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Timber Utilisation Statistics 2015

Timber Utilisation Statistics 2014 & 2015 Estimates

for the Forestry Commission

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Table of Contents

Charts and Tables

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 2004 has been followed by a further two reports, one produced in 2007, covering the year 2005 and another in 2012 covering the year 2010 with estimates provided for 2011.

In the years between reports, 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, the frequency between the production of full reports of about three years is consistent with the timing of this report in 2015, for the year 2014.

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 sawn softwood 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, current or reliable statistics on timber usage in the main timber-using markets was not available.

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.

The focus of these reports is on sawn softwood as it is in this product sector that the greatest level of market intelligence exists and usage of softwood products is also greater than for other timber and wood-based products. In terms of supply of timber and panel products, softwood has regularly supplied 60% or more of UK produced and imported timber and panel products consumed in the UK.

Information Sources:

Timber industry companies and their representative organisations are a major source of information for measuring usage in the UK, but a number of external sources are also used in the process of gathering information for analysis.

The Office for National Statistics provides production data on a wide range of markets, some of which are major consumers of sawn softwood. The timing of release of some of these data can be protracted, as is the case in the supply of data on house building. This can mean delays of up to eight months from the close of the previous year which dictates the timing of the production of the timber utilisation reports, tables and charts. Consequently, firm quantification of sawn softwood utilisation has regularly taken place a full nine to ten months after the close of the year.

Since March 2012, the tables and charts produced as part of this series of timber utilisation studies have attempted to provide estimates of timber utilisation sooner, after the end of the previous year, than the delivery of official data could provide.

By April of each year, it has been possible to provide estimates of timber utilisation for the immediate previous year.

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

Initial estimates of timber utilisation for 2014 were provided in April 2015, but with the availability of all data required by August 2015, this report is able to provide confirmed data for 2014 in addition to initial estimates of timber utilisation for 2015, before the end of 2015.

Purpose and Scope of this Study:

The purpose of this report is to add to and expand the most current information to the series of tables and charts and previous reports that have covered the period from 2002.

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 2002 to 2014.

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

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

Study Objective:

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 2014 and present the trend in consumption by main market from 2002.

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
Structural Timber 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 2014 with initial estimates for 2015, the markets for sawn softwood in the UK have undergone substantial change.

Construction remains the largest consumer of sawn softwood and suppliers to construction have witnessed significant change in the type of buildings constructed and in the methods of construction. In 2002, timber was rarely used structurally in buildings above two or three storeys and only one out of every six homes built in the UK were built by timber framing methods of construction.

By 2014, sawn softwood and other timber products were being used in structures to six storeys and higher and one in every three detached homes were built in timber frame.

The construction industry in the UK has experienced periods of good growth and severe decline over these thirteen years and the development of sawn softwood consumption has been closely tied to these changes.

While the volumes of sawn softwood consumed by new work in the construction industry is of importance, it is the repair, maintenance and improvement (RMI) markets that provide the destination for the majority of sawn softwood entering the construction industry.

Between 2002 and 2014, construction has regularly consumed 60% or more of all sawn softwood used, depending on the level of construction activity taking place in the UK each year,

The other, roughly 40% of sawn softwood consumption during these years, is accounted for by two other main markets, the pallets and packaging market and the fencing and outdoor uses markets. There is a fourth destination for sawn softwood which is the collection of ‘other’ markets where a plethora of different products - from furniture and fittings to picture frames and pencils - are made from the sawn softwood.

The development of the UK economy has a significant influence on the health of many industries, but for the timber industry and in the supply of sawn softwood especially, it is the ups and downs experienced by the construction industry that has had the greatest impact on the development of the main markets for sawn softwood.

Periods of economic growth and decline have also helped direct the progress of the pallets and packaging industry and the fencing and outdoor uses market. During the period under review, the UK experienced the longest and deepest recession in living memory. Substantial losses in the volume of sawn softwood consumed by the main markets occurred during 2008 and 2009 and demand remained at relatively low levels for a further three years.

Demand from sawn softwood markets improved thereafter and during 2013 and 2014, good growth in all markets has resulted.

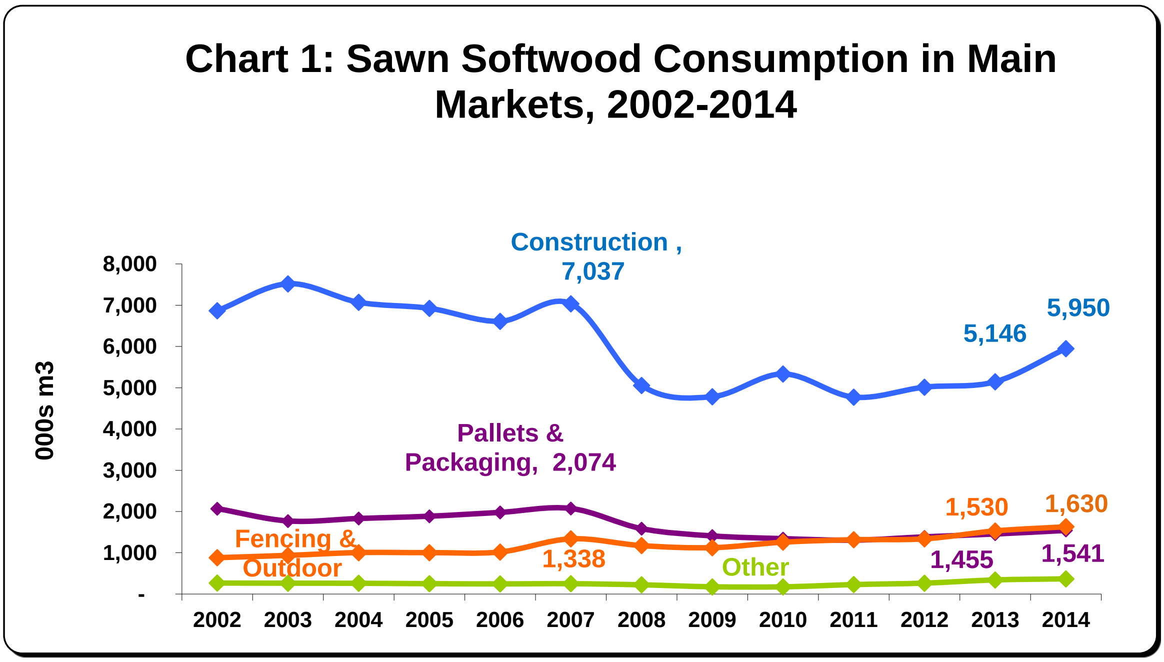
Whilst the health of the UK economy is a main driver of demand for sawn softwood, other factors have also played an important role in the changes that have taken place in these main softwood consuming markets.

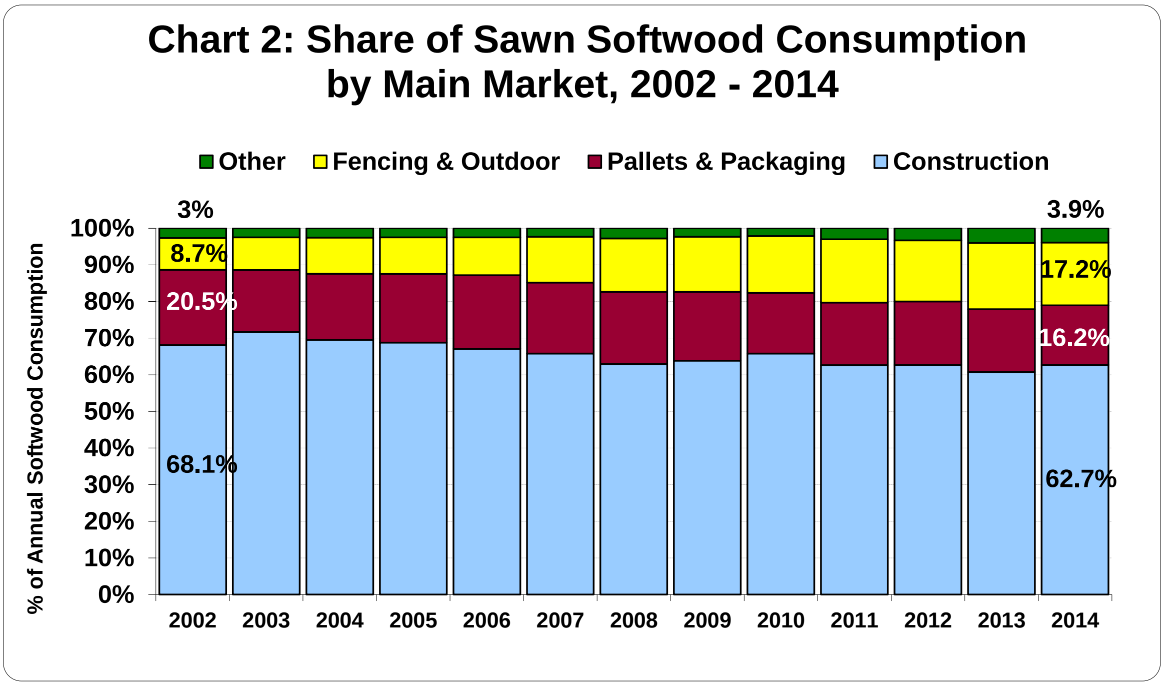
In the pallets and packaging markets, changes in the use of pallets during and after the years of recession resulted in less sawn softwood used. To reduce costs, pallet re-use became more prevalent and production of new pallets fell accordingly.

In the fencing and outdoor markets, changes in consumer behaviour (e.g. indoor smoking bans) saw an increase in decking demand in commercial premises. Bad weather too has been instrumental in stimulating demand for fencing products in 2013 and 2014.

In some of the 'other' markets, lower demand and competitive products from other countries (e.g. furniture making) has resulted in less sawn softwood being consumed.

A variety of different factors have influenced the consumption of sawn softwood over the period from 2002 and 2014 and many of these are covered in greater depth in the main body of this report. The development by volume and the impact on the relative importance, as measured by share of consumption, of each of the main markets for sawn softwood in the UK from 2002 is shown in charts 1 and 2 below.





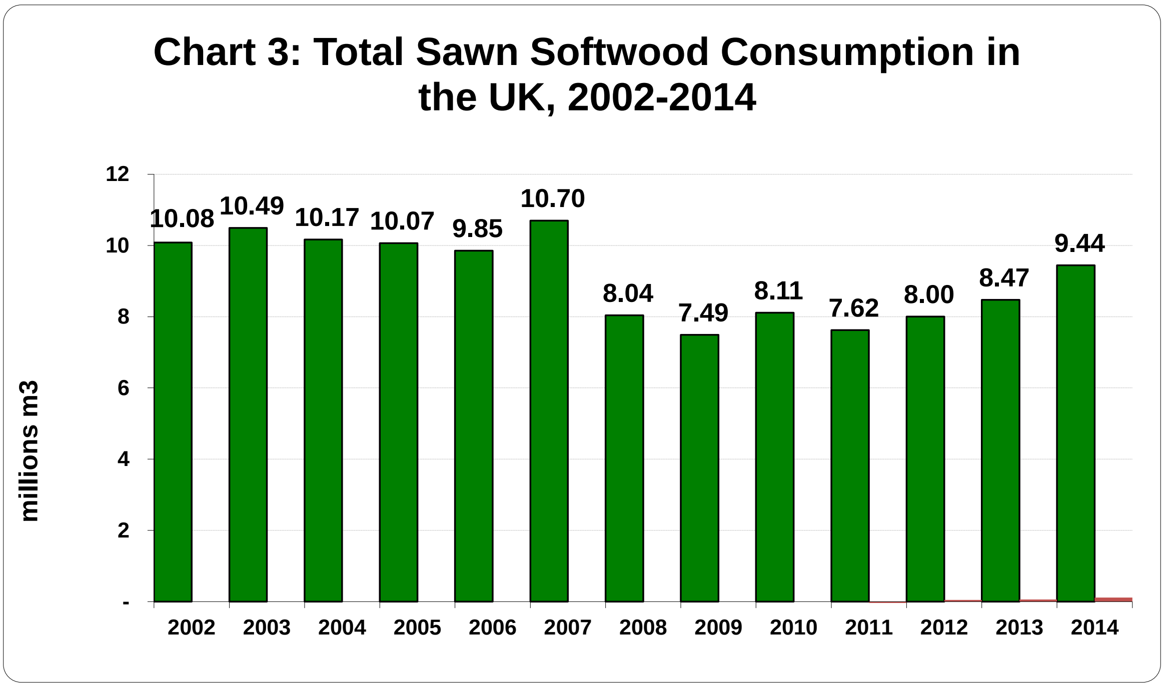
The share of sawn softwood consumed by construction has varied over the period, falling from 68% in 2002 to just under 63% in 2014. A slight lessening of importance has also taken place for the pallets and packaging market which accounted for over 20% of sawn softwood consumption in 2002 but has reduced just over 16% by 2014.

The largest change has taken place with the fencing and outdoors market places where the share of consumption has almost doubled over the period.

Volumes have increased in this market with sawn softwood continuing to be a popular choice of material for residential and agricultural fencing, decking, garden and landscaping products, but the rise in the relative importance of the fencing and outdoor uses market has been aided by the decline in volumes entering construction and the pallets and packaging market since 2007.

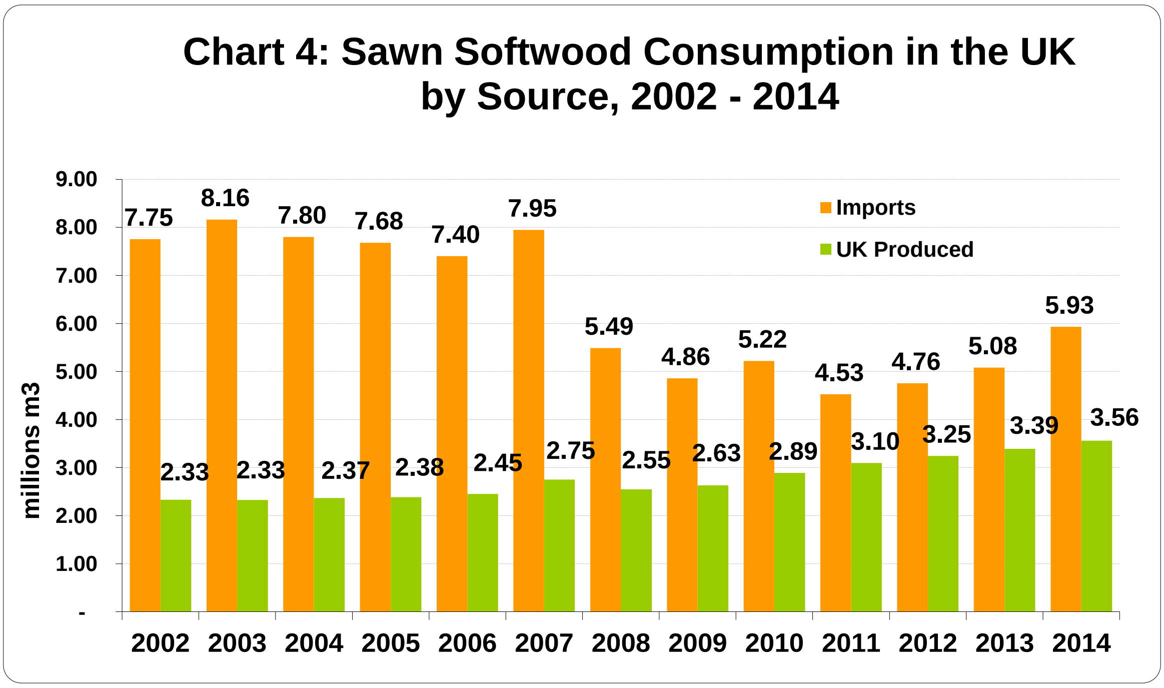
Sawn softwood utilisation, in common with the use of virtually every other raw material and product in the UK, has experienced mixed fortunes in recent years.

The volumes of sawn softwood consumed in the UK since 2002 are shown in chart 3 below.



At the modern-day peak of sawn softwood consumption in 2007, 10.7 million m^3 was consumed, but at the depth of the recession in 2009, this had fallen to around 7.5 million m^3; a decline of 30% in two years. Volumes remained at relatively low levels for the following three years, but by 2013, growth had returned to sawn softwood markets and consumption in 2014 increased for a third consecutive year.

The development of sawn softwood consumption by the two sources of supply - UK produced consumption and imported consumption - have fared very differently over the period under review, as shown in chart 4 below.



In all but one of the years between 2002 and 2014, domestically produced consumption (UK production less exports) of sawn softwood has increased, rising from 2.3 million m^3 in 2002 to nearly 3.6 million m^3 in 2014. Only in 2008, at the onset of recession, was volume lower than the previous year.

The development of imported consumption has been more variable and was affected more severely by the recession than UK produced varieties. The severity of this downturn is confirmed by the time taken for imported sawn softwood consumption to exceed the volume level of 2008. As shown in chart 4, it was only in 2014, a year of high growth in imports, that the levels of 2008 were exceeded. The pre-recessionary levels between 2002 and 2007 had not been exceeded in 2014 however.

Main Findings:

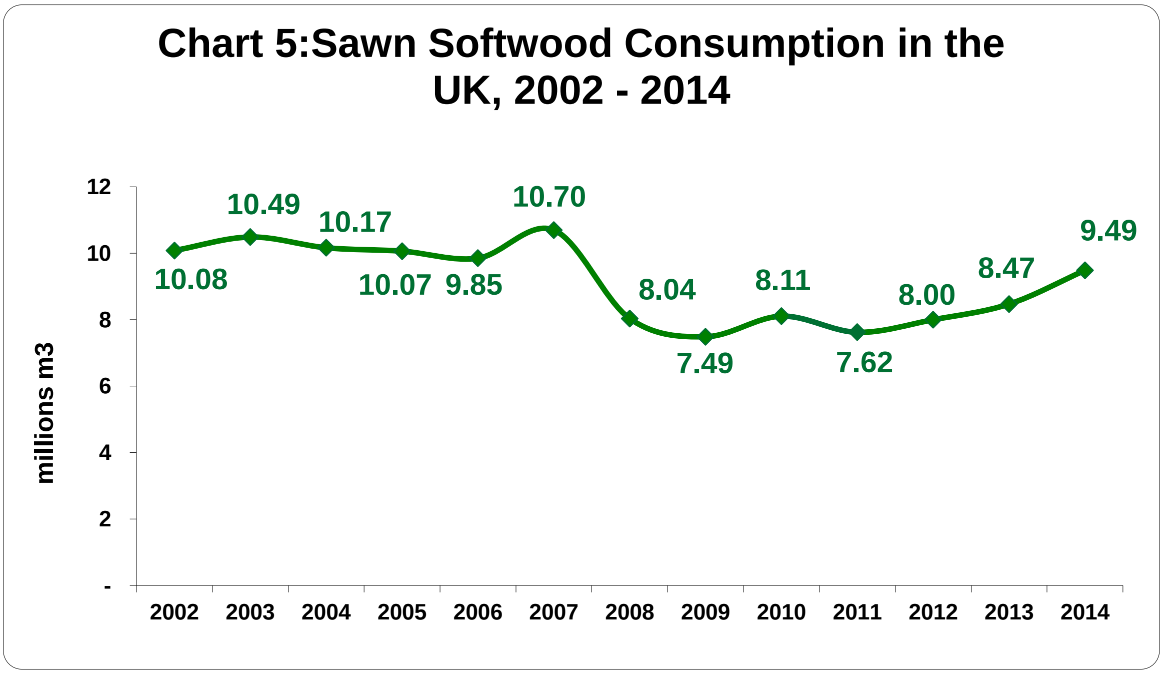
UK Sawn Softwood Consumption
In the thirteen years between 2002 and 2014, sawn softwood consumption in the UK has experienced periods of growth and decline, but by the end of the period in 2014, volume was not broadly different to that in 2002.

The most significant movement in volume during this period came with the onset of the recession in 2008 and for the four years between 2008 and 2012 volume hovered around 7.5 million m^3 to 8.0 million m^3.

This five year period of low demand mirrored the general business climate within the UK economy where Gross Domestic Product – the value of all the goods and services that form the basis of economic activity in the UK – struggled to grow.

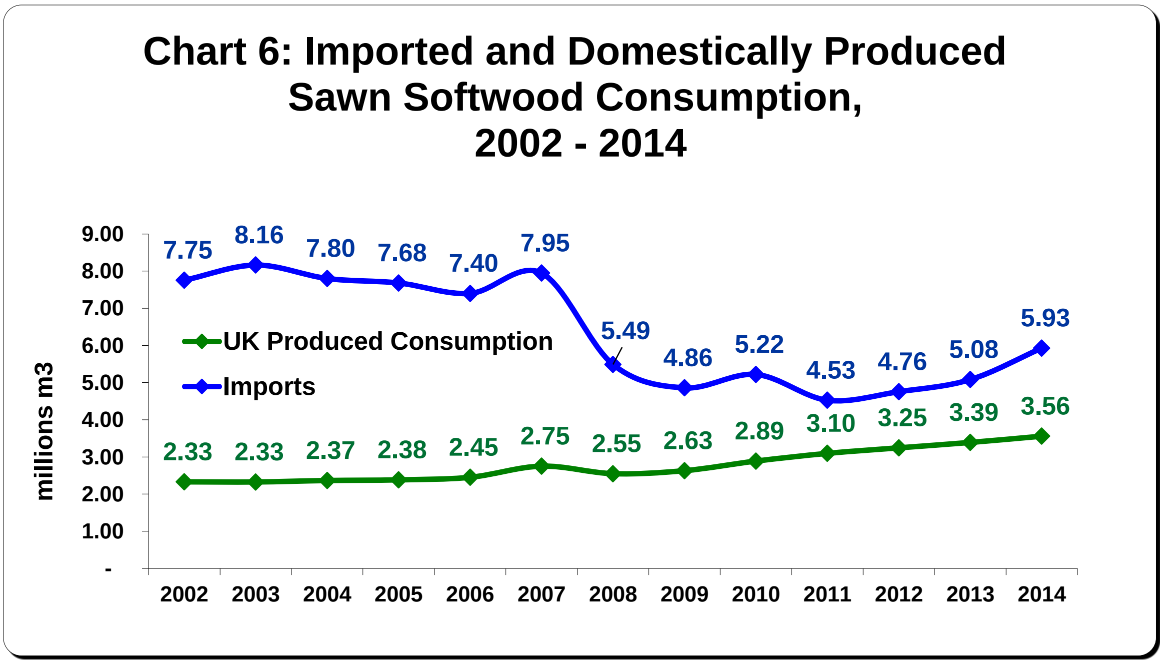
The UK economy eventually enjoyed a recovery in 2013 and many industries, including the timber and wood products industries, experienced higher levels of activity. Sawn softwood consumption in 2013 increased by 6%, rising from 8.0 million m^3 in 2012 to nearly 8.5 million m^3 in 2013. The rate of increase improved further in 2014 with sawn softwood consumption rising by 12% to nearly 9.5 million m^3.

These developments in sawn softwood consumption from 2002 to 2014 are shown in chart 5 below.



The strength of the recovery since 2012 resulted in the highest annual growth this century in 2014. The rate of increase in volume (12%) was higher than the previous best annual growth in 2007 (9%), the year before the start of the recession.

The contribution to these developments by source of supply of sawn softwood is shown in chart 6.



The variability in the volume of sawn softwood consumption since 2002 has been mostly due to the changing fortunes of imported goods.

The striking feature about the volume development of sawn softwood consumption by source of supply is the almost uninterrupted annual growth of domestically produced sawn softwood consumption. Only in the recessionary year 2008 did volume fall from the previous year's level.

This contrasts with roughly equal years of rise and fall of imported sawn softwood throughout the period under review.

As will be seen during this report, imported sawn softwood has a greater exposure to the construction industry than UK produced sawn softwood and the varying health of construction over the period has had a significant impact on the pattern of supply of imported goods.

Volume of imported sawn softwood fell steeply during 2008 and 2009, as shown in chart 6 while UK produced sawn softwood continued its inexorable rise. It was during this time and in the period up to 2013 that UK produced consumption provided strong competition to imports in non-construction markets, but gained ground in construction also.

A further significant feature in the development of sawn softwood consumption has been the resurgence of imports over the last two years of the period. As shown in chart 6, a 7% growth in imported consumption in 2013 was followed by a 17% uplift in 2014, mainly due to recovery in the construction industry.

The changing market share by source of supply is shown in chart 12 later in this report.

Major Market Developments

The relative importance of the main markets for sawn softwood is presented later in this report, but as mentioned previously, the construction industry is of great importance, especially to imported sawn softwood.

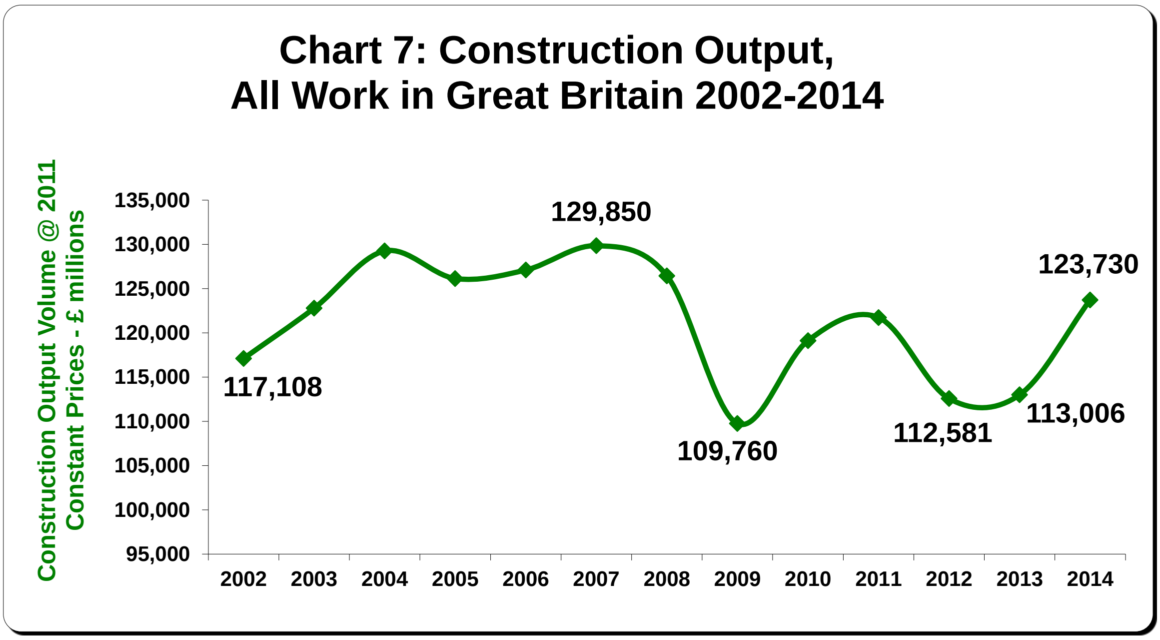
During the recessionary years and the years of low demand that followed, significant reductions in house building and repair, maintenance and improvement activity accounted for much of the reduction in demand for sawn softwood and especially imported goods.

The construction industry lost 13% of its value in 2009 and following a recovery in 2010, activity began to level-off in 2011 and fell sharply once more in 2012, by 8%. This compares to the wider economy where GDP fell by over 4% in 2009 (revised downwards from an original >5%) and virtually no growth in 2012.

The impact of poor demand in the economy and the even greater difficulties experienced in construction resulted in steep falls in sawn softwood volume.

However, by 2014, construction output had benefitted from general economic improvement and all activity (in all construction sectors) grew by 9%.

These development since 2002 are shown in chart 7 below.

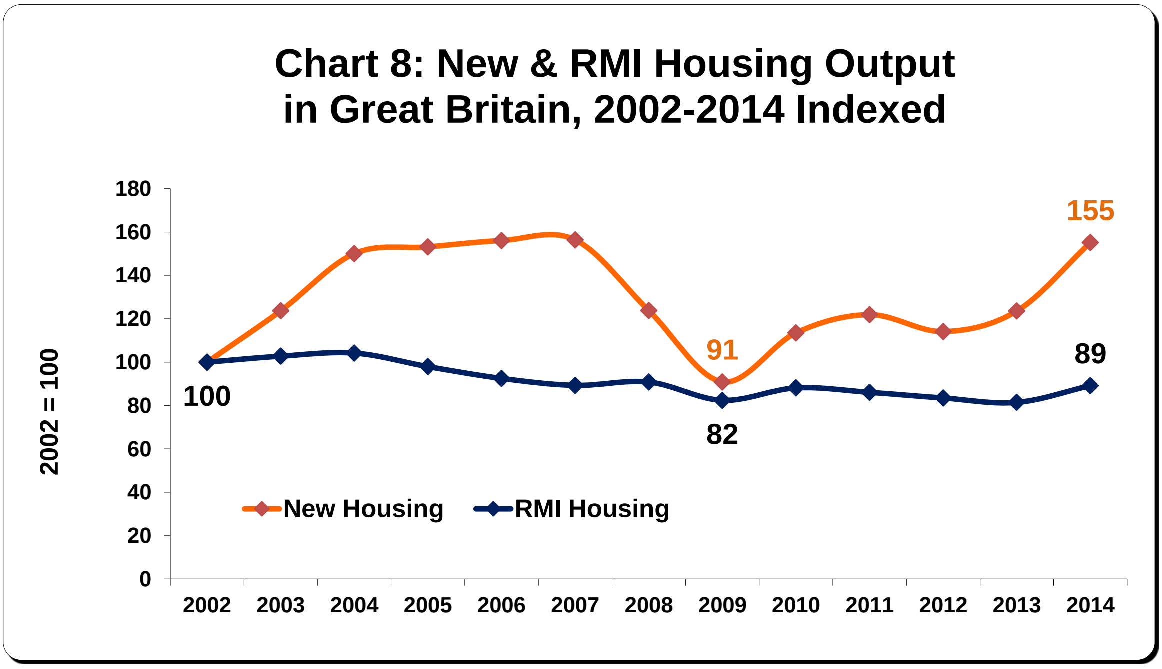


The measure shown in chart 7 above is the volume of construction output at 2011 constant prices in Great Britain. Value, when measured at constant prices, removes inflationary influences and acts as a good guide to the changes that have taken place by volume.

During the depths of the recession in 2009, **output in the housing market** – both new and repair, maintenance and improvement (RMI) – had fallen to 34%, as a percentage of **all construction output,** but mainly due to recovery in new home building in 2013 and 2014, this proportion had risen to 41% of all construction output by the end of 2014.

The changing importance of new home building, as measured by the value of output in new home building and in the repair, maintenance and improvement of homes, is demonstrated by noting that in 2009, **new home building** represented around 43% of the total value of **output of the housing sector** but this had risen to account for 54% of the total by 2014.

The differing development paths of these two housing sectors is depicted in chart 8 below.



From the low point of 2009, output in new home building has increased by 71% to 2014 while RMI output rose by just 8% over the period. The output of new home building had, by 2014, returned to the levels of 2007.

In contrast, RMI housing output has followed a less volatile, but generally downward development path over the period from 2002. Even at the time of the new housing output peak in 2007, activity in the RMI sector was lacklustre and by 2014 remained below the levels of 2002.

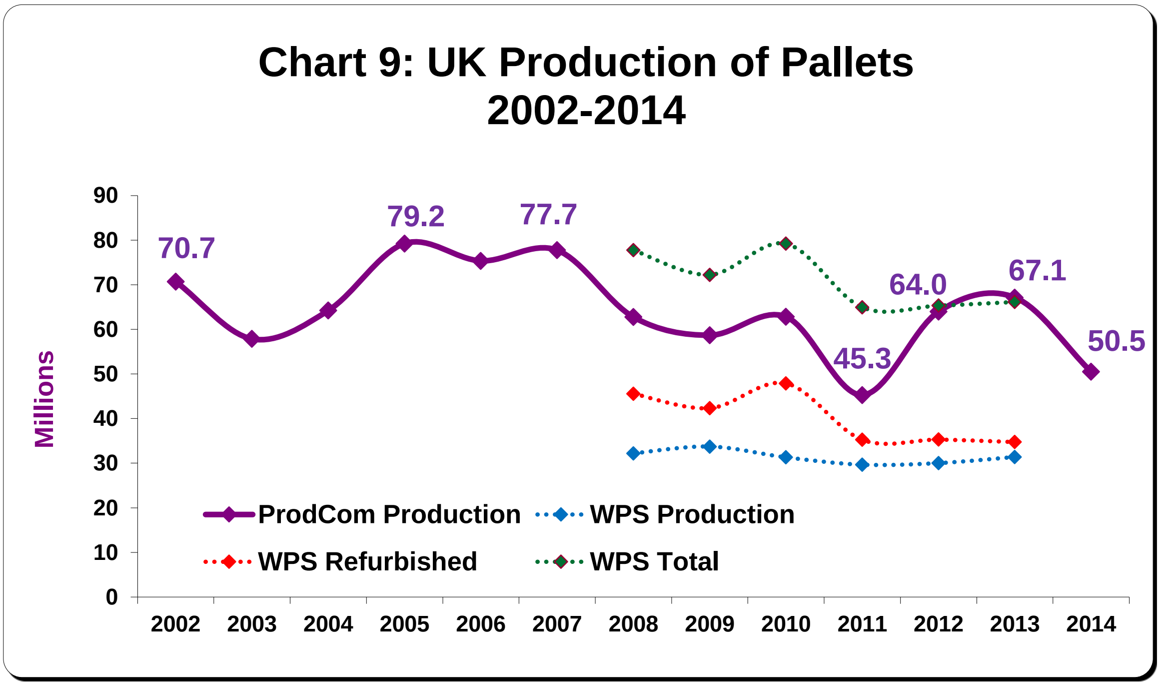
The other main market for sawn softwood, where official statistics are regularly available, is in the packaging and pallets industry.

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, but in common with other markets, output fell back in 2011.

However, unlike the other main markets, the improvement witnessed in 2013 was not followed by further growth, but a sharp and substantial fall in output.

Chart 9 below describes the output, in millions of pallets produced, of UK pallet makers from 2002 to 2014, as measured through the ProdCom series of production output statistics as supplied by the Office for National Statistics (ONS).



ProdCom is the abbreviation for 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 regularly worth over £500 million over the last three years is of sufficient scale to be including within the ProdCom series and is a significant consumer of sawn softwood.

There has been concern within the packaging and pallets industry that the ProdCom data were not fully measuring the true scale of productive activity in this market and particularly in the manufacturing and refurbishment of pallets.

During the recessionary years of 2008, 2009 and beyond, radical changes were taking place in the buying behaviour of pallet buyers and users. With the economy in recession in 2008, many pallet using companies sought to cut costs in order to support poor sales and weak profitability during this period of low demand. One of many ways this was achieved was to reduce the cost of distributing goods and pallet costs came under close scrutiny. In many companies, whether in manufacturing, food distribution, construction or wherever there was a need to transport articles over pallets, buyers altered their purchasing patterns.

Pallets were re-used more often, with companies keen to make a greater number of trips with each pallet, and this in turn reduced the demand for newly manufactured pallets.

Initially, this also reduced the frequency of pallet repair, with an extended lifespan of pallets.

As companies reduced their distribution costs, pallet manufacturers experienced lower demand for their products which in turn, resulted in less timber used in pallet making and repair.

According to ProdCom estimates, pallet production fell by around 42% between 2007 and 2011.

TIMCON, the pallets and packaging confederation and the Forestry Commission sponsored an independent study into this important market for timber and especially sawn softwood. A series of Wood Packaging Studies revealed a lower level of new pallet production - than ProdCom had estimated - was taking place after 2008, for the reasons outlined above, while greater quantities of sawn softwood were being used for pallet repairs than previously. It was discovered that the extended life of pallets, while reducing the frequency of repair, was creating a situation where the extent of each repair had been greater than before. The condition of pallets returned for repair were often substantially worse than previously, requiring more time, more material (sawn softwood) and resulting in greater cost in the process of repair and refurbishment.

The combination of fewer newly manufactured pallets and a lower frequency of repair (despite an increasing softwood usage per pallet repair) resulted in a 37% reduction of sawn softwood consumed by the pallets and packaging market between 2007 and 2011.

Volumes have recovered more recently, with improvement in the economy generally in 2013 and 2014, although the ProdCom estimate of the number of pallets produced in 2014 was lower than in 2013 by around 25%. This would appear to be in error, especially as this annual rate of fall in 2014 was as high as the combined rate of reduction during the recession of 2008 and 2009.

Perhaps one of the reasons for an incorrect estimate from ProdCom is the change of methodology implemented by ONS for this 2014 ProdCom publication. With support from TIMCON, ONS were persuaded to change the ProdCom Inquiry Form that is sent to manufacturers each year to collect the information on production. This change incorporated a question on repaired and refurbished pallets in order to attempt to separate production and repair for the purpose of achieving a more accurate estimate of each. Unfortunately, both the production and repair estimates of quantities in the 2014 ProdCom for pallets would appear to be incorrect.

In order to provide an alternative estimate of pallet production and repair, the results from the Wood Packaging Studies over the past few years have been added to chart 9 above and, as described by the legend, are shown by the dotted lines around the ProdCom data.

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

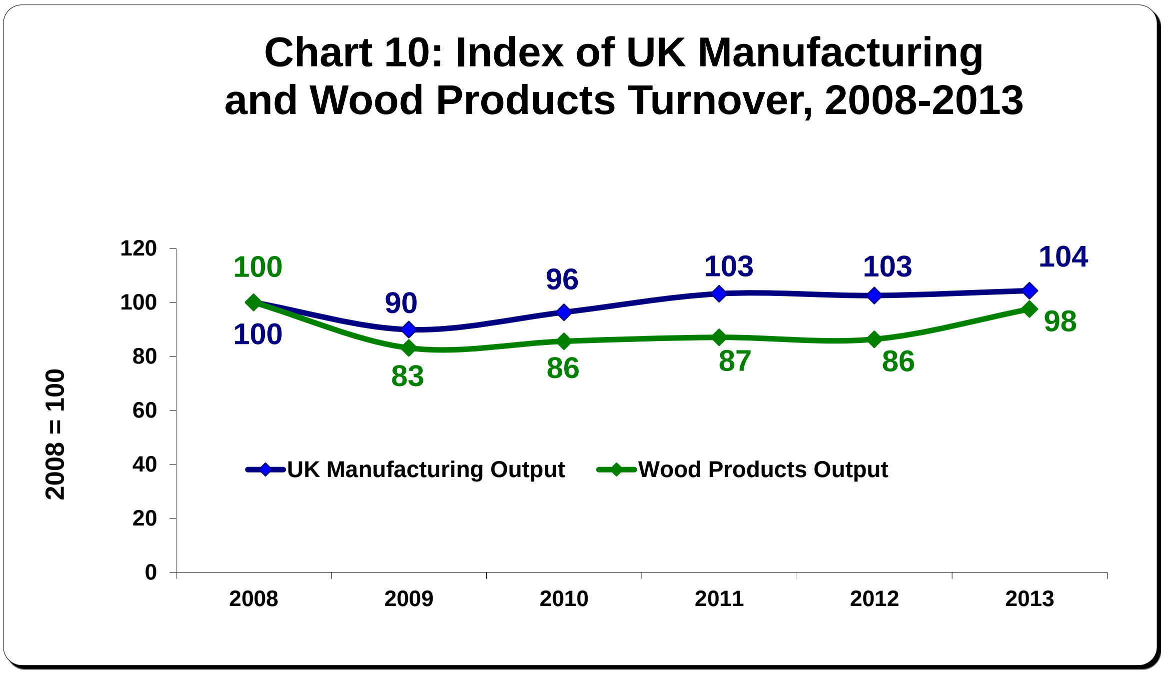
Little or no official published information exists for many of the other major wood consuming markets, with the exception of furniture, consequently, the specific developments of these other markets have been derived from other sources.

Consumption of sawn softwood in the UK in 2014 was valued at around £1.15 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 and 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 in 2013, the latest year for which industry data is available, was valued at around £7.6 billion which compares favourably with many other industries, as shown later in this report.

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 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.

The recovery in the demand for timber products in 2013 was proportionately greater than manufacturing in overall terms, as shown in chart 10 below.



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 that 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 2014 was at its highest level since the pre-recessionary year of 2007. It was also the third consecutive year that growth in sawn softwood consumption had taken place. The growth by market, as noted above, has been uneven, with a greater degree of volatility in some markets, such as new housing, compared to others.

The estimates of sawn softwood consumption by main market from 2002, showing the different changes in volume over the period from 2002 are shown below in table 1.

Table 1: Sawn Softwood Utilisation by Volume by Main Market

000m3	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Construction	6,868	7,521	7,072	6,926	6,610	7,037	5,057	4,783	5,336	4,773	5,015	5,146	5,950
Pallets & Packaging	2,070	1,771	1,831	1,886	1,978	2,074	1,585	1,408	1,343	1,305	1,386	1,455	1,541
Fencing & Outdoor	881	936	1,004	1,003	1,019	1,338	1,173	1,123	1,257	1,316	1,337	1,530	1,630
Other	265	263	260	250	245	250	223	175	174	229	263	342	367
Total Consumption	10,084	10,490	10,167	10,065	9,853	10,699	8,037	7,490	8,109	7,623	8,002	8,472	9,488

The ebb and flow of sawn softwood consumption is shown from the movements in the volume of total consumption in table 1 where, often, a year of progress is followed by a downturn the ensuing year.

From table 1 it can be seen that there has never been a time when growth or decline was repeated for more than two consecutive years, except the most current period where there has been three years of volume increase.

Since 2011, the annual growth rates of sawn softwood consumption have been 5% in 2012, 6% in 2013 and 12% in 2014.

This growth has been shared by all markets, but by differing degrees.

The growth of sawn softwood consumption in construction over the same three years has been uneven but has remained positive throughout the period with increases of 5% in 2012, 3% in 2013 and 16% in 2014.

Growth of sawn softwood consumption in the fencing and outdoor uses market has also been uneven with growth rates between 2011 and 2014 of 2%, 14% and 7%.

A more consistent growth has taken place in sawn softwood consumed by the pallets and packaging market with a 6% increase in 2012 followed by a 5% increase in 2013 and another 6% rise in 2014.

Other markets have also grown over the period, but with significantly lower volumes consumed by this group of markets combined, a higher degree of volatility has been evident.

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 7.5 million m^3 in 2003 to 4.8 million m^3 in 2009 and had fallen again in 2011. The recession of 2008 and 2009 served to hasten the decline of construction, in relation to other main markets.

The share of sawn softwood consumption by main market, or in other terms, each market's relative importance, is shown in table 2 below for the period 2002 to 2014.

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

% of Consumption	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Construction	68%	72%	70%	69%	67%	66%	63%	64%	66%	63%	63%	61%	63%
Pallets & Packaging	21%	17%	18%	19%	20%	19%	20%	19%	17%	17%	17%	17%	16%
Fencing & Outdoor	9%	9%	10%	10%	10%	13%	15%	15%	15%	17%	17%	18%	17%
Other	3%	3%	3%	2%	2%	2%	3%	2%	2%	3%	3%	4%	4%

Construction consumed 72% of sawn softwood used in the UK in 2003 but by 2008 this had fallen to 63% of all consumption. In 2009 and 2010, the share for construction rose again, but this was as attributable to the sharp decline in volumes entering the pallets and packaging market as any temporary spike in construction output.

By 2011, the share of construction had fallen back to 63% of the total and despite significant improvements in demand for sawn softwood by the new home building market in 2013 and 2014, the share held by construction has not surpassed the 63% level since 2011.

The pallets and packaging market has also lost ground since the peak years of 2006 and 2007 when sawn softwood consumed in this market accounted for around 20% of all consumption. Since that time, the relative importance of this market has slipped, with a share of consumption falling to 16% in 2014.

The market that has grown the most over the period from 2002 and has gained in importance as a result, is the fencing and outdoor markets (which includes decking and garden products) which held a share of consumption of just 9% at the start of the period but by 2014, this had risen to claim 17% of sawn softwood consumption.

Sawn Softwood Utilisation by Main Market & Construction Sector

The availability of official data on different 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 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	2012	2013	2014
All Construction	6,868	7,521	7,072	6,926	6,610	7,037	5,057	4,783	5,336	4,773	5,015	5,146	5,950
New Housing	645	660	681	673	668	669	406	328	396	416	387	455	555
Other Construction	6,223	6,860	6,390	6,253	5,943	6,369	4,651	4,455	4,939	4,357	4,628	4,690	5,395
Pallets & Packaging	2,070	1,771	1,831	1,886	1,978	2,074	1,585	1,408	1,343	1,305	1,386	1,455	1,541
Fencing & Outdoor	881	936	1,004	1,003	1,019	1,338	1,173	1,123	1,257	1,316	1,337	1,530	1,630
Other	265	263	260	250	245	250	223	175	174	229	263	342	367
Total Consumption	10,084	10,490	10,167	10,065	9,853	10,699	8,037	7,490	8,109	7,623	8,002	8,472	9,488

Sawn softwood consumption in new housing was at its peak in 2007 when it accounted for 10% of all sawn softwood entering construction. With home building falling to levels last seen in the 1920´s in 2009, (housing starts had halved from 2007 in the UK) sawn softwood accounted for just 6% of the total of all sawn softwood entering construction. Sawn softwood consumption in new home building had also halved since 2007.

Since the low-point of 2009, usage of sawn softwood has risen and in 2014 accounted for over a half a million cubic metres which represented 9% of sawn softwood used in construction.

This increase in the share of sawn softwood consumption in new home building has been greater than the growth in housing starts since 2009; effectively, the utilisation of sawn softwood in this market has risen at a faster rate than the rate of increase in new homes. This is demonstrated by the average usage per housing start in the UK. In 2009, the average sawn softwood usage per housing start was $2.87m^3$ but by 2014 this had risen to $3.39m^3$.

Sawn softwood has for many years been losing applications in construction to competitive materials. Perhaps the most significant of these product substitutions was the replacement of timber ground floors by concrete in the 1980s and 1990s. More recently, the substitution of solid wood (usually softwood) joists by the engineered variety has reduced the quantity of solid wood used in construction. However, most engineered joists use some form of timber in their manufacture, thereby limiting the extent of the loss in volume.

The increase in the average usage of sawn softwood over the last five years can be attributed to two important developments in the UK housing market.

The first is the higher number of ‘family’ homes and a lower number of flatted developments over the last five years. In the recent peak years of home building, notably in 2006, the number of flats started were around 106,000 but by 2014 this had fallen to around 46,000. This was a decline of over 60% during a time when all housing starts had fallen by 29%.

In comparison, the number of detached homes started in 2006 was approaching 47,000 and this had fallen to around 41,000 in 2014, a decline of 12%. The significance of this changing mix of dwelling types is brought into focus when the average usage of sawn softwood per type of dwelling is applied to these different housing starts. The average usage of sawn softwood in a detached dwelling is estimated to be more than twice that used in flatted developments.

The second important development has been the increase in the market share of timber frame housing in 2014. It is estimated that the volume of sawn softwood used in a timber frame home can be double that used in a masonry home.

Therefore, the twin developments of more ‘family’ type homes being built and more of these homes being built in timber frame has accounted for the disproportionate increase in sawn softwood utilisation in new home building.

Whilst developments in new home building have been beneficial to the amount of sawn softwood used, this market only accounted for 9% of consumption in construction in 2014.

Within the other 90% or more of sawn softwood used in other construction sectors, it is in the repair, maintenance and improvement markets (RMI) where the majority of material is used.

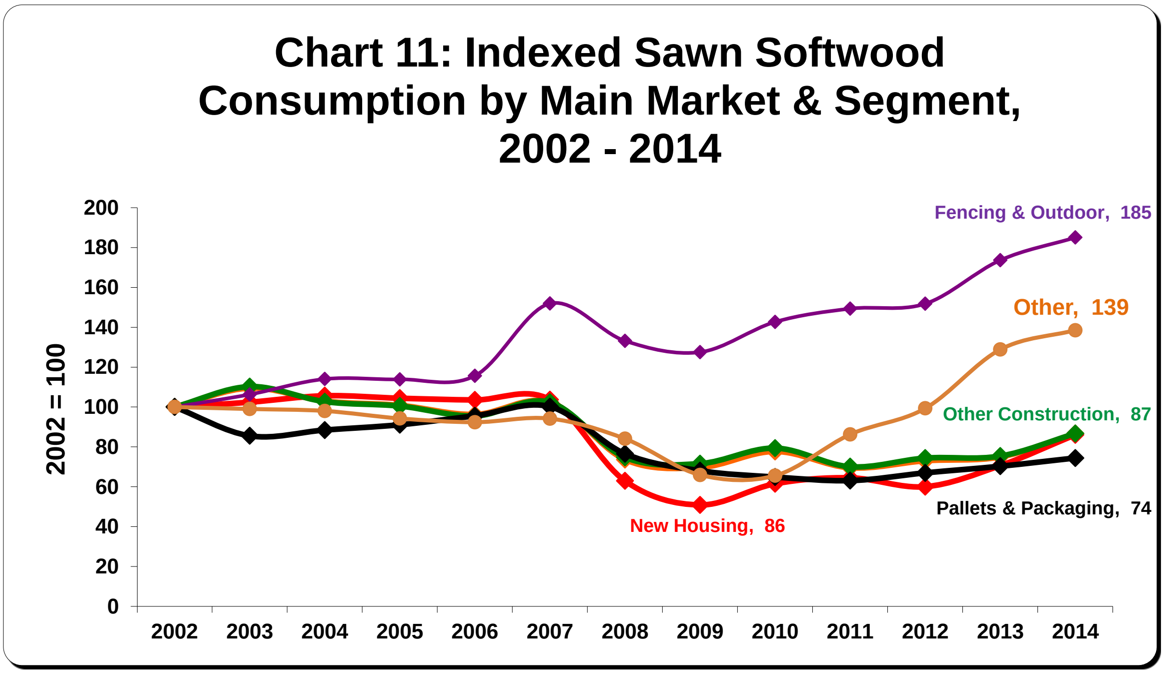
It is estimated that around 5.4 million m^3 of sawn softwood was used in other construction markets (excluding new home building) in 2014, compared to around 6.4 million m^3 in 2007.

Although not affected as severely as new home building during the recession, these other construction markets nevertheless experienced large losses in activity which in turn, helped to reduce the volumes of sawn softwood consumed.

While the decline was a little less severe than in new home building, the recovery has been less dynamic. Growth has returned to these other construction markets over the last three years, with increases in sawn softwood consumption in 2013 and 2014 of 1% and 15%, compared to increases of 18% and 22% in new home building.

The last two years especially, have seen rapid growth in sawn softwood consumption in its served markets but as previously mentioned, overall consumption remains below the levels of 2007 and the slow recovery from recession of construction, until 2013, has accounted for the major part of this below 2007 performance over the last seven years

The relative performance of sawn softwood consumption, over the period from 2002 to 2014 by each of the main markets is shown in chart 11. The volumes have been indexed in order to illustrate relative performance.



Of the main markets, only the fencing and outdoor markets have grown over the thirteen year period. At an indexed level of 185 by 2014, the scale of this market is, by definition, 1.85 times larger than in 2002.

This compares to the other main markets (except the small 'others' market) where volumes are below the levels of 2002.

Sawn Softwood Utilisation by Main Market by Source of Supply

The growth of UK domestically produced consumption was quantified in chart 4, describing the generally increasing penetration of markets over the period.

UK produced sawn softwood consumption has grown by over 50% since 2002 to supply over 3.5 million m^3 to UK markets.

The destinations for UK produced sawn softwood between 2002 and 2014 are identified in table 4 below.

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

000m3	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
All Construction	830	803	781	803	829	892	775	735	840	819	899	928	973
New Housing	95	96	94	97	100	98	64	65	95	107	98	118	142
Other Construction	735	706	687	707	728	794	711	670	746	712	801	810	831
Pallets & Packaging	720	721	733	722	748	717	734	896	913	1,008	1,036	1,069	1,122
Fencing & Outdoor	731	756	804	813	834	1,116	993	973	1,107	1,181	1,187	1,226	1,289
Other	49	47	47	45	42	28	49	26	29	89	123	167	175
Total Consumption	2,330	2,327	2,366	2,384	2,452	2,753	2,550	2,631	2,889	3,096	3,246	3,390	3,559

There has been a growing acceptance of the suitability of UK produced sawn softwood in new home building in recent years and this is confirmed by increasing volumes consumed by this market, as shown in table 4 above. Consistent with the steep drop in new home building during the recession, UK produced sawn softwood volumes in new housing fell by a third in 2008 but have since recovered all of the volume lost from 2007 and by 2014, the volume of domestically produced sawn softwood used in new housing had increased by over 40% from the 2007 level.

UK produced sawn softwood has made significant progress in the pallets and packaging market over the last seven years. As will be shown a little later in this section of the report, UK produced sawn softwood replaced substantial volumes of imported sawn softwood during and after the recession. Between 2007 and 2014, the volume of UK production consumed by this market rose by over 50% and has not failed to achieve an increase, year-on-year over this period.

UK producers were able to take advantage of higher import prices in the pallets and packaging market, especially in the supply of material for pallet repairs which as reported earlier, grew rapidly during this time.

UK produced volumes have also grown strongly in the fencing and outdoor markets. Much of the activity in this market is for maintenance and improvement in existing buildings and of course for outdoors uses, such as agricultural and motorway fencing, decking and garden products and for public works.

Volumes of domestically produced sawn softwood consumed by the fencing and outdoor uses market have risen by around a third since the most recent low-point of 2009 and by 2014 was at a higher level than supply to the pallets and packaging market.

As previously mentioned, consumption of UK produced sawn softwood has grown by 50% since 2002 and since 2008, an additional one million cubic metres has been consumed by all markets.

The positive development of domestically produced sawn softwood has been consistent over the last thirteen years which is in contrast to the more volatile rises and falls present with imported sawn softwood.

Table 5 below presents this development since 2002.

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

000s m3	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
All Construction	6,038	6,718	6,291	6,123	5,782	6,145	4,282	4,048	4,495	3,954	4,116	4,218	4,977
New Housing	550	564	587	577	567	570	342	263	302	309	289	337	413
Other Construction	5,489	6,154	5,703	5,546	5,214	5,575	3,940	3,785	4,193	3,645	3,827	3,881	4,564
Pallets & Packaging	1,350	1,050	1,098	1,164	1,231	1,357	851	512	430	297	350	386	419
Fencing & Outdoor	150	180	200	190	185	222	180	150	150	135	150	303	341
Other	216	216	213	205	203	222	174	149	145	140	140	174	192
Total Consumption	7,754	8,163	7,801	7,681	7,401	7,946	5,487	4,859	5,220	4,526	4,756	5,082	5,929

Consumption of imported sawn softwood was consistently higher between 2002 and 2007 compared with the years that followed. By 2014, although volume had recovered from the low-point in 2009 when volume dipped below the 5 million m^3 mark, at nearly 6 million m^3, imports remained 25% below the 2007 levels.

The traditional strength in the consumption of imported sawn softwood is the construction market which accounted for 77% of all imported sawn softwood in 2007 and despite volumes around 20% lower than in 2007, by 2014 the relative importance of construction had grown further to account for 83% of imported consumption.

This increasing level of penetration of construction was clearly not because of improved volumes, but due to the substantial losses in volume sold into the pallets and packaging market. In 2007, it was estimated that around 1.4 million m^3 of imported sawn softwood was consumed by pallets and packaging but by 2014, this had fallen to just over 0.4 million m^3, a decline of nearly 70%. The difficulties facing pallet manufacturers and repairers during and after the recession, aided by substantially lower volumes of sawn softwood available from the Baltic States, contrived to remove the greater part of the volume of imported sawn softwood that had, prior to 2007, been consumed by the pallets and packaging market.

However, the last two years, 2013 and 2014 have seen a resurgence in imported sawn softwood destined for pallets and packaging. This is confirmed in table 5 which shows that volume consumed by this market has grown strongly over the last three years.

This pattern of development was repeated in the fencing and outdoor markets where volumes (albeit at a lower level than in pallets and packaging) fell sharply in 2008 and 2009 but have recovered in the most recent years. Imported softwood, particularly from the Baltic States and also the Republic of Ireland, benefitted from very strong demand for fencing products during 2013 and 2014. The regular demand for repairs and improvements was further stimulated by poor weather and high winds in the early months of both 2013 and 2014 which created material shortages that were in large part resolved through higher levels of imported products.

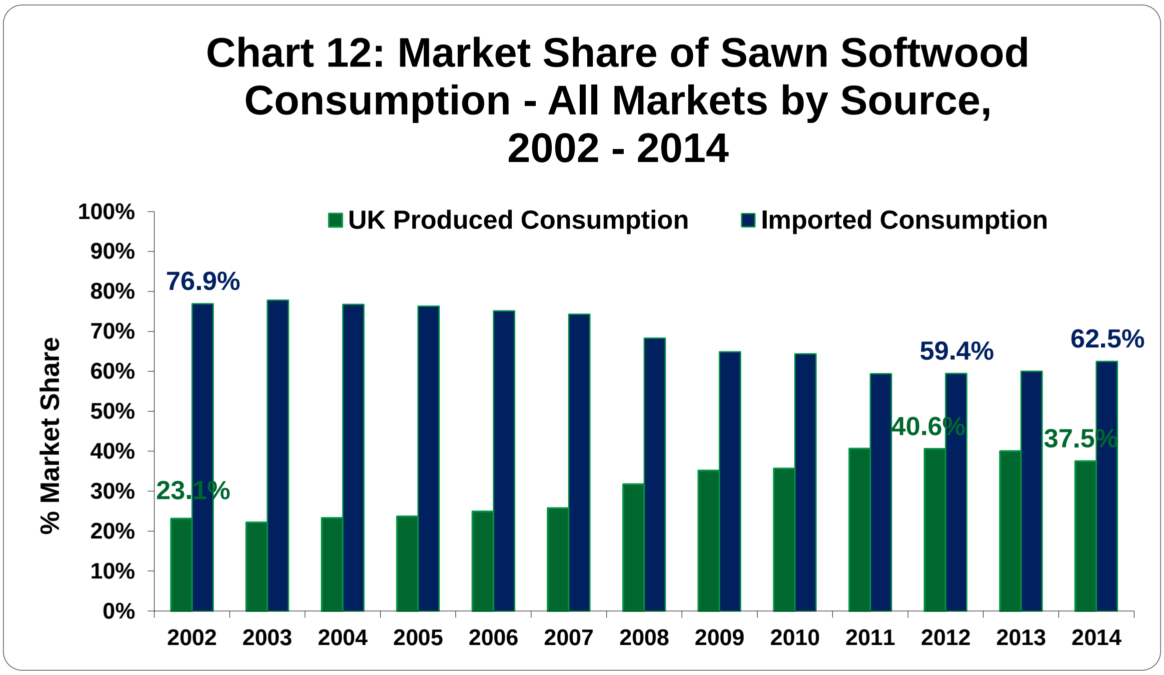
The respective strengths and weaknesses – in terms of utilisation and market share – for UK produced and imported sawn softwood further polarised with the onset of the recession in 2008 and despite gains made by UK produced sawn softwood in construction and the return of imported sawn softwood in the pallets and fencing markets in recent times, the consumption patterns for each source of supply remain clearly defined.

UK produced sawn softwood remains a major source of supply for fencing, outdoor and agricultural use and the most 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 the past, high volumes from Canada.

The differing circumstances that have prevailed in each of the main markets; the economic and supply constraints that have affected imported goods and the efforts made by UK producers have conspired to change the relative positions of UK produced and imported consumption over the period under review in this report.

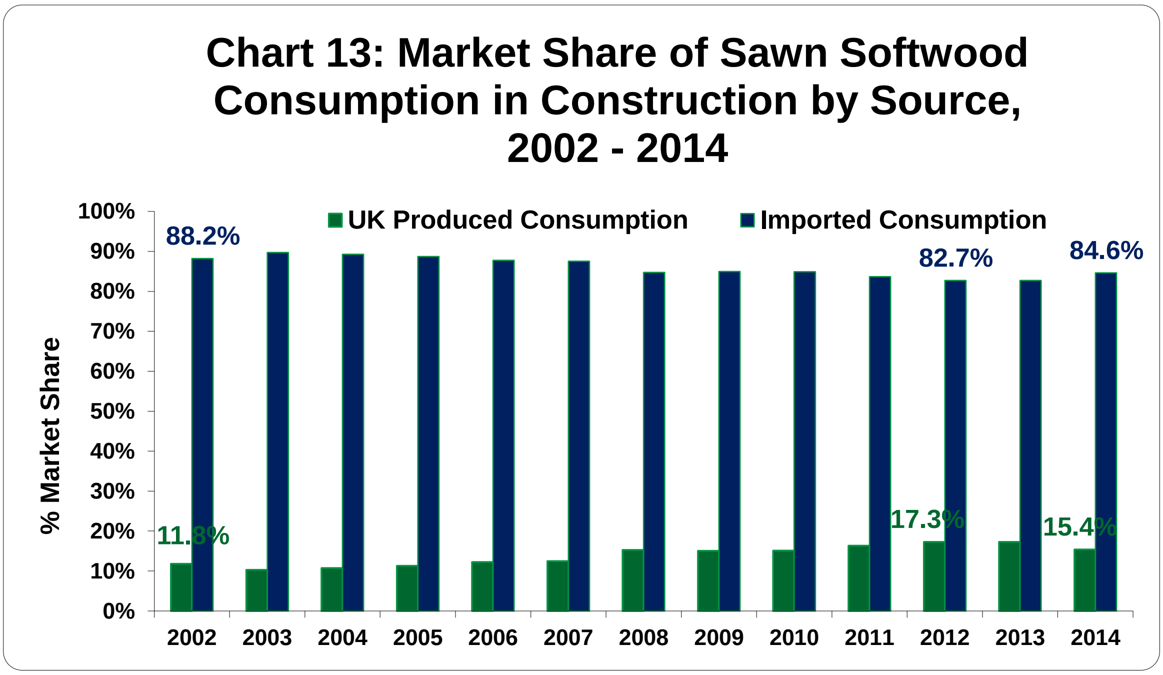
This is illustrated in chart 12 below.



Growth in the relative importance of UK produced consumption accelerated during the recessionary years and their aftermath. By 2012, UK producers had succeeded in capturing nearly 41% of all UK sawn softwood consumption.

The UK produced market share has fallen back since 2012 however as construction markets have revitalised, especially the new home building market, which has drawn increased volumes of sawn softwood from Scandinavian and other European countries.

The dominance of imported sawn softwood in construction is clearly demonstrated in chart 13 below.



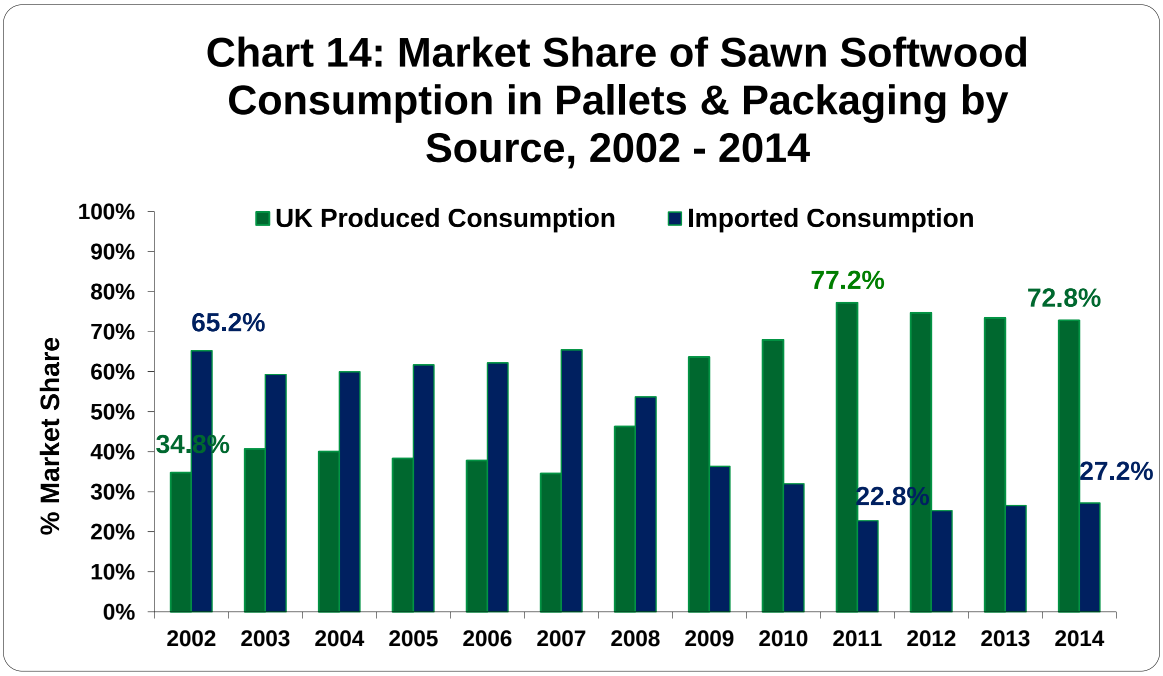
The share of construction held by imported consumption has risen once more to around 85% of all sawn softwood consumed by this market in 2014. Irrespective of changing volumes, UK producers have made inroads into construction, albeit confirmed by a fairly modest increase in share over the period from around 12% to just over 15%.

The fortunes of imported sawn softwood are therefore closely tied to the health of the construction industry.

While there has been only a modest shift in the source of supply in construction, there has been a complete reversal of relative importance in the pallets and packaging market.

In 2002, it was estimated that imported consumption accounted for around two-thirds of the volume of sawn softwood consumed, but by 2014, this had changed with imported sawn softwood accounting for a little over a quarter of consumption.

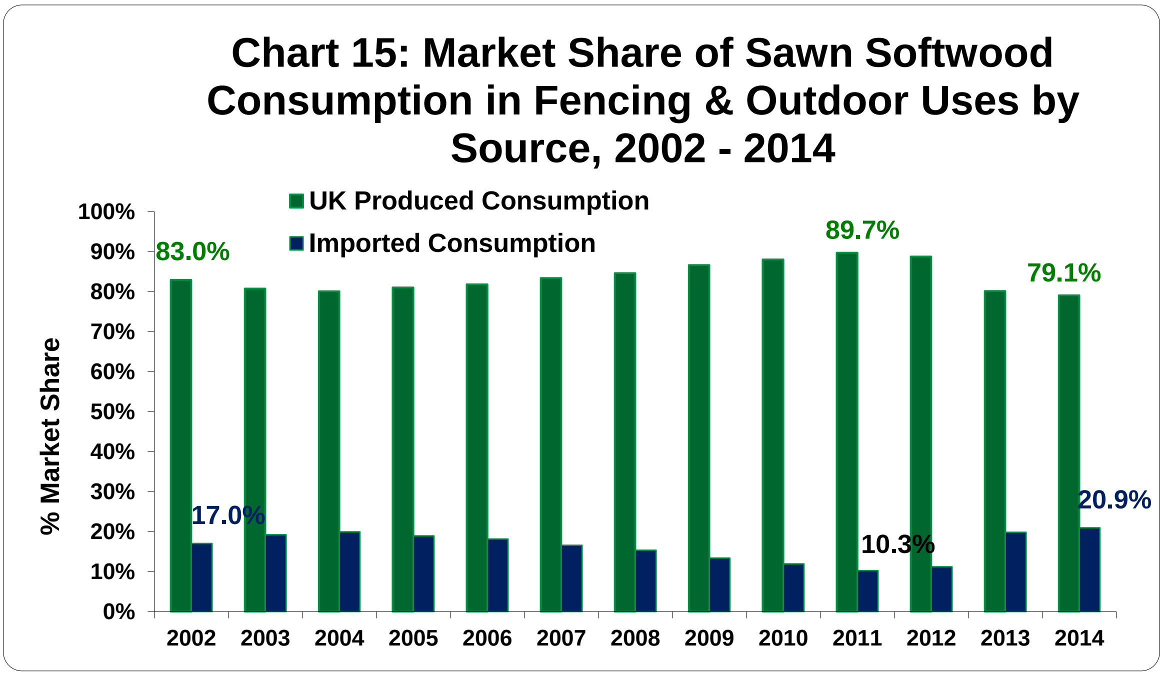
This change on an annual basis is shown in chart 14.



The collapse of imported consumption and the winning of volume by UK producers from 2008 is clearly shown in the above chart, as is the improvement made by imports since the low-point of 2011.

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 dominant market position of UK grown sawn softwood has been maintained throughout the period from 2002.



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 generally rising sawn softwood costs over the period has, as in the pallets and packaging market, worked in favour of UK produced material.

As previously described, the shortage of fencing material has provided a fillip to importers of sawn softwood with imported material making good some of the shortages that arose in 2013 and 2014 from demand outstripping supply. This resulted in imported sawn softwood supplying around 20% of the market, the highest level reached over the period.

Development of Markets for Sawn Softwood

The Construction Market

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

Official data on construction output, identified as new work and repair, maintenance and improvement (RMI) is further categorised by **new work** in housing, industrial building, commercial building and infrastructure and **RMI** output is categorised similarly.

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 Structural Timber 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 from 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 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

As noted earlier in this report, new home building, suffered more than most markets from the recession of 2008 and 2009 and, until 2013, had made little progress thereafter.

The impact of the recession cannot be understated. The decline of greater than a half in the numbers of new homes being built between 2006 and 2009 had a significant effect on sawn softwood volumes consumed and especially imported sawn softwood which holds a very dominant position in the supply to new home building. This is particularly so in the building of timber frame homes where imported sawn softwood is used by the great majority of timber frame manufacturers, although UK produced varieties have also begun to be used in small volumes.

Both timber frame and masonry construction experienced large reductions in the number of homes built between 2008 and 2012, but the decline in numbers for timber frame was proportionately greater than for masonry construction. With home building activity at such a low level (in 2011 only a little over 110,000 new homes were started compared to over 230,000 in 2006) some of the benefits of timber frame construction, which include the more rapid speed of construction compared to masonry built homes, became less important for builders and developers. The availability of relatively less skilled and low cost labour in masonry construction also proved attractive. This resulted in a couple of years where timber frame lost market share and, as previously described in this report, with significantly more sawn softwood used in timber frame construction than other methods, the loss in volume was compounded.

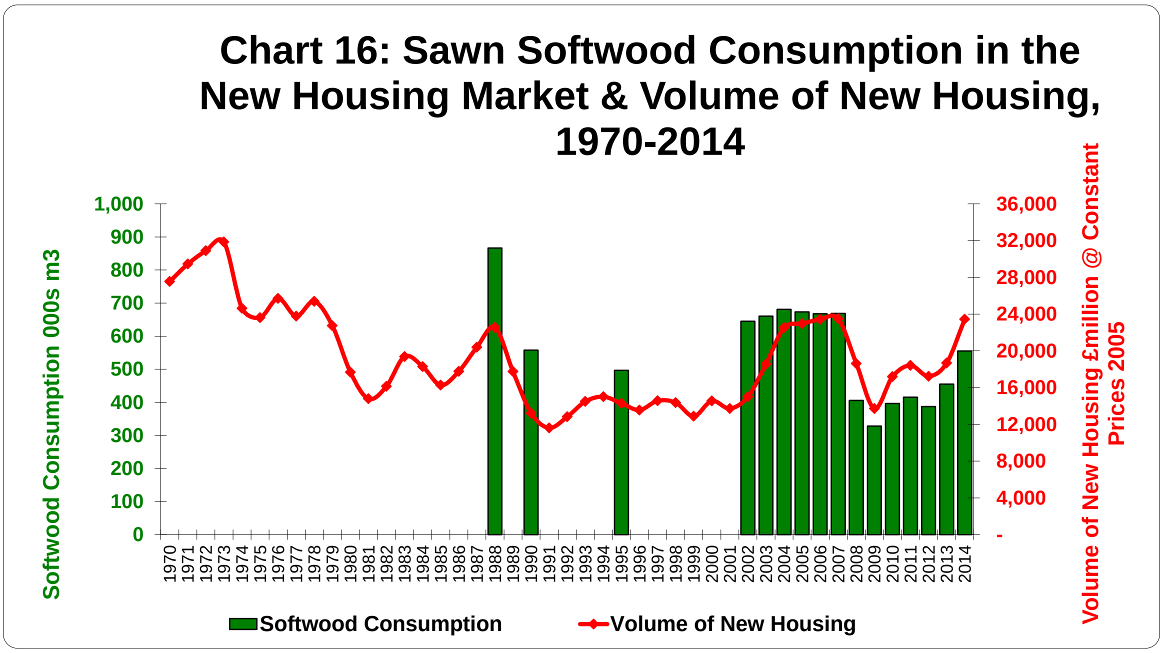
This situation effectively reversed in 2013 and 2014. The recovery in new home building (rising to over 163,000 homes started in 2014) has led to a resurgence in timber frame building. The cost benefits, speed of build and the overwhelming environmental and quality advantages of timber frame resulted in a faster rate of growth than for masonry built homes which in turn, has benefitted sawn softwood consumption and imported sawn softwood especially.

As previously described, the mix of dwelling types has continued to change over the last seven years and this too has benefitted the utilisation of sawn softwood. It is very likely that the most recent growth in sawn softwood consumption would have been higher, were it not for the adoption of some of the newer types of wood-based products, designed to replace softwood and other competing products in specific construction applications. Examples include the substitution of softwood joists by I-beams and other structural members by the newer type of laminated timber products which provide higher structural strength, stability and greater flexibility in design. It should be noted that these engineered wood products have also been used to complement and extend the usage of sawn softwood in construction. It should also be noted that some of these newer engineered wood products are originally formed from softwood species.

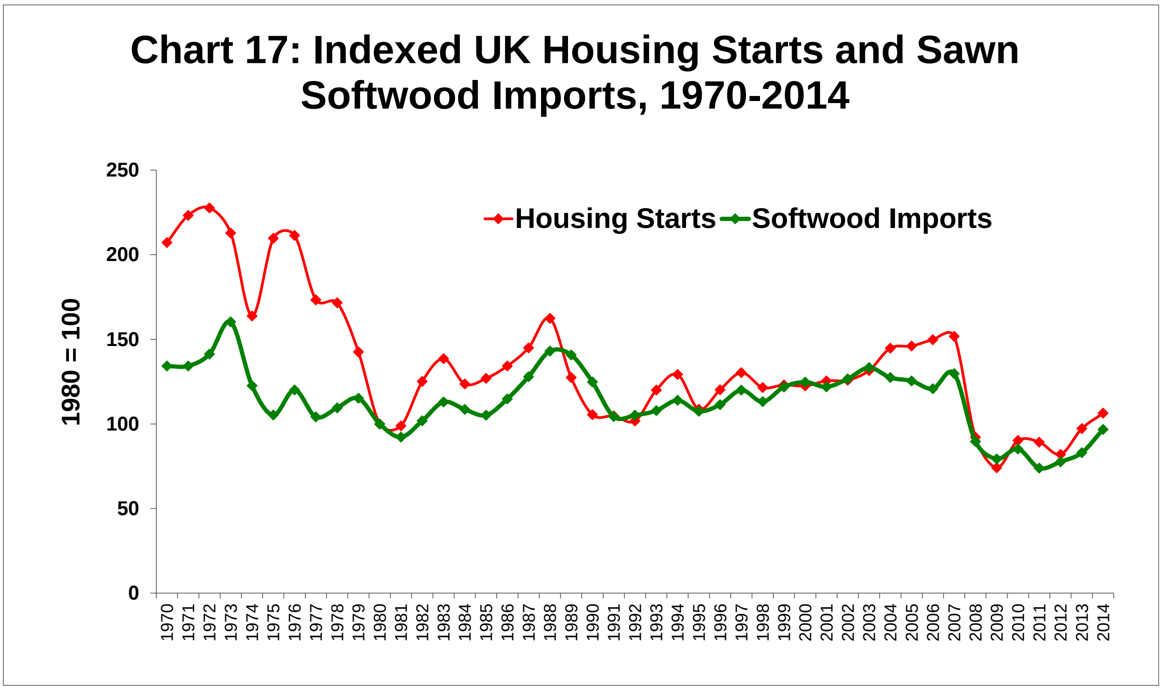
However, it is undeniable that over the long-term, housing type changes (from houses to flats in the first decade of this century), changes in building methods and product substitution, have contributed to the reduction in sawn softwood volumes consumed in new home building in the UK.

This longer-term relationship between new home building and sawn softwood consumption is shown in chart 16 below. As shown in the chart, softwood utilisation in the new housing market has broadly moved in step with new home building over the period 1970 to 2014. Data on sawn softwood consumption before the commencement of these timber utilisation studies was scarce, hence only some estimates for the period before this work are provided in chart 16 below. However, based on previous end-use studies in the 1980s and 1990s, it can be seen that greater volumes of sawn softwood were being used in the past.

The developments of new home building and sawn softwood consumption in this century have been well documented earlier in this report, but the relationship between sawn softwood usage and new home building persists, as described in the chart below.



As reported, around 85% of sawn softwood consumed in construction is imported with new home building an important market for overseas suppliers. If domestically produced sawn softwood is excluded from the analysis and solely imported sawn softwood is matched against new housing starts, the good statistical correlation that exists between the two is revealed and this is shown in the chart below which monitors the annual development of each since 1970.



Data before 2002 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 Construction Sectors excluding New Housing

The availability of data on non-new housing construction sectors are less comprehensive than for the housing sector.

Data from ONS does provide a measure of output from the following construction sectors: infrastructure, public works, industrial and commercial new work and RMI for these sectors with RMI housing quantified separately.

The majority of timber usage resides in the RMI housing sector, although there are many building and repair applications in the other abovementioned sectors.

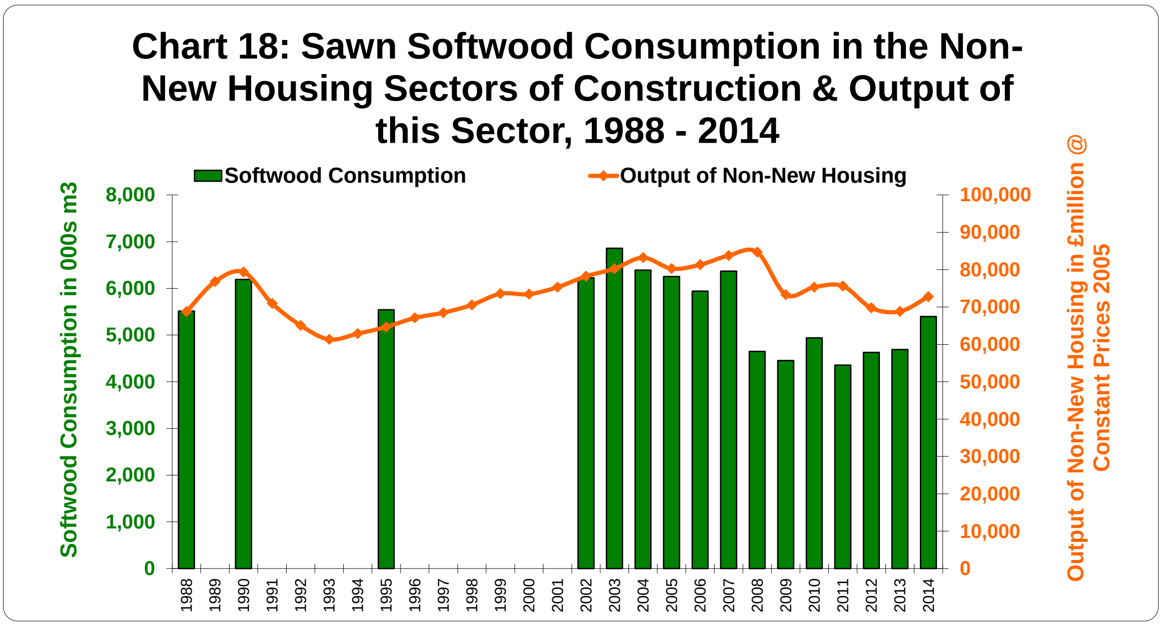
The calculations of timber usage in the housing sector has been subject to research for these timber utilisation studies and in previous market and end-use studies, however, average usage data of sawn softwood in the other construction sectors, excluding new housing, is unknown and probably not possible to measure because of the variability in use of the many different 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. However, it has been possible to quantify average usage for these types of application. With the other construction sectors, excluding new housing including work as diverse as bridge building to shopfitting, the ability to measure average usage in non-new housing applications is not possible.

While it is known that very 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 have been 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.

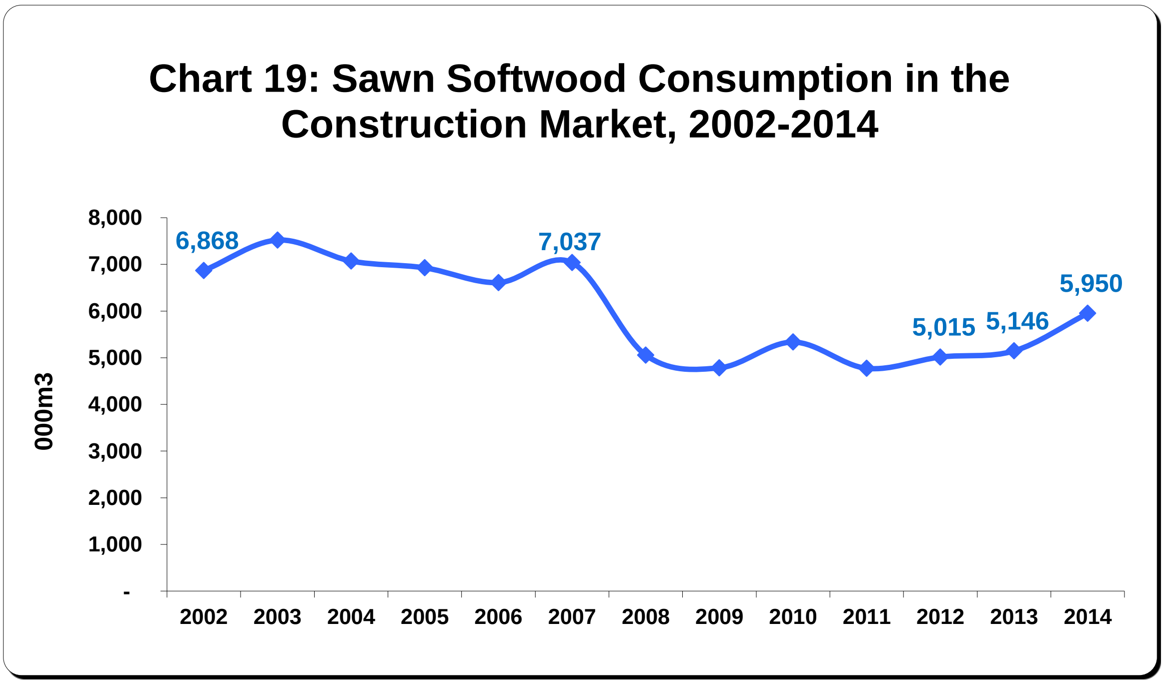
As a check on the validity of this method, the calculated sum of sawn softwood consumption in all other construction sectors (non-new housing) can be plotted against the output of these sectors to determine co-variability.

In common with the availability of consumption data in the new housing sector, the plotting of the other construction sectors, excluding 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 (including new housing) the development of sawn softwood consumption to 2014 is shown in chart 19 below.



Confirmation of the improvement in sawn softwood consumption in construction over the last three years is provided in chart 19 showing the increase of 2.6% in 2013 to 5.15 million m^3 followed by a 15.6% increase in 2014 to 5.95 million m^3.

The Pallets and Packaging Market

It was indicated earlier in this report that the ProdCom on wooden packaging in 2014 may be in error. This is further confirmed by viewing the turnover figures provided through ProdCom for 2013 and 2014. In 2013, the estimated value of pallets manufacturing in the UK amounted to around £363 million within a total for all wooden packaging of £505 million. Pallets manufacturing therefore represented 72% of the total. In 2014, ProdCom data recorded turnover of pallet manufacturing at £284 million from a total for all wooden packaging of £544 million, or 52% of the total.

As with the volume data reported earlier, this reduction in turnover and as a proportion of the total does not appear to be correct. One possible explanation is that the newly reported value of refurbished pallets in the 2014 ProdCom of £110 million, when added to the turnover for production of £284 million amounts to a grand total of £394 million, or an increase of 8.5% by value over the declared pallet industry total in 2013 of £363 million.

Consulting the Wood Packaging Study turnover estimates for pallet production and refurbishment for 2013, the estimated total was around £280 million, significantly less than the ProdCom total.

The quantification of this market is further hampered by the ProdCom estimate of the number of refurbished pallets in 2014 which also appears to be far in excess of industry estimates.

Despite the ongoing debate over industry sizes, it is undeniable that the changes in the usage characteristics in the pallets sector has had a profound effect on volumes of sawn softwood consumed.

The Wood Packaging Studies, conducted between 2010 and 2013, gathered information on the volume of wood products used in the manufacture and repair of pallets 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. With a closer understanding of pallets and packaging output determined from the Wood Packaging Study, the volume of sawn softwood used has been possible.

The Wood Packaging Study of 2013 quantified the volume of all wood products (including hardwoods and panels) used in the pallets and packaging market in 2013 to be around 1.45 million m^3, of which approximately 1.12 million m^3 was consumed by pallet making and repair.

These measures are consistent with the estimates of sawn softwood use derived from the Sawmill Survey conducted by the Forestry Commission and industry estimates of imported sawn softwood used in pallet making.

As reported earlier, the switch away from newly manufactured pallets to longer-life pallets, generating more repairs, but with longer frequencies between repairs, resulting in less sawn softwood used in total, reduced the demand for sawn softwood during and after the recessionary years.

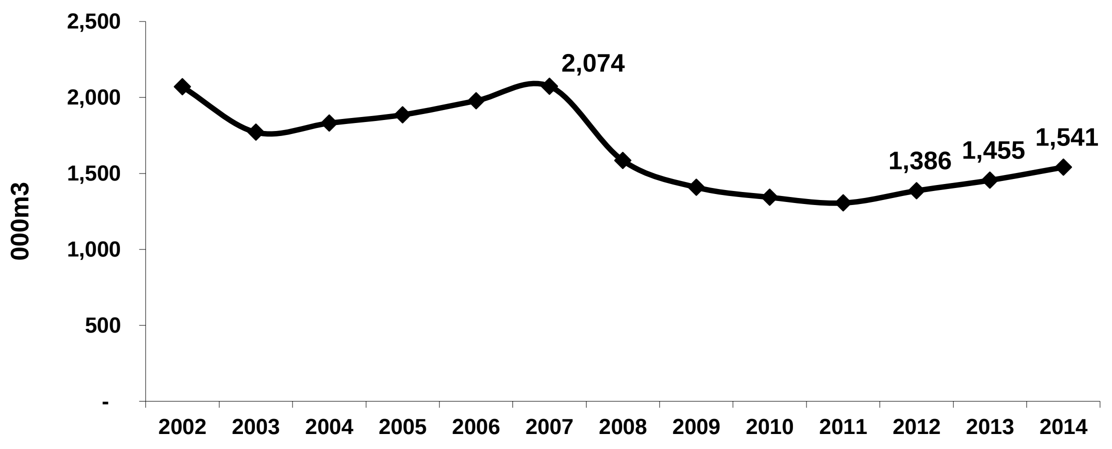
This trend continued until 2012 when, for the first time for five years, more newly manufactured pallets were produced than in the previous year, helping to stimulate growth for sawn softwood. A higher number of pallet repairs were still being carried out than new pallets produced in 2012 however. Change took place again in 2013 with further growth in newly manufactured pallets, rising by 4.5% to around 32 million units.

Also during 2013, the number of pallet repairs was estimated to have fallen for the first time for six years and these changes resulted in more newly manufactured pallets coming to market than repaired pallets returning to market.

This had the effect of further stimulating demand for sawn softwood in this market, as witnessed by the increase in consumption between 2012 and 2014. Referring to table 1, sawn softwood consumption in the pallets and packaging market fell year on year from 2007 to 2011 before the changes described above began to take effect.

With the greater insight into pallet making and repair activity provided by the series of Wood Packaging Studies, improved estimates of sawn softwood usage have been possible and these estimates for sawn softwood utilisation in the pallets and packaging market are shown in chart 20 below.

Chart 20: Sawn Softwood Consumption in the Pallets and Packaging Market, 2002-2014



The Fencing and Outdoor Market

The fencing and outdoor applications market, as identified in previous timber utilisation reports and other outputs, 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 2014 nearly 1.3 million m^3 of domestically produced sawn softwood was consumed by this grouped market. This market of many types of product for outdoor uses has been a significant consumer of UK produced sawn softwood.

Domestically produced sawn softwood has dominated supply to this market for many years while imported goods have, until very recent years, struggled in comparison.

As shown in table 5, the increase in imported sawn softwood in 2013 and 2014 has been sudden and substantial, due to the pressure of demand for fencing and outdoor products in the UK.

Collectively, UK produced and imported sawn softwood usage in this market amounted to around 1.6 million m^3 in 2014, making it the second largest sawn softwood consuming market behind construction.

Trade sources have estimated the volume of sawn softwood used for fencing. The nature of the market makes collection of industry data a difficult task and the extent to which primary market research can help quantify this activity is therefore limited.

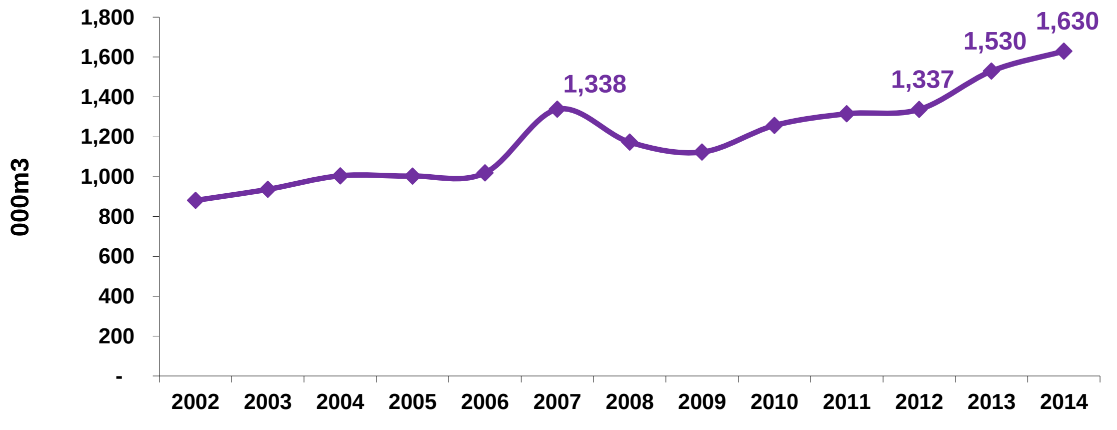
Many fencing firms are very small operations and the ‘churn’ rate, whereby firms appear and disappear, is facilitated by the relative ease with which fencing businesses can be established.

Timber fencing, the great majority of which uses 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 peaks during the spring and again in the autumn, when this type of work is carried out.

Affected by adverse weather conditions, sawn softwood usage can vary according to the severity of the weather at different times of the year. Over the longer-term however, such fluctuations are evened-out and the development of sawn softwood used in this market can be measured.

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

Chart 21: Sawn Softwood Consumption in the Fencing and Outdoor Market, 2002-2014



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 previous timber utilisation studies, estimates of sawn softwood utilisation are based upon the work of previous research 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 being substantially smaller or non-existent by 2014. 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.

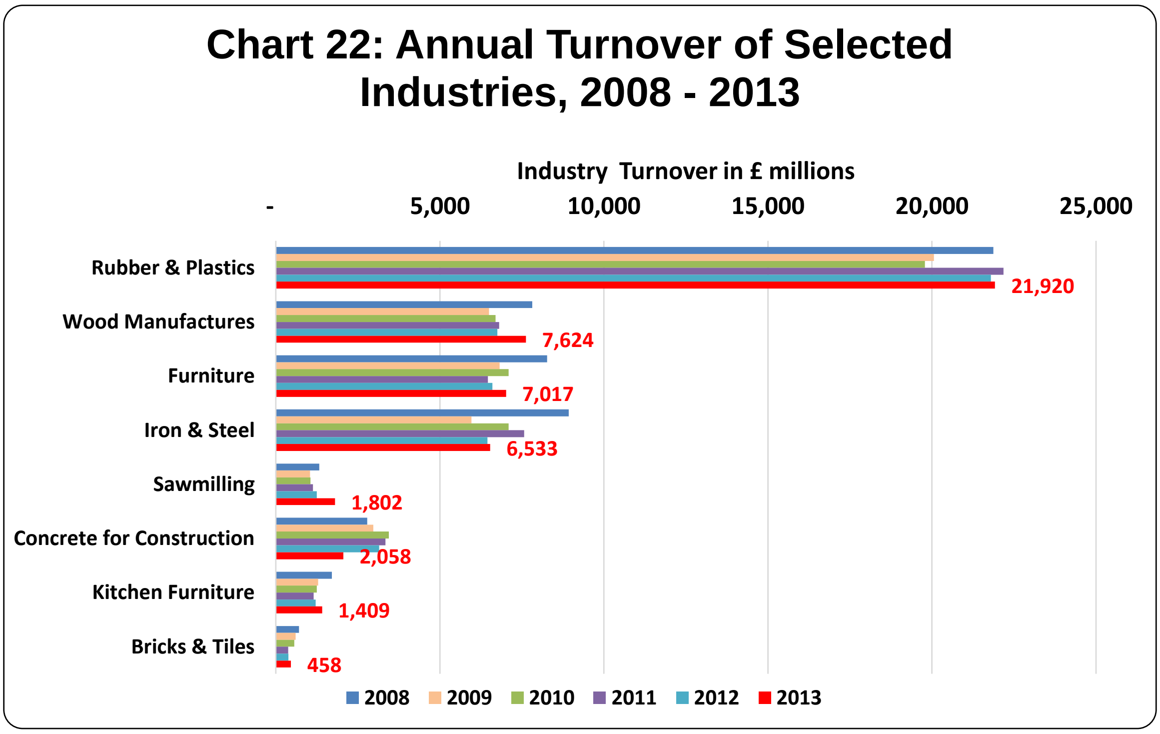
As these previously large-scale markets have declined or disappeared, there remains a residual volume consumed by these other markets (in comparison, much smaller markets) which are believed to have accounted for nearly 3%, or around 175,000m^3, of all UK produced sawn softwood consumed in the UK in 2014.

The percentage of all sawn softwood imports used in these 'other' markets in 2014 was also estimated to be around 3% of the total, at 192,000m^3. In total, a volume of approximately 367,000m^3 was consumed by these 'other' markets in 2014.

The Market for Wood Products Compared

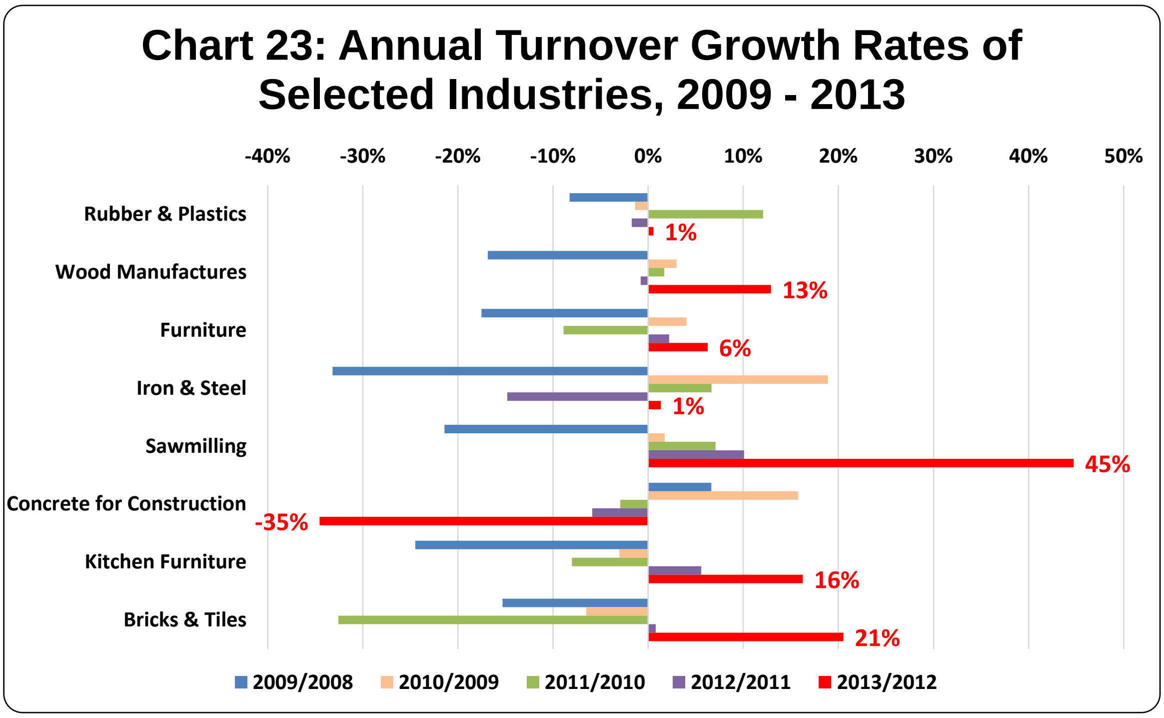
The Office for National Statistics (ONS) publishes turnover data for manufacturing and production industries, including wood and products made of wood. The total output of manufacturing in the UK was indexed and compared to the indexed output of wood and wood products in chart 10 on page 16 of this report, to provide an indicative measure of the wood products industry's relative performance in the UK economy.

In chart 22 below, the relative sizes of a number of selected markets are shown. Some of these markets were chosen because of their close connection to the supply of sawn softwood, being either processors of, or consumers of sawn softwood, and others were chosen because of the competitive nature to the supply of sawn softwood.



The "wood manufactures" industry, full title of which is the "Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials", was valued at over £7.6 billion in 2013, the latest year for which data are available. This compares favourably by size to complementary and competitive industries. These comparisons also show that "wood manufactures" has performed better than some other industries in terms of recovering from the low-point of 2008/2009. Included within this market description is sawmilling which is also identified separately in chart 22. According to ONS, the value of the sawmilling industry in Great Britain, valued individually at £1.8 billion surpassed the low-point of 2009 in 2013.

Chart 23 below compares the growth rates of wood industry turnover against these other selected industries for the most current year for which data are available. This shows that wood manufactures and within this, sawmilling, has performed as well and often better than other industries.



These data are drawn from the Annual Business Survey, published by ONS, and are deemed to be representative of the changes that take place within industries which, if correct, signals how well the parts of the wider timber industry performed in 2013 against competitive industries.

Sawn Softwood Consumption & Market Share Estimates for 2015.

In preparation for the International Softwood Conference and the UNECE timber meetings held towards the end of each year, estimates of sawn softwood imports are made by the Timber Trade Federation's National Softwood Division Committee and UK production estimates are made by the Forestry Commission. These data are then joined to form a sawn softwood estimate for the current year and a forecast for the following year.

Made in August of each year and using data from the first six months of the year, these estimates and forecasts serve to inform industry and other interested parties of how the market for sawn softwood is likely to develop over the short-term.

For 2015, both UK production and imports of sawn softwood are predicted to be lower than in 2014. The reduction in UK production is projected to be around 4.5% while softwood imports are expected to decline by around 0.5%. The combined effect on consumption is a fall of just over 2% in 2015.

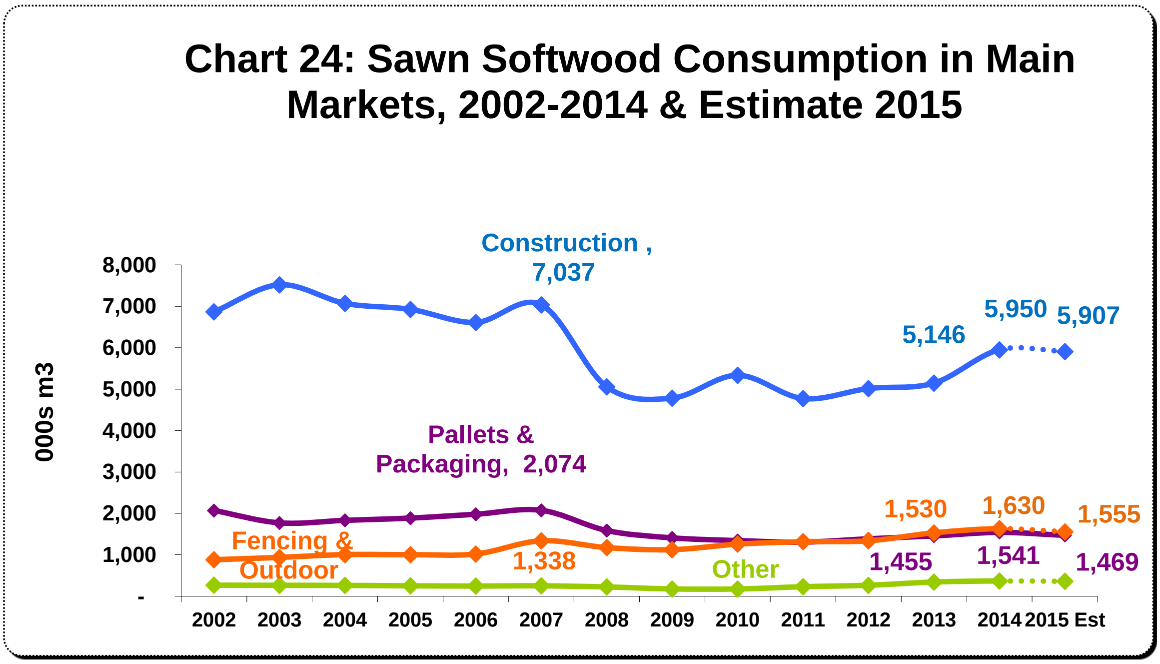
For 2016, UK production is expected to rise once more, but by only by a modest 1.4% while sawn softwood imports are forecast to rise by 2.5%. The net effect would be to raise sawn softwood consumption by 2.2% in 2016.

These estimates for 2015, when detailed by main market, indicate volumes declining in each market, with the largest decreases arising in the pallets and packaging and the fencing and outdoors uses markets, each expected to decline by upwards of 5%. With UK production estimated to be 4.5% lower in 2015, it is these two markets that are expected to feel the greatest impact of lower output.

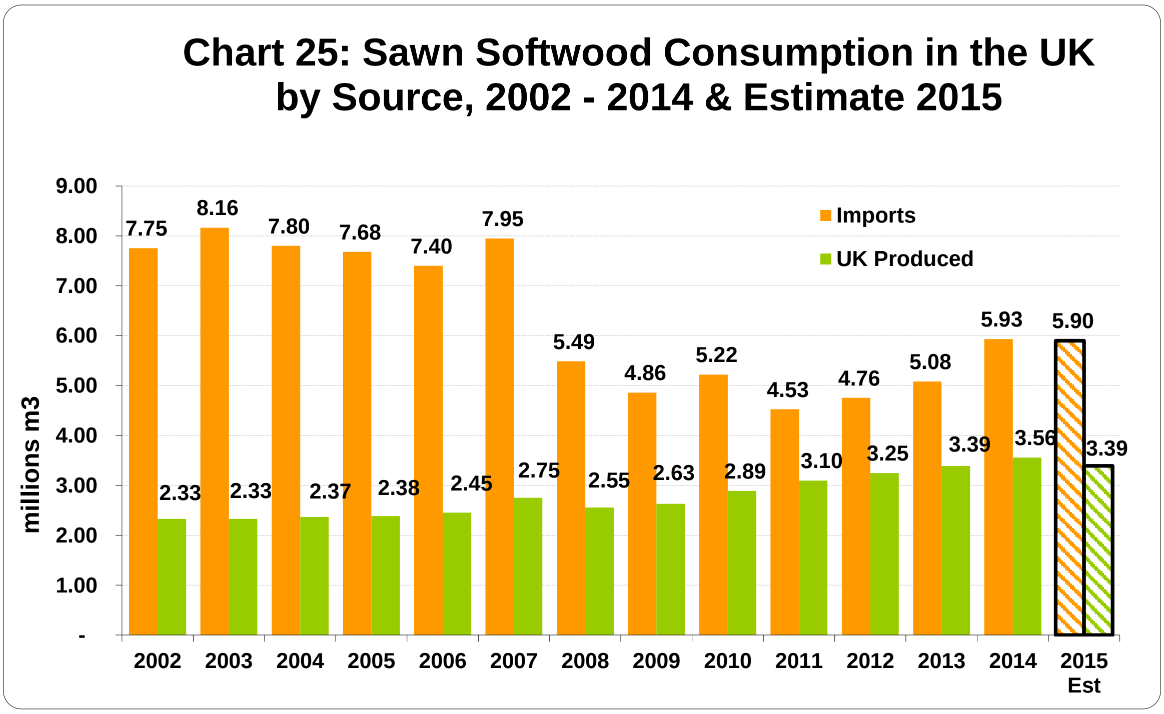
Construction, in overall terms is expected to decline by less, down by slightly less than 1% in 2015. The predicted performance by the two construction sectors are different however with sawn softwood consumption in new housing expected to rise by around 2% while all other construction is predicted to be lower by around 1%.

With softwood import data available for eight months of 2015, reasonable estimates of the progress in the main markets can be made at time of writing this report, therefore the estimates provided here for 2015 are not expected to be too different from the eventual outturn by the time actual performance becomes known.

These estimates, leading to the predicted level of sawn softwood consumption in 2015 are plotted alongside the development of consumption since 2002 in chart 24 below.

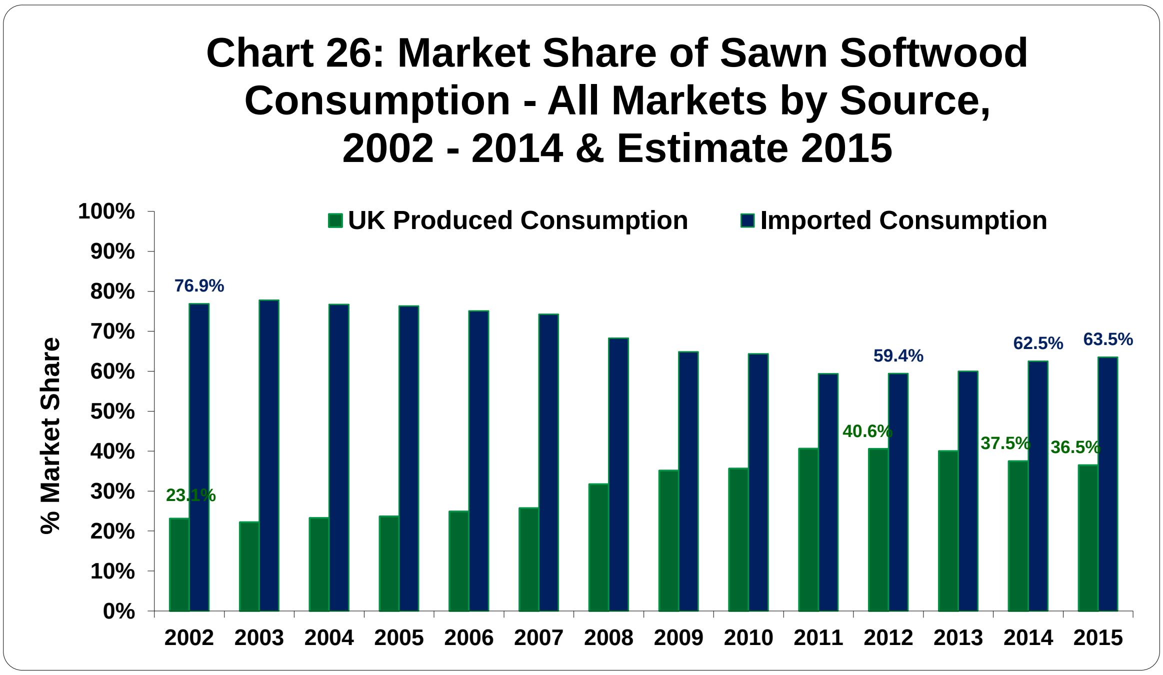


As reported above, the estimate of UK production for 2015 suggests a decline of around 4.5%, signalling the end of the long period of continual growth (bar one recessionary year) for UK produced consumption. This development in shown in chart 25 along with the expected small fall in imports.



With exports predicted to be at similar levels as in 2014 and sawn softwood imports predicted to fall by only 0.5%, the estimated level of domestically produced consumption results in a loss in market share in 2015.

The market share development of UK produced and imported sawn softwood consumption is shown in chart 26 below.



It has been generally recognised by many involved in the home grown softwood processing industry that once recovery from recession had taken place and with this probably being led by a return to growth in construction, the market share of domestically produced sawn softwood would fall from the peak levels of around 40%,

This has duly happened and as shown in chart 26, the projected level of 36.5% in 2015 would be the third consecutive year that market share would have fallen.

The improvement in end-use markets, especially construction, has enabled the trend of a decreasing share of sawn softwood consumption for UK producers to be established.

However, as the brief history provided here in this report reveals, there are certain to be periods of reduced and increased demand in different markets and at different times, ensuring that there will rarely be a smooth path in the development of either UK produced or imported sawn softwood consumption.

Most recent data on market developments indicate that construction output is slowing in the UK towards the end of 2015, as the UK economy in total, although growing, is slowing down.

A continuation of these events would lead to a larger than expected fall in imports and should the downward forecast for UK production be a little over-estimated, then it is quite likely that the decline in market share of UK produced consumption projected for 2015 (and 2016, based on forecast volumes) will be less severe than was predicted.

Acknowledgements

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.

Particular gratitude is expressed to industry associations, without whom the objectives of this work would not have been met.

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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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