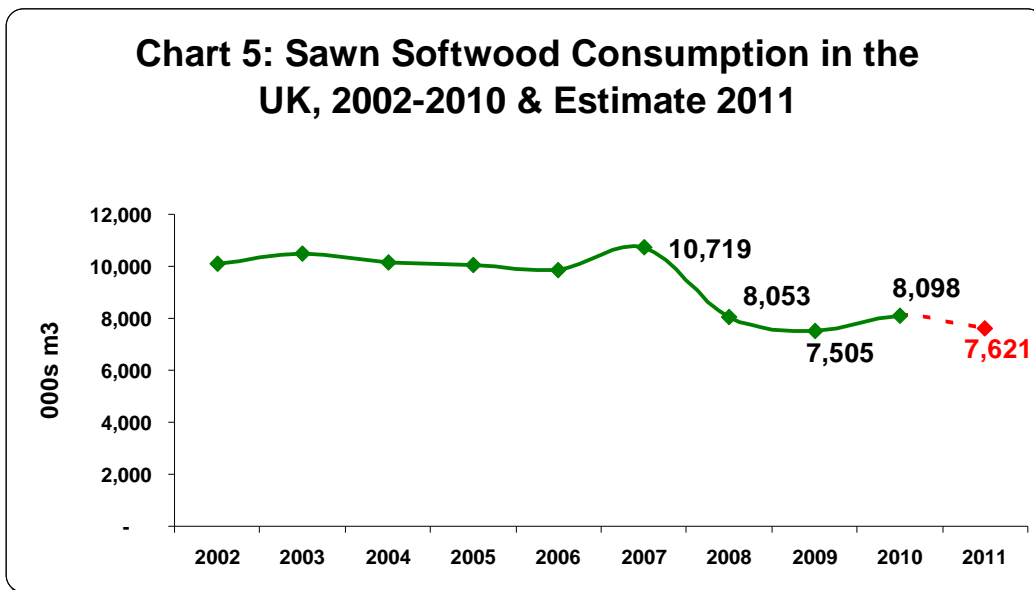
Main Findings:

UK Sawn Softwood Consumption

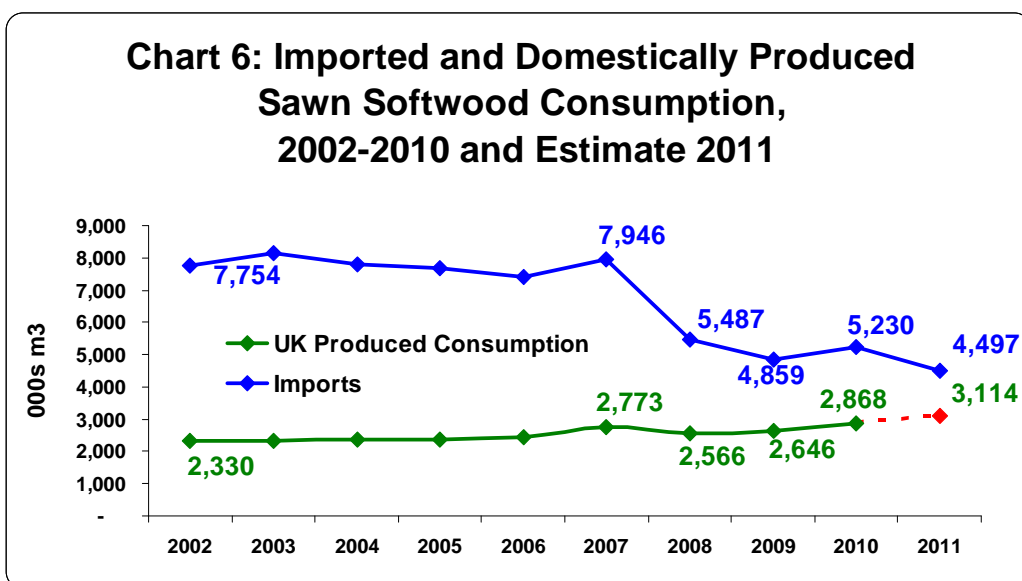
In common with virtually every other industry in the UK and Europe, economic recession resulted in lower demand for sawn softwood from user markets, significantly reducing levels of consumption in 2008 and 2009.

Moderate recovery took place in 2010, but there is firm evidence to suggest that when final data for 2011 is available, consumption of sawn softwood in the UK will have fallen once more.

The pattern of sawn softwood consumption from 2002 to 2010 with a forecast for 2011 is shown in chart 5 below.



A fall of 25% in sawn softwood consumption was experienced in 2008 with a further 7% reduction in 2009. The improvement in consumption in 2010 of 8% is likely to be followed by a 6% reduction in 2011. The development of sawn softwood consumption by source of supply is shown in chart 6.



Imports fell by 31% and UK domestic consumption (production less exports) by 8% in 2008, but domestic consumption has risen each year since 2008 and is expected to rise once again in 2011, by around 8%. This contrasts with a decline in imports in 2011 of around 14%, although the eventual total after amendments and late returns will push the import total above the 4,500,000 million m³ mark.

The forecast of just over 3.1 million m³ for domestic consumption is derived from the mid-point between the Forestry Commission's forecast of UK sawn softwood production submitted to the United Nations Economic Commission for Europe (UNECE) Timber Committee within its Joint Forestry Questionnaire and current industry opinion of the eventual outturn of sawn softwood production in 2011. This production estimate is then subtracted from the provisional export volume provided from HMRC trade data.

The positive development of UK production since 2003 has resulted in an increasing share of sawn softwood consumption for UK sawmillers. The market share growth of UK sawmillers has accelerated since 2008 as UK production has increased every year while import volume has been more variable and mostly lower over the same period.

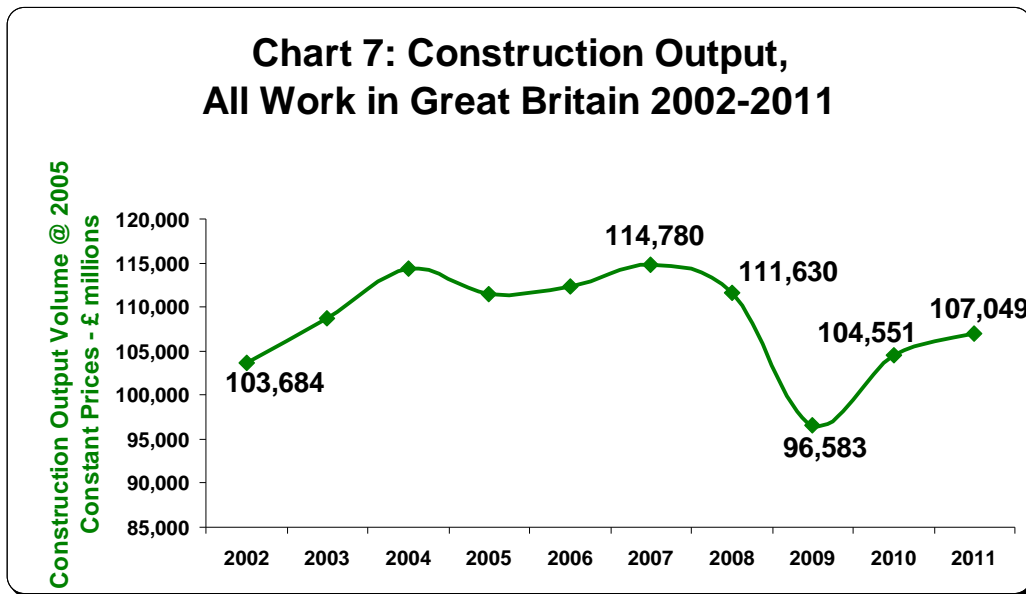
Should the forecast of domestic consumption for 2011 prove to be close to the actual (available in provisional form in May 2012), this would give UK producers a share of total consumption of over 40%.

Major Market Developments

Two of the most important markets for sawn softwood are construction and pallets and packaging. Recent developments of these markets, as reported by official statistics available from the Office for National Statistics, have followed a broadly similar pattern to the rest of the UK economy.

Construction has experienced a greater downturn than many other markets with the significant reductions in house building and repair, maintenance and improvement works accounting for much of the reduction in demand for sawn softwood.

A recovery of around 8% occurred in construction output in 2010 following a reduction of just over 13% in 2009 and a 3% fall in 2008. The trend of construction output over the period from 2002 is shown in the chart below.

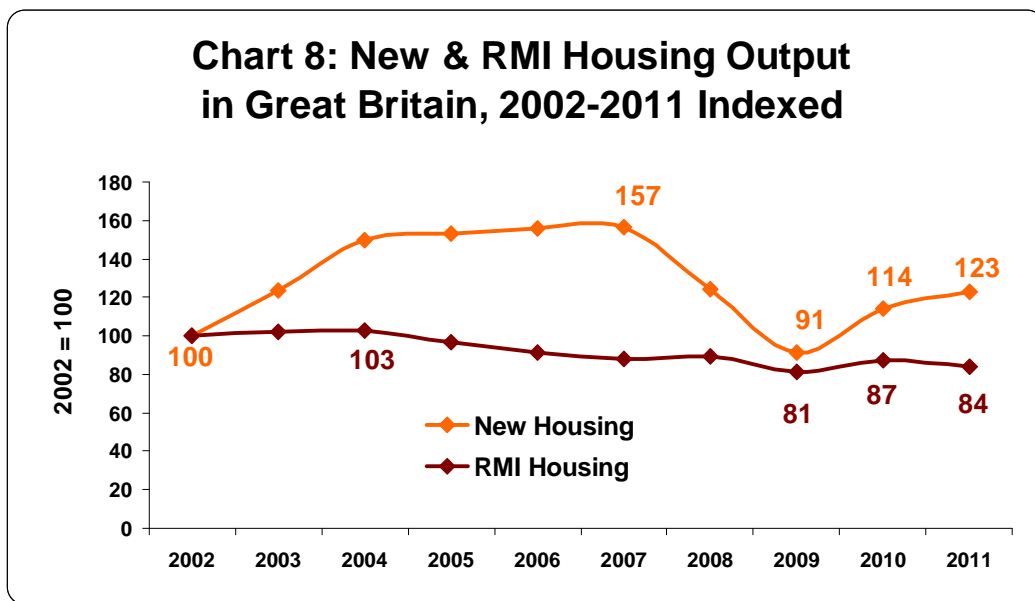


The measure shown in chart 7 above is the volume of construction output at 2005 constant prices in Great Britain.

Output in the housing market – both new and repair, maintenance and improvement (RMI) – represented around 35% of total construction output in 2007, at the height of modern-day house building activity, but had fallen to 33% in 2010.

New and RMI housing was a significant contributor to the large fall in all construction activity in 2009, accounting for over 40% of the decline in construction volume in that year.

Within these housing sectors, the sudden and substantial fall in new house building was a major factor in this decline, as shown in chart 8 below.



New housing output reached a recent peak in 2007 with volume nearly 60% higher than in 2002. The sharp drop in output in 2008 and again in 2009 has been followed by a recovery, but only back to the levels of 2008.

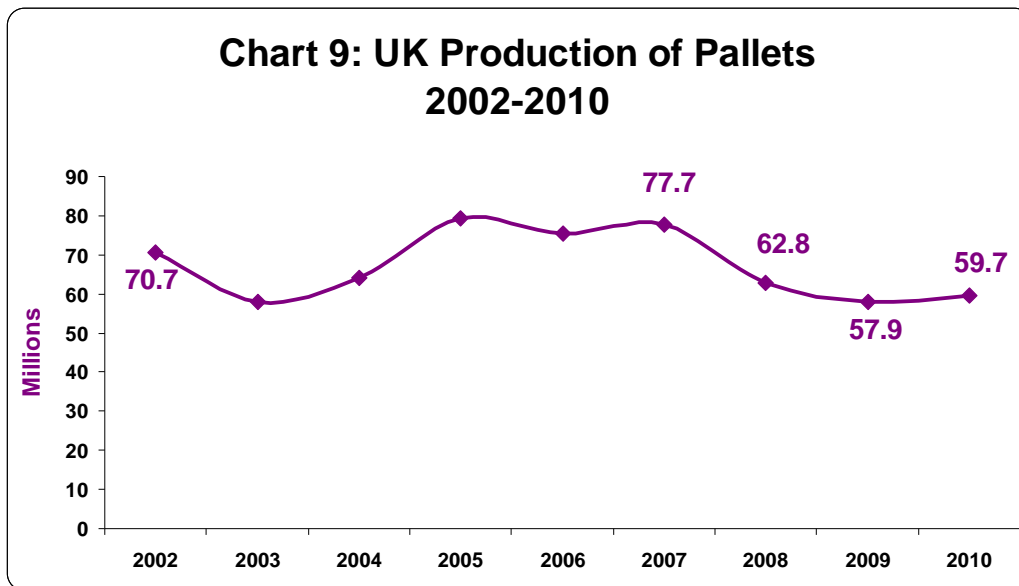
RMI housing output has followed a less volatile, but generally downward development path. The peak in RMI activity occurred in 2004 and despite a shallow recovery in 2010, remains below the levels of 2004.

The other main market for sawn softwood, where official statistics are regularly available, is in the packaging and pallets industry.

A similar pattern of activity to many other industries in the UK has taken place with the production of pallets.

A recent peak was reached in 2007 with a sharp decline in output occurring in 2008 and a further fall experienced in 2009. A modest increase in output was achieved in 2010.

Chart 9 below describes the output, in million of pallets produced, of UK pallet makers from 2002 to 2010.



The data shown above is provided through ProdCom. This is PRODUcts of the European COMMunity and is a European Union (EU) wide survey of production, mainly for the manufacturing industries, and covers over 4,500 products classified to around 250 industries. The packaging industry, with UK manufacturers' sales reported to be worth over £500 million in 2007 (around £420 million in 2010) is of sufficient scale to be including within the ProdCom series and is a significant consumer of sawn softwood.

Construction and packaging are major consumers of sawn softwood, but many other industries, including the fencing and outdoor uses market also consume substantial quantities.

Little or no official published information exists for many of the other major wood consuming markets, with the exception of furniture, consequently, the specific developments of these other markets has needed to be derived from other sources.

Consumption of sawn softwood in the UK in 2010 was valued at around £1.5 billion which is a significant sum for the value of a feedstock that supplies the many timber manufacturing and construction activities in the UK. Such activities include timber frame manufacturing, builders carpentry and joinery, packaging tool making, Once sawn softwood and other timber raw materials are converted to an equivalent measure of manufacturing output and compared to other industries, the timber industry valued at around £7 billion compares favourably with the textiles industry (£5.4 billion), soaps & detergents, cleaning & polishing, perfumes & toiletries (£4.3 billion), ship and boatbuilding (£4.2 billion), soft drinks: production of mineral waters & other bottled waters (£3.9 billion) and paints, varnishes, printing inks & mastics (£3.7 billion).

Compared to other manufacturing industries the timber industry has followed a similar pattern of development before and after the recession of 2008. The chart below plots the indexed development of the timber industry against all manufacturing and while following similar patterns, it can be seen from this chart that both the rate of growth and decline experienced by the timber industry over the period tends to be of a greater scale than for manufacturing in total.

Manufacturing has also experienced a less volatile period in terms of output than construction and the importance of the construction industry in the consumption of sawn softwood compared to the many types of manufacturing helps explain these higher rates of growth and decline.



Perhaps larger than many would imagine, timber products and the uses of sawn softwood in particular serve a multitude of other industries with a usefulness than few other industries are able to emulate.

Although the use of sawn softwood is widespread, many of the other industries outside of the three main markets of construction, pallets and packaging and fencing and outdoor uses consume relatively small amounts of sawn softwood in comparison. For this reason, the focus of attention with timber utilisation in this report rests with these main markets.

Sawn Softwood Utilisation by Main Market

As shown previously in chart 5, sawn softwood consumption in 2010 was at a relatively low level compared to previous years, although an 8% rise was achieved in the year. The estimate for 2011 is for a 6% reduction in consumption as housing starts and RMI activity in construction declined once again in 2011.

The work of these timber utilisation studies has provided estimates of sawn softwood consumption by main market from 2002 and these data are shown below in table 1, with an estimate for 2011.

Table 1: Sawn Softwood Utilisation by Volume by Main Market

000s m ³	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Construction	6,868	7,521	7,072	6,926	6,610	7,088	5,116	4,842	5,303	4,749
Pallets & Packaging	2,070	1,771	1,831	1,886	1,978	2,119	1,595	1,431	1,427	1,400
Fencing & Outdoor	881	936	1,004	1,003	1,019	1,262	1,142	1,056	1,168	1,272
Other	265	263	260	250	245	250	200	175	200	190
Total Consumption	10,084	10,490	10,167	10,065	9,853	10,719	8,053	7,505	8,098	7,611

All markets experienced a downturn in demand with a consequent lowering of the volumes of sawn softwood consumed during 2008 and 2009. Differing rates of decline in each of the main markets took place in these two years however, with sawn softwood consumption in construction the worst affected, falling by 28% in 2008 and a further 5% in 2009. The pallets and packaging market also consumed substantially less sawn softwood in these two years; down by 25% in 2008 and 10% in 2009. The fencing and outdoors uses market fared better, although experienced lower volumes, down by an estimated 10% in 2008 and 8% in 2009.

The moderate recovery in 2010 saw sawn softwood volumes rising once more in the construction industry and in the fencing and outdoor markets, with increases in volume of 10% and 11% respectively.

Growth did not return to the pallets and packaging market however with volumes marginally lower again in 2010.

Estimates for 2011 indicate that overall sawn softwood consumption will have fallen by around 6%, because of continuing weakness in construction markets. Sawn softwood consumption in construction is likely to have declined in the region of 11% in 2011 and a further decline of around 2% is predicted in the pallets and packaging market. However, sawn softwood used by the fencing and outdoor market is likely to grow once again in 2011.

The depth of the 2008 recession was severe and its aftermath prolonged, but it should be noted that although construction was the greatest casualty with a 28% decline in 2008, the volumes consumed by construction had already been in general decline since 2003. From table 1, it can be seen that volumes in construction had fallen from around 7.6 million m³ in 2003 to 6.6 million m³ in 2006. The peak of the last economic cycle in 2007 when construction output reached new heights (see chart 1) helped the volume of sawn softwood consumed by construction to rise, but this did not prove to be a turning point in the fortunes of suppliers of sawn softwood. Indeed, despite the rise in volume consumed by construction in 2007, its share of sawn softwood consumption continued on the downward path, as shown in table 2, which identifies the relative importance of each of the main markets, in terms of the share of total sawn softwood consumption in each of the years under review.

Table 2: Sawn Softwood Utilisation by Share of the Total by Main Market

% of Total pa	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Construction	68%	72%	70%	69%	67%	66%	64%	65%	65%	62%
Pallets & Packaging	21%	17%	18%	19%	20%	20%	20%	19%	18%	18%
Fencing & Outdoor	9%	9%	10%	10%	10%	12%	14%	14%	14%	17%
Other	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%

From a peak of 72% of all sawn softwood consumed, the share held by the construction industry had fallen to 66% in 2007 and, with the large decline in demand in 2008, fell once more to 64% of the total in that year.

By 2010, despite a 10% increase in sawn softwood volume over 2009, construction's share remained fixed at 65% of the total.

Whilst growth from construction was welcome, weakness in the demand for sawn softwood in the pallets and packaging market continued.

Fencing and outdoor markets, including decking for domestic and commercial uses, have experienced – against a background of generally poor trading conditions – improved performance, growing by around 11% in 2010.

For 2011, lower consumption in construction is likely to result in a further decline in the share of all sawn softwood consumption held by construction to an estimated 62%, the lowest proportion for many years. Sawn softwood consumed by the pallets and packaging market is predicted to be lower again in 2011, but with total sawn softwood consumption also declining in 2011, the share held by the pallets and packaging market is estimated to remain at 18% of the total.

The fencing and outdoor uses market has performed better than many others over the last three years and this continuing better performance has led to an increase in the actual volumes consumed and a further rise in the share of total sawn softwood consumption. This trend is predicted to have continued in 2011 with the share of fencing and outdoor activity claiming a share of UK sawn softwood consumption only marginally lower than the pallets and packaging market, at 17%.

The weakness of demand for sawn softwood in the pallets and packaging market over the last two to three years has been brought about by structural changes within that market and not because of any general change in the preference for sawn softwood as the main material of choice in pallet making.

The series of Wood Packaging Studies¹, sponsored by Timcon, the pallets and packaging confederation and the Forestry Commission, has revealed changes in use characteristics that has had a significant effect on the utilisation of sawn softwood in this market. In brief, since the beginning of the recession, greater quantities of recycled pallets (repaired, re-manufactured and re-used) have been placed onto the market as many pallet using companies have attempted to reduce costs by using more second-hand/previously used pallets, to the detriment of newly manufactured pallets. The implications for sawn softwood consumption are brought sharply into focus when the differences in usage between a new pallet and a recycled pallet are viewed. Repaired and re-manufactured pallets, on average, use a tenth of the amount of sawn softwood compared to newly manufactured pallets.

¹ Wood Packaging Study - Quantification of the Manufacture, Recycling and Re-use of Wood Packaging in the UK, 2010.

This difference in material usage per type of pallet activity is compounded by around 3.5 million fewer pallets manufactured in 2010 than in 2009 and approximately 10 million more repaired and re-manufactured pallets placed onto the market in that year.

Sawn Softwood Utilisation by Main Market & Construction Sector

The availability of official data on the various sectors of the UK construction market has enabled separate analysis of these sectors and the housing market specifically.

New house building in the UK has traditionally been a market perceived to have a direct bearing on the demand for sawn softwood.

There is certainly a good correlation between sawn softwood consumption and new housing starts, but the new housing market segment is a relatively small consumer of sawn softwood compared to the wider construction industry and the repair, maintenance and improvement (RMI) segments of construction in particular.

This is demonstrated in table 3 which separates these two segments from the total of all consumption in construction.

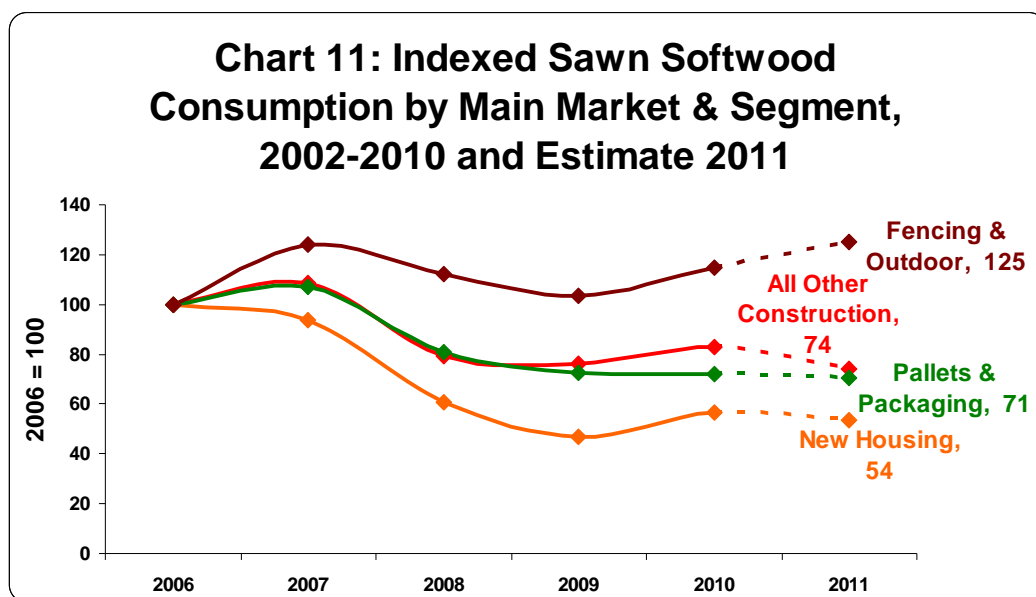
Table 3: Sawn Softwood Utilisation by Volume by Main Market & Construction Sector

000s m3	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
All Construction	6,868	7,521	7,072	6,926	6,610	7,088	5,116	4,842	5,303	4,749
New Housing	645	660	679	674	667	624	406	313	379	359
All Other Construction	6,223	6,860	6,392	6,253	5,943	6,464	4,710	4,529	4,924	4,391
Pallets & Packaging	2,070	1,771	1,831	1,886	1,978	2,119	1,595	1,431	1,427	1,400
Fencing & Outdoor	881	936	1,004	1,003	1,019	1,262	1,142	1,056	1,168	1,272
Other	265	263	260	250	245	250	200	175	200	190
Total Consumption	10,084	10,490	10,167	10,065	9,853	10,719	8,053	7,505	8,098	7,611

Sawn softwood consumption in new housing was at its peak in 2007 when it accounted for 10% of all sawn softwood entering construction. It has since fallen back and in 2009, after the virtual halving of housing starts in the UK, accounted for just 6% of the total. In 2010, volumes into new housing rose once more, as housing starts 'bounced-back' from two years of decline, but with fewer housing starts predicted for 2011 than in 2010, sawn softwood volumes are likely to have fallen once more.

Consumption in all other construction sectors, within which RMI is the major source of sawn softwood demand, has also experienced mixed health over the last two to three years. A further decline in volume in 2009 was followed by a 'bounce-back' in demand, in similar fashion to the new housing sector, with around 9% more sawn softwood consumed in these other construction sectors in 2010. The recovery was short-lived however and a fall of similar proportions is estimated to have taken place in 2011 with volumes lower by 11%.

To provide a 'snapshot' of how each of two identifiable construction sectors and the other markets have performed, before the most recent recession and since, developments of these markets and sectors are shown in chart 11 below and indexed for ease of comparison.



As previously reported, recession in 2008 resulted in sawn softwood consumption in all main markets and sectors falling in 2008 and again in 2009, but all, except the pallets and packaging market, recovered in 2010 with sawn softwood consumption rising, but remaining below pre-recessionary levels. Estimates for 2011, shown in chart 11 above, reveal a continuing lack-lustre performance for sawn softwood consumption in the construction and pallets and packaging market, but continued improvement in volumes used in the fencing and outdoor markets.

Volume in the fencing and outdoor markets is expected to return to the levels of 2007, but all other markets remain substantially below the volume of that year. The level of new house building in the UK, as shown above, has nearly halved since 2006.

Sawn Softwood Utilisation by Main Market by Source of Supply

The growth of UK domestically produced consumption was quantified in chart 4, describing the increasing penetration of markets to 2010, culminating in a share of all consumption of 35% in that year.

In 2010, domestically produced consumption grew by an estimated 8%, to 2,868,000m³, with growth in all main markets.

In 2011, it is projected that domestically produced consumption will have risen once more, to around 3,114,000m³, raising the share of all sawn softwood consumed in the UK to 41%.

The destinations for UK produced sawn softwood between 2002 and 2010, with the estimate for 2011, were as identified in table 4 below.

Table 4: UK Produced Sawn Softwood Utilisation by Volume by Main Market & Construction Sector

000s m ³	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
All Construction	830	803	781	803	829	943	834	794	889	981
New Housing	95	96	94	97	100	91	63	62	68	74
All Other Construction	735	706	687	707	728	852	771	732	821	907
Pallets & Packaging	720	721	733	722	748	763	744	919	932	965
Fencing & Outdoor	731	756	804	813	834	1,040	962	906	1,018	1,137
Other	49	47	47	45	42	28	26	26	29	31
Total Consumption	2,330	2,327	2,366	2,384	2,452	2,773	2,566	2,646	2,868	3,114

A 23% rise in housing starts in the UK in 2010 helped generate an estimated 11% growth of UK produced sawn softwood delivered into the new housing market, an increase of around 6,000m³ compared to an 89,000m³ increase from all other construction sectors. The total increase of UK produced sawn softwood in construction was therefore around 95,000m³.

A similar level of increase in 2010 was estimated to have taken place in the fencing and outdoor markets where consumption rose by around a further 112,000m³, a rise of 12%.

The pallets and packaging market also consumed more UK produced sawn softwood in 2010.

Despite an overall drop in volume used in this market, UK producers were able to take advantage of higher import prices and won a higher market share of a marginally smaller market. This, and the structural changes within the market for new and repaired pallets, is reported in greater detail in the section of this report concerned specifically with the pallets and packaging market.

It is believed that UK producers have continued to enjoy increases in the penetration of all markets in 2011.

Approximately 92,000m³ more UK produced sawn softwood was estimated to have entered construction in 2011 with increases in both sectors. An increase of around 33,000m³ is likely to have been consumed by the pallets and packaging market and 119,000m³ more used by the fencing and outdoor markets.

Collectively, these increases in volume account for the 9% higher volume of UK produced sawn softwood estimated to have been consumed in 2011.

With total sawn softwood consumption falling in 2011, it is clear that UK production has taken market share from imported sawn softwood.

Table 5: Imported Sawn Softwood Utilisation by Volume by Main Market & Construction Sector

000s m ³	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
All Construction	6,038	6,718	6,291	6,123	5,782	6,145	4,282	4,048	4,414	3,768
New Housing	550	564	585	577	567	533	343	251	311	285
All Other Construction	5,489	6,154	5,706	5,546	5,215	5,612	3,939	3,797	4,103	3,484
Pallets & Packaging	1,350	1,050	1,098	1,164	1,231	1,357	851	512	495	435
Fencing & Outdoor	150	180	200	190	185	222	180	150	150	135
Other	216	216	213	205	203	222	174	149	171	159
Total Consumption	7,754	8,163	7,801	7,681	7,401	7,946	5,487	4,859	5,230	4,497

The provisional volume of imported sawn softwood in 2011 was 730,000m³ lower than in 2010. Amendments to be received after the publication of this report will raise the import total and reduce the deficit in volume over 2010, but the data provided in table 5 will probably differ only slightly.

Volume is lower in all markets with construction the worst performer, estimated to have consumed 15% less imported sawn softwood in 2011. Imported sawn softwood consumed in new housing was around 8% lower and 15% lower in all other (non-new housing) construction sectors.

Imported sawn softwood suffered from continued substitution by domestic producers in the pallets and packaging market and also for fencing and outdoor uses.

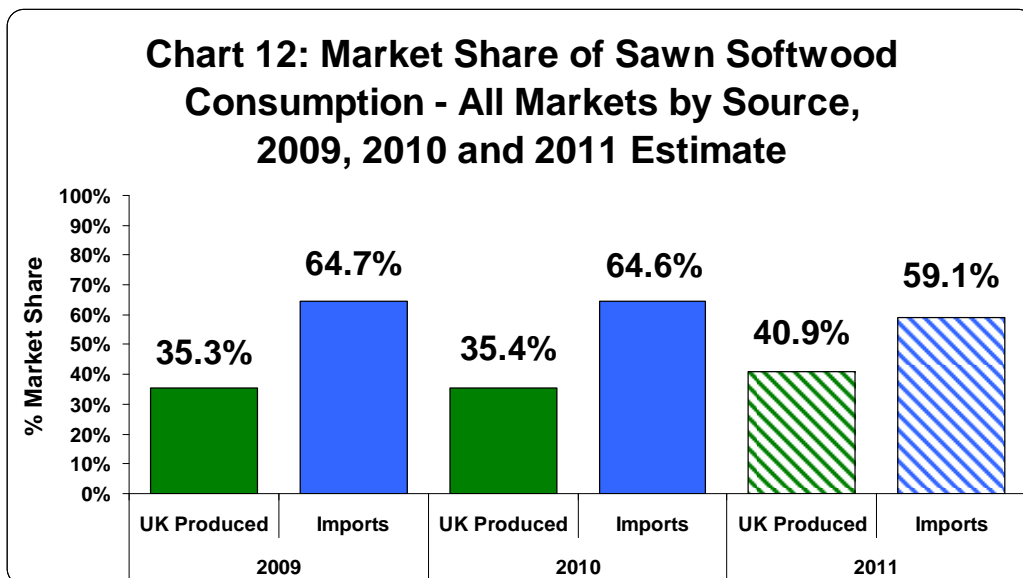
It is also believed, but not possible to quantify with limited information available, that imported sawn softwood has also experienced a small degree of substitution, especially in construction markets, by some of the newer forms of wood-based products coming to market. It is known that some small volumes of modified wood products, such as “Accoya” and cross-laminated timber (CLT) were used in construction in 2011.

The respective strengths and weaknesses – in terms of utilisation and market share – for UK produced and imported sawn softwood are well known with UK produced sawn softwood a major source of supply for fencing, outdoor and agricultural use and an important source of material for the large pallet and packaging industry in the UK. Imported sawn softwood has traditionally been the leading supplier of constructional sawn softwood, especially structural grade materials imported from Scandinavia and in days past, high volumes from Canada. Imported goods are not used exclusively in construction however as high volumes have also been sold to the other major markets with the Baltic States regularly supplying around 10% to 15% of the total of goods imported by the UK and used for pallet making and fencing and outdoor uses, but also for carcassing and structural uses in construction.

As shown in chart 6, UK produced sawn softwood has grown in importance over the past ten years.

The last three years, including the estimates for 2011, have seen a sharp rise in the market share of UK produced sawn softwood as lower demand from user markets and competitive pricing by UK producers has adversely affected the volumes of imported sawn softwood entering the UK.

The increase in volumes of UK produced sawn softwood has resulted in consistent improvement in the share held by domestic producers and is estimated to have stood at nearly 41% in 2011.



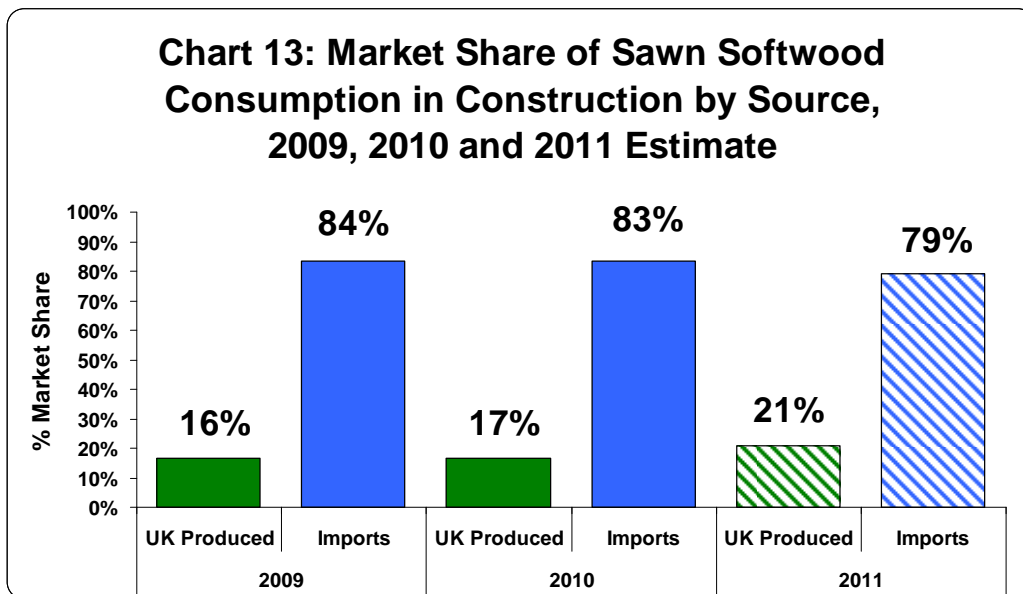
The growth in the relative importance of UK produced consumption has been achieved by an across-the-board improvement in each of the major markets for sawn softwood.

Construction remains the most important market for imported sawn softwood and imports continue to supply the great majority of the needs of the construction industry and especially in new house building.

The main end-use for UK produced sawn softwood in construction has been in RMI sectors, especially the housing RMI sector and in 2011, further advances were achieved. UK produced sawn softwood has also gained a further small increase in volume in the new house building sector.

As reported previously, the estimated increase in volume of UK produced sawn softwood entering construction in 2011 of around 92,000m³ has helped raise market share to 21%.

The share development over the last three years is shown in chart 13 below.



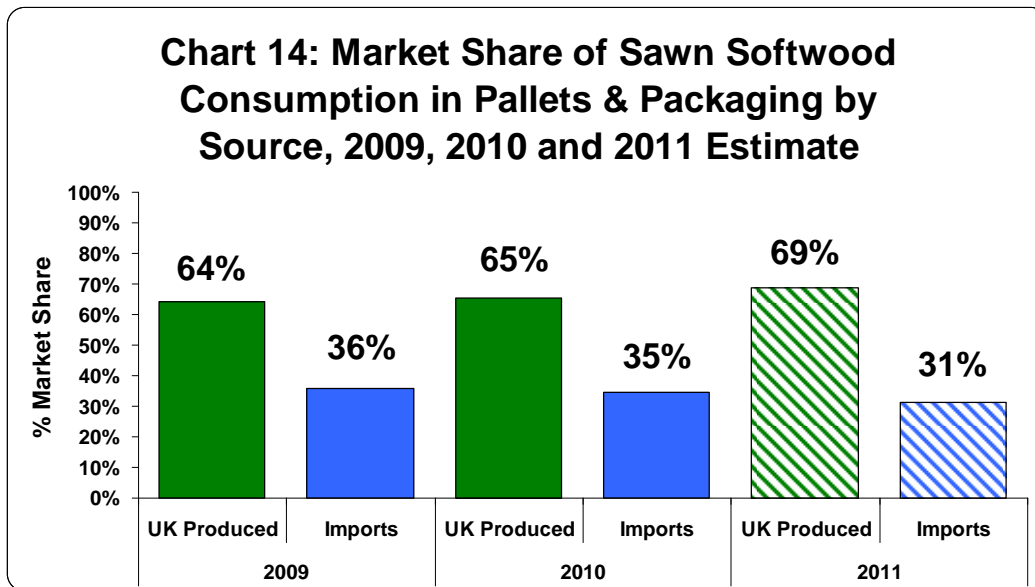
The loss in volume in construction has been the main factor in the total reduction in imported sawn softwood of around 730,000m³ in 2011.

The estimated percentage loss of imported sawn softwood in 2011 in new house building was 8% and 15% in all other construction sectors.

In the pre-recessionary years, 2006 and 2007, the volume of both UK produced and imported sawn softwood declined in new house building and imported sawn softwood volumes were also lower in the other construction sectors, most notably in the RMI sectors. The development of UK produced consumption in the housing RMI sector especially is thought to have been positive over this period however and this has been the main driver behind the rise in the overall share of UK produced sawn softwood in construction to 21% in 2011.

While the substitution of imported consumption by UK produced has been of a moderate nature in construction, the switch away from imported goods in the pallets and packaging market has been more pronounced.

The market share development by source of supply in this market is shown below.



The total volume of sawn softwood entering the pallets and packaging market in 2011 was estimated at around 1,400,000m³, which was a similar volume as in 2010.

However, imported sawn softwood lost ground in 2011 and 2010. The loss in volume of imported sawn softwood in this market in 2010 over 2009 was around 3% and this was followed by an estimated further fall in 2011 of 12%. In contrast, UK produced sawn softwood consumed by this market was higher in 2010 over 2009, by just over 1% and is estimated to have grown by approaching 4% in 2011.

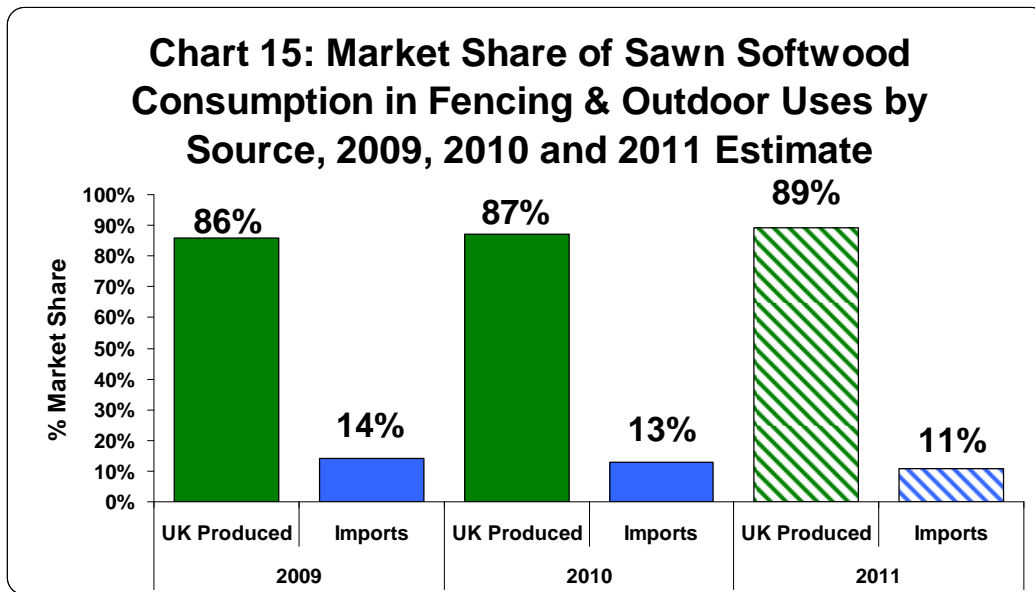
These volume changes and particularly the lower supply of imported goods is thought to have brought about the reduction in market share of imported sawn softwood to 31% of consumption in 2011, from 36% in 2009.

Overall volumes consumed by the pallets and packaging market are thought to have stabilised in 2011, but for the reasons previously outlined, where significant changes to the volumes of new pallet manufacturing and the repair and re-use of pallets has taken place, lower volumes of sawn softwood generally have been used in this market over the last three to four years.

A further important factor in the reduction in imported goods sold to this market is price. The average price of sawn softwood over the period reviewed above has increased by a quarter, at a time when the Pound has strengthened and the UK price for pallet wood has not kept pace with the increase in price of similar grades from the Baltic States and other mainland European suppliers.

A similar, but less marked, development has taken place in the fencing and outdoor markets.

This market has been traditionally strong for UK producers and the market position of UK grown sawn softwood has strengthened further over the last three years, as described in chart 15 below.



The fencing and outdoor market comprises a number of different sectors, often populated by relatively small companies serving local market places. Sawn softwood prices have always been an important factor in the cost structures of wood using companies and this is especially so in this market which tends to purchase relatively low grade, low cost material. The preference for local supply and rising sawn softwood costs has, as in the pallets and packaging market, worked in favour of UK produced material.

Development of Markets for Sawn Softwood

The Construction Market

Available data has dictated the degree to which the construction industry and its constituent parts can be identified.

Official data on construction output, identified as new work and RMI is further categorised by **new work** in housing, industrial building, commercial building and infrastructure. **RMI** output is categorised by the same categories.

These data are available from the Office for National Statistics (ONS). Also available via ONS are data on housing starts and completions compiled by the Department for Communities and Local Government (DCLG). Housing statistics are also available from the National Home Building Corporation (NHBC) and the Construction Products Association. Statistics are also available to members of various organisations and other associations, including the Home Builders Federation, the Federation of Master Builders and the United Kingdom Timber Frame Association.

House building is therefore relatively well-served by available data. Other construction sectors are less well quantified, but the availability of output data in other sectors by ONS provides the framework within which estimates of sawn softwood usage can be made.

These data, coupled with current and previous studies of timber usage for many applications in different markets has enabled relatively good estimates to be made of the volumes of sawn softwood used in the various end-use markets.

As identified, the new house building market is well-served by available data and this has permitted an insight into the development of the new and RMI housing market in the UK and consequently, robust estimates of timber utilisation within these sectors.

New Housing

New house building, or, with the many different types of dwelling now constructed, perhaps more properly defined as new home building, has suffered more than most markets from economic troubles of the last three to four years.

Housing starts declined from a peak of 230,000 in 2006 to just below 107,000 in 2009.

This decline of greater than a half in numbers of new homes being built has had a significant effect on sawn softwood volumes consumed.

Both main forms of home building, timber frame and masonry construction, have experienced large reductions in homes built, although the relative share of each has changed little over the last two to three years. Timber frame housing grew substantially during the last decade and it is estimated that one in every four homes built in the UK is now of timber frame construction.

The rise in popularity of timber frame housing has been important to the suppliers of sawn softwood as, on average, double the quantity of sawn softwood is used in a timber frame home than a masonry built home.

Despite the rise in popularity of timber frame home building and the consequent higher volumes of sawn softwood used per home, the halving of the number of homes built since the middle of the last decade has resulted in sharply lower volumes of sawn softwood consumed by the new housing market.

As shown in table 3, the volume of sawn softwood utilised in new home building has fallen from a peak of 667,000m³ to an estimated 359,000m³ in 2011.

Lower sawn softwood utilisation, because of this most recent downturn in housing volume, has been exacerbated by the changing mix of dwellings in the UK. Fewer detached dwellings in absolute terms and as a proportion of all dwellings have been built in the UK since 2006 and with a higher proportion of sawn softwood consumed in a detached dwellings compared to all other dwelling types, this has also contributed to lower sawn softwood volumes used in home building and construction overall.

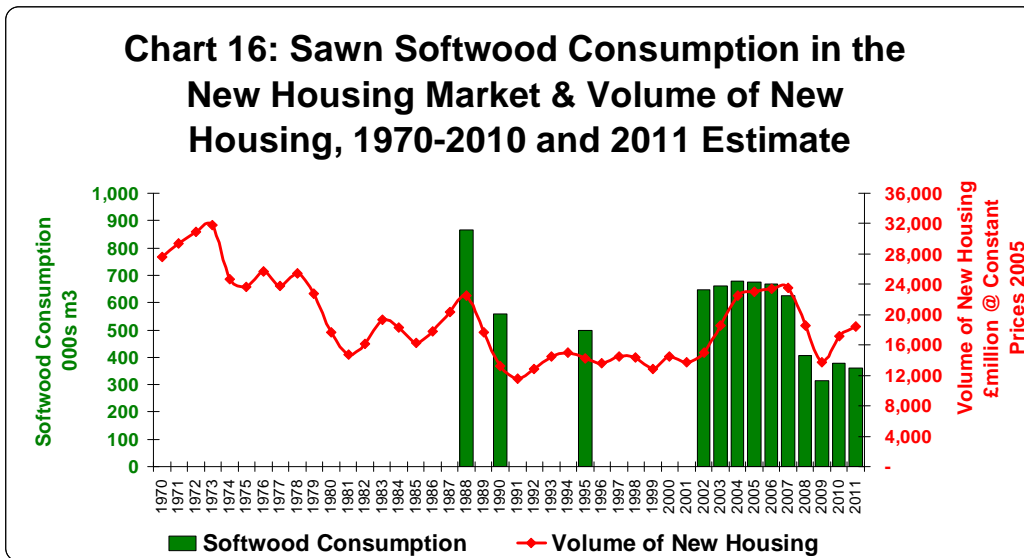
This trend away from detached dwellings was halted in 2010 and 2011 and more detached homes were built in these two most recent years as a proportion of the total. However, in real terms in 2011, lower housing starts will have resulted in fewer detached homes built once again.

Volumes built and changes in the mix of housing types has therefore conspired to help reduce sawn softwood consumption over the medium-term, but sawn softwood has also experienced competition from other products for some applications in home building.

As alluded to previously, some of the newer types of wood-based products are beginning to replace sawn softwood in a limited number of applications in a small number of new build projects, but a longer-term trend of substitution of flooring joists by I-beams has had a detrimental effect on the demand for sawn softwood in these applications in new home building.

It is these factors of economic difficulty, housing type changes and, to a lesser extent product substitution, that have contributed to the reduction in sawn softwood volumes consumed in new home building in the UK.

The longer-term relationship between new home building and sawn softwood consumption is shown in chart 16 below.

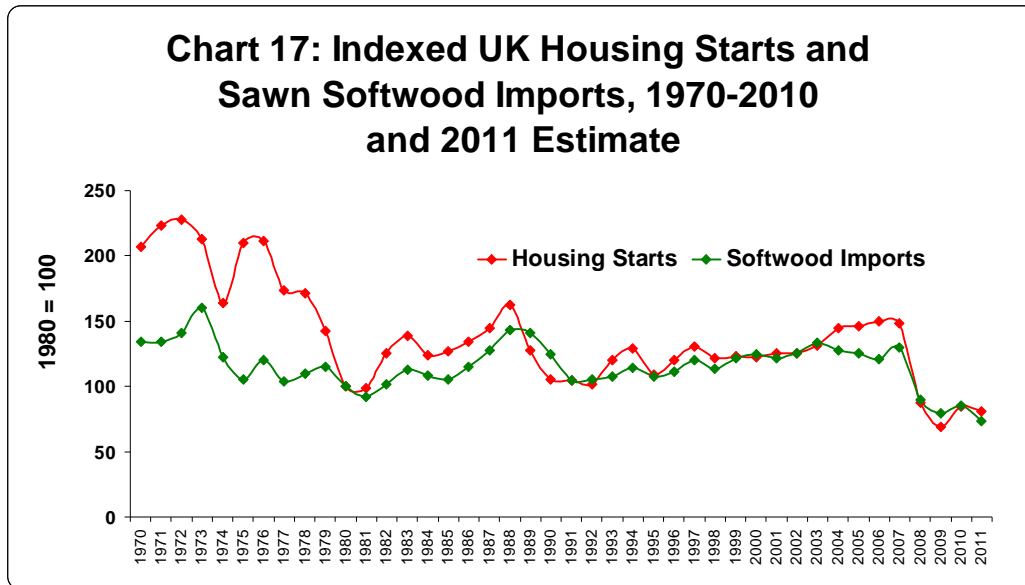


The estimated sawn softwood volumes consumed in new home building reflect the rise and fall in new home construction. There have been a number of years where the annual development of sawn softwood consumption has not followed the annual development in home building, but the relationship between the two is consistent over the long-term.

It should be noted that the volume of new housing as shown above is more closely allied to housing completions than housing starts.

It should also be noted that the measurement of sawn softwood consumption in new home building prior to the work of this series of timber utilisation studies which quantified volumes used from 2002, are the work of other organisations. The data for 1995 was estimated from end-use studies conducted by Trada and before that, estimates derived from the work of Peter Grimsdale of the Truss Rafter Association in 1988 and the Anders Baudin work of 1990.

As identified in this report, 80% of sawn softwood consumed in construction is imported with new home building an important market for overseas suppliers. The relationship between imported sawn softwood and housing activity is confirmed through the good statistical correlation that exists between the two and this is shown in the chart below which monitors the annual development of each since 1970.



Data to 1970 on imported sawn softwood consumption specifically used in new house building are not available, hence the use of all sawn softwood imports in the chart above, nevertheless, the relationship between the volumes of housing starts and the volumes of sawn softwood imports is highly consistent.

All Non-New Housing Construction Sectors

As reported, data availability on non-new housing construction sectors is less comprehensive than for the housing sector.

Data from ONS does provide a measure of output from these sectors however and in 2011, the scale of the non-new housing sectors is revealed through the measure of the volume of construction output at 2005 constant prices. The value of new housing in 2011 using this measure was £18.4 billion and the non-new housing sectors were valued at £75.6 billion. In output terms, the non-new housing sectors were roughly four times larger than new housing.

As previously indicated, there is a variety of different activities, including industrial and commercial building, that are categorised in these sectors.

Timber usage within the different activities differs, with more sawn softwood used in housing RMI than, for example, in infrastructure projects which often involve large civil engineering works.

However, within the RMI sectors, which comprise, housing, industrial, commercial and infrastructure RMI, average usage data of sawn softwood is unknown and, unlike new housing, probably not possible to measure because of the variability of the applications for sawn softwood present in each sector.

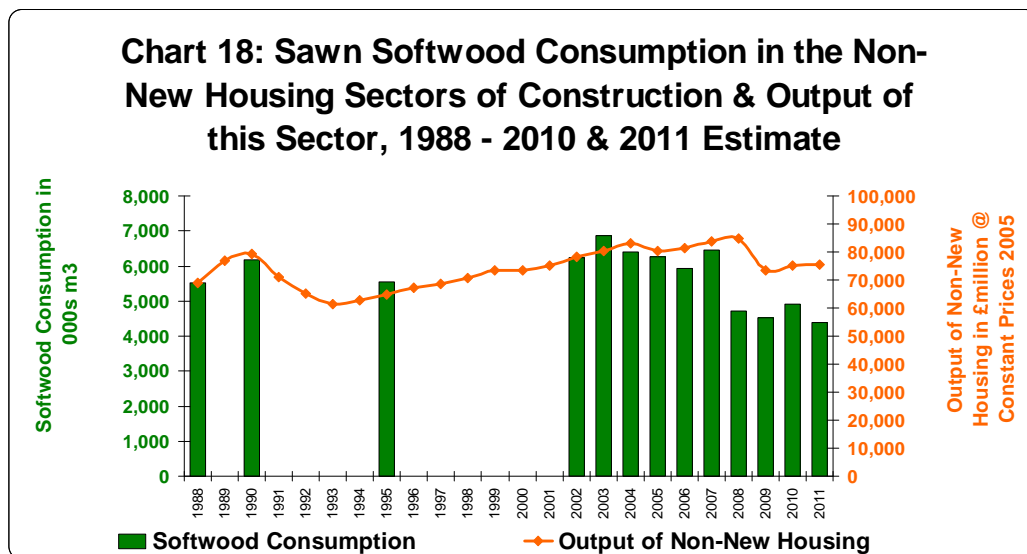
In housing alone, the range of activities is wide, varying from relatively small-scale repairs (e.g. to staircases or flooring) to larger-scale improvement work which would include extensions to existing properties. Without any real uniformity of activity, the ability to measure average usage is not possible.

While it is known that vary large volumes of sawn softwood are used in housing RMI and smaller volumes used in the other non-housing RMI sectors, the method through which

these non-new housing sectors are quantified is to estimate usage in all other markets and subtract these volumes from the known total volume of sawn softwood consumed as derived from UK production and imports, less exports.

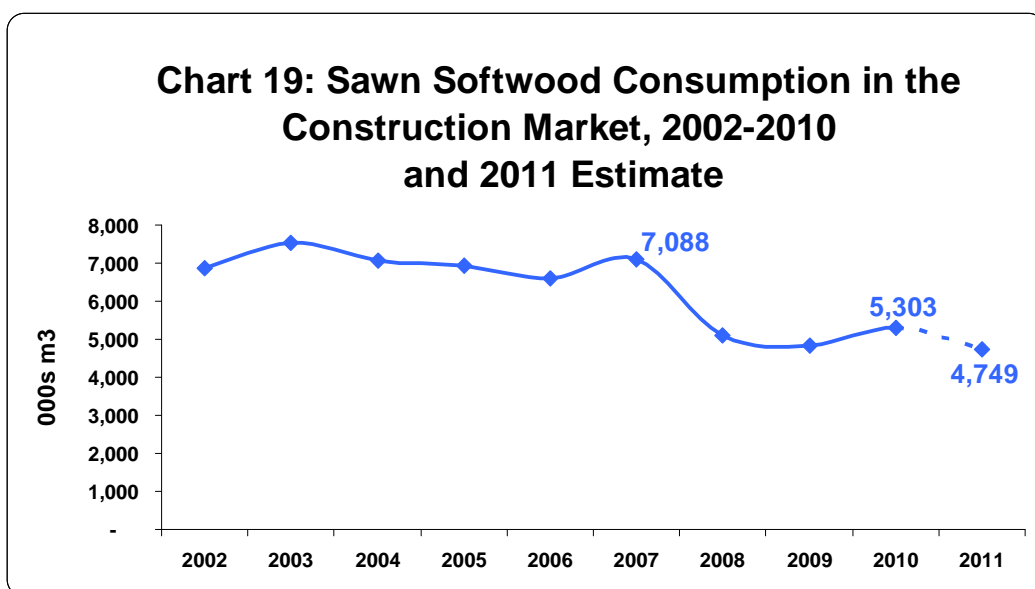
As a check on the validity of this method of calculation the calculated sum of sawn softwood consumption in all other construction sectors than new housing can be plotted against the output of these sectors to determine co-variability.

In common with the availability of consumption data in the new housing sector, the plotting of non-new housing sawn softwood consumption against construction output reveals the expected relationship where market demand is followed by product (sawn softwood) supply.



As shown in chart 18, there is a good correlation between sawn softwood consumption in non-new housing sectors, confirming that the method of measuring sawn softwood volumes in these markets has credibility.

For all construction sectors combined, the development of sawn softwood consumption to 2010 and the estimate for 2011 is shown in chart 19 below.



The Pallets and Packaging Market

The proportion of industry turnover, estimated to be around £420 million in 2010 by ProdCom, accounted for by the production of pallets was approximately 70%, or £295 million. It is within this sector of the total packaging manufacturing market that the greatest volumes of timber products are used. Therefore, changes in usage characteristics in the pallets sector will have profound consequences on timber usage and indeed, significant changes have taken place over the last three to four years.

In chart 9 on page 12 of this report, the quantity of new pallets as reported by ProdCom reveals a familiar pattern of trade as seen in many other markets between 2007 and the present day. However, further investigation into the packaging market, with particular emphasis on pallet making was conducted in 2009 and 2010 through a study sponsored by Timcon, the pallets and packaging confederation and the Forestry Commission. This work² revealed that quantities of newly manufactured pallets had declined substantially from the top of the business cycle in 2007 and the quantity of repaired and re-manufactured pallets had risen substantially.

This finding has cast doubt over the number of pallets produced in the UK, as reported by ProdCom.

Packaging is one of the markets quantified by official Government statistics through the series of 'PRODCOM' information sets. ProdCom is a comprehensive data series of production of PROducts of the European COMmunity and is a European Union (EU) wide survey. This series covers around 3,900 products classified to over 230 industries in manufacturing, but also in service, repair and distribution industries. Companies involved in the annual ProdCom Inquiry supply sales data for the products they manufacture, as well as non-manufacturing income.

Further investigation into the ProdCom reporting of pallet manufacturing is planned to take place in 2012.

The Wood Packaging Study of 2010 gathered information from Timcon members and from members of the Wood Packaging Material Marking Programme.

Timcon represents manufacturers and suppliers of pallets and other industrial packaging items. The Wood Packaging Material Marking Programme was established by the Forestry Commission (Great Britain) and Forest Service (Northern Ireland) to help manufacturers demonstrate compliance with ISPM15, the standard by which packaging is heat treated to reduce the risk of infestation. The United Kingdom Wood Packaging Material Marking Programme regulates the manufacture, repair, recycling and re-manufacture of ISPM15 compliant wooden packaging in the UK.

Through the Wood Packaging Study of 2010, it has been possible to determine the quantity of new pallets produced in the UK, the number repaired and re-manufactured and also the re-use of pallets by member companies.

In 2010 it was estimated that around 30 million new pallets were manufactured in the UK and a further 45 million were repaired or re-manufactured. This conflicts with the 60 million pallets reported to have been produced in the UK by ProdCom.

² Wood Packaging Study 2010 - Quantification of the Manufacture, Recycling and Re-use of Wood Packaging in the UK, 2010

It is believed that the results of the Wood Packaging Study provide a more realistic assessment of activity in the pallets sector in 2010 and this has been confirmed by the trade.

Also from the Wood Packaging Study, data was gathered on the volume of wood products used in the manufacture and repair and re-manufacturing of pallets and in the production of industrial packaging which provided an insight into the average volume used per type of activity.

This has enabled a realistic assessment of timber utilisation in the pallets and packaging industry.

Previous measures of the volume of timber products used in this industry utilised ProdCom data and therefore have over-estimated timber usage. With a reported production in 2010 of around 60 million pallets by ProdCom, average usage data derived from the Wood Packaging Study, if applied to these ProdCom quantities, would result in an over-estimation.

This method of (over)estimating timber utilisation in the pallets and packaging market has been employed for many years.

With a closer understanding of pallets and packaging output determined from the Wood Packaging Study, the volume of sawn softwood used in 2010 and revisions to previous years has been possible. The estimate for 2011 is also based on this new intelligence.

The Wood Packaging Study quantified the volume of all wood products used in the pallets and packaging market in 2010 to be around 1,470,000m³. Approximately 70% of this total was used in pallet manufacturing, repair and re-manufacturing, the remainder in the production of industrial packaging, such as cases, boxes and crates.

This measure is consistent with the estimates of sawn softwood used derived from the Sawmill Survey conducted by the Forestry Commission and estimates of imported sawn softwood used in pallet making. Using these sources of information resulted in an estimate of sawn softwood usage for pallets and packaging of 1,290,000m³ in 2010.

With such consistency, the volume of sawn softwood used specifically for newly manufactured and repaired and re-manufactured pallets can be determined with confidence. It is estimated that in 2010, around 940,000m³ was used in new pallet manufacturing and 130,000m³ for repairs and re-manufactures. These estimates confirm the expected material usage of an 'average' repair which, at around 10% to 12% of the total of all material used in a pallet, would involve the odd deckboard or stringer replacement.

The incidence of repairs and re-manufactures has increased over the last three to four years.

The recession in 2008 and its aftermath of weak demand and rising costs induced buyers of pallets and packaging to keep a tight control on all types of costs, including the cost of pallets and packaging materials. The price of a new pallet is significantly higher than a repaired pallet, hence, in order to reduce cost of pallet purchases a change in usage away from newly manufactured and towards repaired and re-manufactured pallets took place.

This trend was first noted in the Wood Packaging Study of 2009 and confirmed by the 2010 study. The proportion of newly manufactured pallets fell in 2010 to 40% of the total,

down from 49% in 2009. This change in a single year resulted in nearly 4 million fewer new pallets manufactured in 2010 and nearly 10 million more repaired and re-manufactured.

Another driver of the growing proportion of recycled pallets in 2010 was the increase in timber prices.

Average prices for sawn softwood in the year 2010 rose by around 19% which, because of substantially less wood used in repair and re-manufacture, encouraged a greater amount of recycling.

The steep rise in timber prices contributed to sharply rising new pallet prices in 2010 and this in turn resulted in lower demand for newly manufactured pallets.

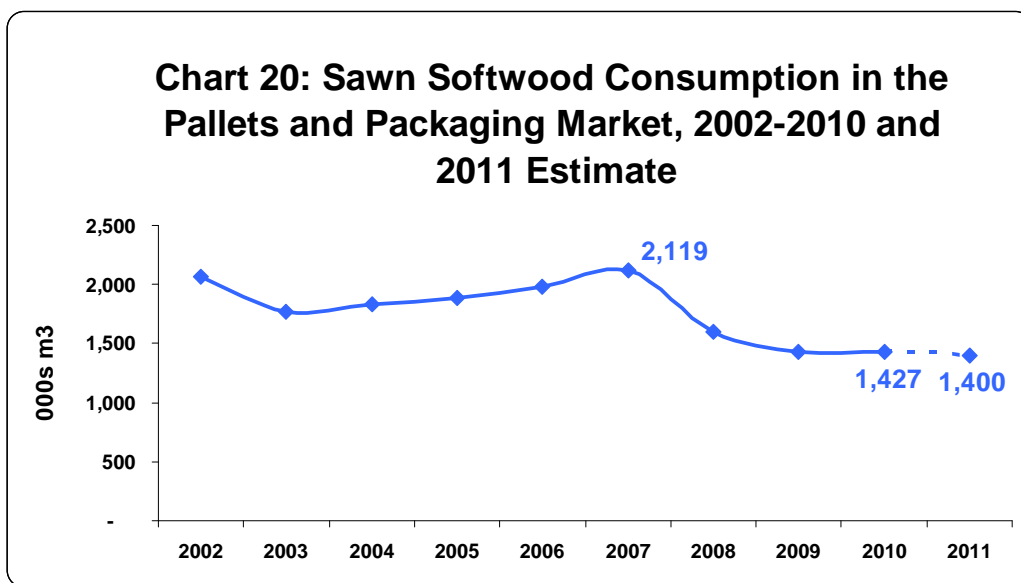
The rise in prices also provided a stimulus to UK produced sawn softwood. UK produced sawn softwood is often sold at lower prices than the imported equivalent and with the heightened sensitivity to production costs, pallet makers have consumed more UK grown sawn softwood over the last three to four years at the expense of imported material.

Rising new pallet prices, mostly because of increased raw material costs; the need to maintain tight cost control and lower demand from pallet user markets were the main factors behind the greater quantities of repaired and re-manufactured pallets produced and placed onto the market in 2010 and fewer newly manufactured pallets.

Consequently, less sawn softwood was used in the pallets and packaging market in 2010 than in 2009 and 2008. This trend was set to continue in 2011.

With the greater insight into pallet making and recycling activity, improved estimates of sawn softwood usage have been made for the last three to four years and estimates before this time have also been made, retrospectively revising previously reported data.

The revised estimates for sawn softwood utilisation in the pallets and packaging market are shown in chart 20 below.



The Fencing and Outdoor Market

The fencing and outdoor applications market, as identified in the previous timber utilisation report, presents greater difficulty than some other markets in attempting to quantify sawn softwood utilisation. The products and activities in this market include not just the many varieties of fencing products, but also decking (residential and commercial), sheds, pergolas and similar landscaping constructions, but not garden furniture.

Information derived from the Forestry Commission estimated that in 2010 around 35% of domestically produced sawn softwood was consumed by this grouped market, which amounted to approximately 1,050,000m³ in 2010.

Imported sawn softwood has lost market share to domestic producers over the last three to four years and the volume of imported material consumed in this market in 2010 was estimated to be in the region of 150,000m³. Consequently, this market would have utilised around 1,200,000m³ of sawn softwood in 2010.

As indicated, decking is a sector within this market and information from the Timber Decking and Cladding Association and trade sources indicate that in 2010, around 120,000m³ of sawn softwood was consumed, leaving just over a million cubic metres of sawn softwood used for the other sectors in this market, of which fencing is the largest.

Trade sources have estimated the volume of sawn softwood used for fencing as the nature of the market legislates against the collection of industry data and limits the extent to which primary market research can help quantify this activity.

Many fencing firms are very small operations and the 'churn' rate, whereby firms appear and disappear, is facilitated by the relative ease with which fencing businesses can be established.

This part of the market tends to service the residential market, although a number of small companies are also found in the agricultural fencing and security fencing sectors.

According to the research and training company, Lantra, there are over 3,150 known fencing business in the UK of which over two thirds have less than 4 employees.

The market for timber fencing, the great majority of which is sawn softwood, is concentrated in the residential and agricultural sectors. Consequently, seasonality is an important feature and the demand for sawn softwood for new fencing and fencing repairs and maintenance has peaks during the spring and again in the autumn, when this type of work is carried out.

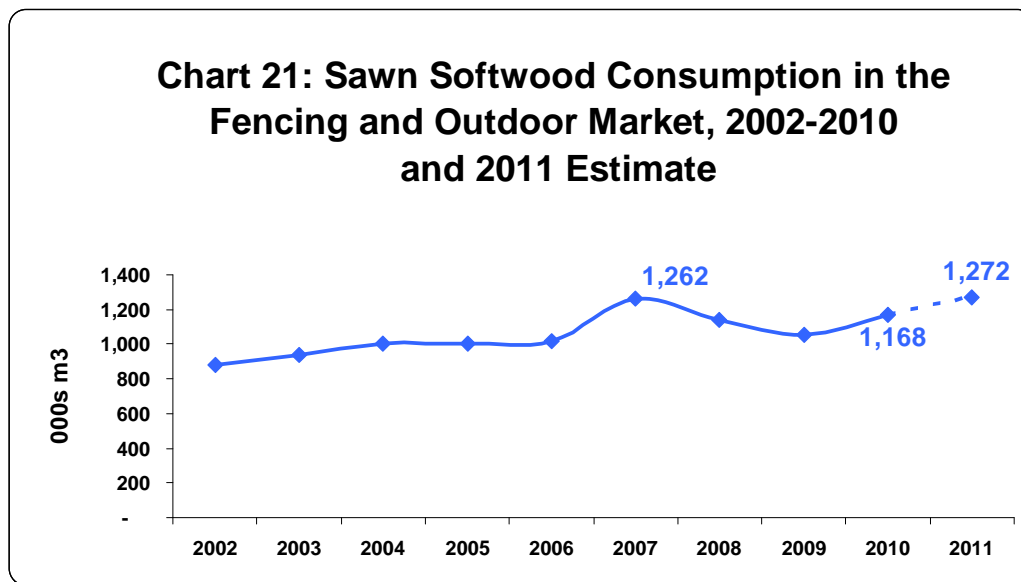
The market is also affected by adverse weather conditions and sawn softwood usage can vary according to the severity of the weather at different times of the year.

Over the longer-term, such fluctuations are evened-out and the development of sawn softwood used in this market can be measured.

The fencing market is one which is more 'recession-resistant' than many as the drivers of demand include not just new fencing projects which, in the residential market is closely allied to new house building, but repairs and replacement fencing also. The downturn in new house building over the last few years will have dampened demand for new fencing in the residential sector, but this has been offset by repairs and replacements and a steady demand from the agricultural fencing sector.

Sawn softwood consumed in this market in 2009 was around 16% below the levels of 2007, but have since grown and in 2011 is predicted to have returned to volumes similar to those seen in 2007.

The development of sawn softwood consumption in the fencing and outdoor uses market is shown in chart 21 below.



Other Markets

The collection of markets classified as 'others' comprise all that is not normally classified as construction, packaging or fencing and outdoor. This includes activities such as, 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.

Little or no published information exists on the scale and characteristics of some of these individual markets and little data is available on timber usage.

As with the previous timber utilisation report, estimates of sawn softwood utilisation are based upon the work of previous studies and from the response to the Forestry Commission Sawmill Survey which identifies the proportion of domestically produced sawn softwood that is accounted for by these other markets.

Acknowledgement of the organisations involved in previous work in this area is repeated 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).

As previously reported, the scale of some of the markets has declined (e.g. mining) or the market demand for sawn softwood within these markets has declined. Many applications previously using sawn 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 or non-existent by 2010. The decline in volumes within this collection of markets is typified by the decline in UK furniture manufacturing in recent years and the commensurate fall in sawn softwood used in furniture making.

These other markets are believed to have accounted for just 1%, or around 29,000m³, of all UK produced sawn softwood consumed in the UK in 2010 while the proportion of all sawn softwood imports used in these 'other' markets in 2010 was a little over 3% of the total, or 170,000m³. In total, a volume of approximately 200,000m³ was consumed by these 'other' markets in 2010.

Consistent with the development of the main markets for sawn softwood consumption, the collection of other markets is likely to have experienced a reduction in sawn softwood consumed in 2011.

The Market for Wood Products Compared

This report has revealed that a high degree of volatility has existed over the last few years in the utilisation of sawn softwood and other timber products, especially material that has been imported.

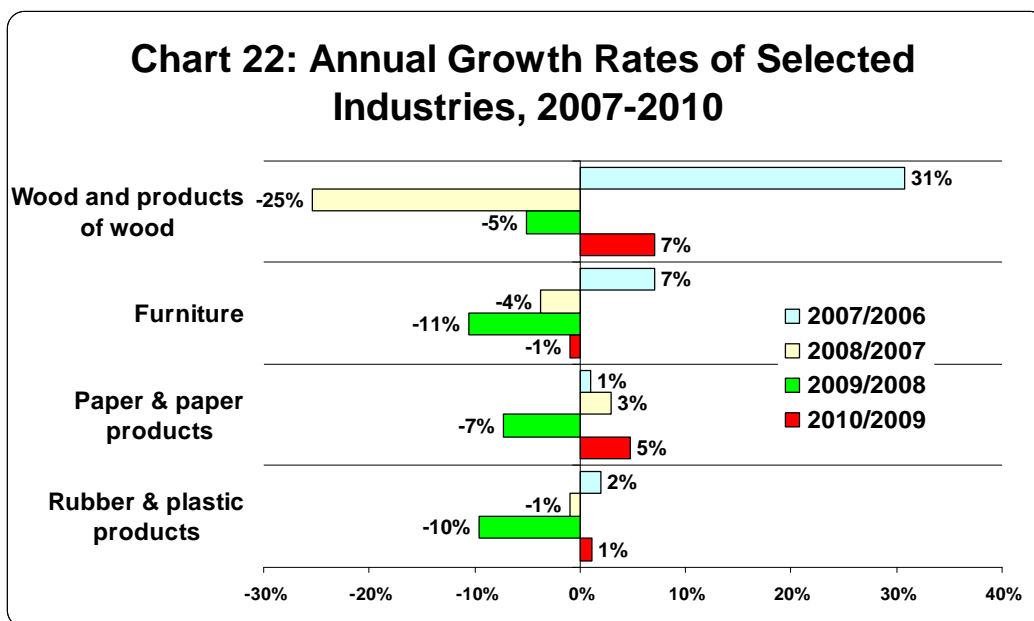
The Office for National Statistics (ONS) publishes turnover data for manufacturing and production industries, including wood and products made of wood. The total output of manufacturing in the UK was indexed and compared to the indexed output of wood and wood products in chart 10 on page 13 of this report, to provide an indicative measure of the wood products industry's relative performance in the UK economy.

A higher degree of volatility for wood products than for manufacturing in general was identified, especially around the time of the onset of the recession.

This suggested that wood and wood products may have experienced greater levels of variability in supply than some other industries. Further analysis has revealed that this has been the case over the last few years.

These ONS data on wood products includes both primary processing (sawmilling) and manufacturing (e.g. flooring) and provide an output measure in turnover that permits comparison with other UK industries.

Chart 22 below compares wood industry turnover against other selected industries.



The lower 'lows' and the higher 'highs' are clearly present in the turnover associated with wood and wood products.

The wood and wood products industry has been subject to greater volatility than many industries and all of the selected industries, as shown in chart 22.

At the top of the most recent business cycle in 2007, wood and wood products turnover grew by 31%, substantially more than the other industries shown, all of which have turnover levels of £7 billion or more.

With the onset of recession, turnover of wood and wood products fell by 25% while other industries experienced much smaller declines and the paper and paper products industry actually grew by 3% in that year.

The continuing weakness in markets generally in 2009 resulted in the majority of industries declining and those shown above all experienced lower sales in that year.

The moderate recovery of the UK economy in 2010 saw many industries 'bounce-back' from decline of the previous year and the wood and wood products industry achieved a better growth in turnover than some others.

This finding suggests that wood products, and sawn softwood as the single largest volume supply into user markets, experience a greater degree of sensitivity to economic conditions than many other industries. One of the main reasons for this is probably due to the industry's (still) heavy reliance on construction.

Market watchers in the timber industry will be monitoring closely the health and development of construction markets within the overall development of the UK economy in the coming months.

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The ability to measure the utilisation of sawn softwood by main market in the UK in this study would not have been possible without the contribution of many people from different parts of the timber industry.

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The United Kingdom Timber Frame Association
The United Kingdom Forest Products Association
The Confederation of Forest Industries
The Timber Decking and Cladding Association
Timber Industry Companies
The Office for National Statistics

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