

Memo: **Report on BUS ticket**By: Mark Vonk Probos
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The effect of the increasing timber prices on the availability of biomass

Definition and problem:

Timber prices are rocketing over the past year. According to timber merchants, during each new transaction timber prices have risen again. So-called non-commercial thinning is no longer non-commercial and precommercial thinning (thinning before 30 years) is executed increasingly. Timber from pre-commercial thinning is especially suitable as biomass.

What is the short and long term influence of these high prices on the availability of biomass?

Questions

- 1. What causes the extreme increment of the timber prices?
- 2. Does the demand for biomass influence this process?
- 3. What is the effect on the development of the timber prices on the availability of biomass?
- 4. What is the long-term effect of the timber prices on the availability of biomass?

Authors: Mark Vonk

Method.

For this quick scan available statistics, recent publications and sources on the Internet were referred and several actors on the timber market were interviewed.

Referred sources.

During the recent months, from August until November 2006 several publications were written and published in the various media.

- Forse prijsstijgingen op de rondhoutmarkt (big price increment on the round wood market): Bosberichten oktober 2006
- Marktrapport NL delegatie: Internationale soft wood conference 2006-11-06
- Forest products annual market review 2005-2006: Geneva timber and forest study paper 21, UNECE
- Press release VVNH nr. 0610924
- www.globalwood.org/market1
- www.ustr.gov
- Various Holz Zentral papers of the last weeks.

Interviews

Due to the fact that no fresh statistics were available during the quick scan (the most recent statistics are published at the end of 2005), a survey was performed. During the survey, representative companies from the timber trading branch and consulting agencies from the Netherlands, Belgium, Sweden, Germany and Canada were consulted on the issue.

Dutch state forest service.

The service is specialised in forest exploitation, trade and processing of forest products from the estates managed by the Dutch state forest service.

"The effect of the latest developments on the timber market is for sure that pre-commercial thinning are reaching a break even point. Especially timber from small management units that produce OSB assortments. The demand



for biomass as fuel has increased in general but the demand for pellets as part of the biomass for fuel has increased substantially more than other products like fresh chips etc. The demand for chips in the panel industry has increased substantially and also the quality requirements have been altered over the past view months. More "green" parts are allowed in the chips. This can be explained as a reaction on the shortage of fresh chips.

The service confirms that the level of timber harvest is depending on a budged driven system. As soon as the annual budget is closed, more timber is not harvested although the prises are good and the forest management of the forest is not influenced negatively. The service estimates that the shortage of timber on the market is not very large and argues that the price increments is rather a corrective compensation than a hick up of the market. The prises of standing round wood have not changed over the past ten years only the costs for processing have increased and compensated in the round wood prise. The timber market is changing into a bidders market. Until now the buyers were ruling the market and were regulating the demand and supply mechanism but with a shortage, the bidders are regulating this mechanism. This requires a complete different market approach of the forest managers"

Norske Skog Parenco

Norske skog Parenco is one of the largest players on the Dutch round wood and forest exploitation market. "The demand for fresh biomass for fuel is mainly coming from the neighbouring countries but the demand for by products from the processing industry is almost doubled in the Netherlands. Fresh chips are hardly exported to the energy industry abroad. The company recognises that the balance in the market is very fragile and easily disrupted with the slightest increment of demand. This effect is enforced by the fact that forest managers hardly respond to the growing demand. The supply demand mechanism is not working properly. An other effect that is disrupting the supply and demand mechanism is the fact that the supply of round wood has been influenced substantially by a series of storms over the past decades and is compensated during the last harvesting season."

A.J. v/d Krol

A.J. v/d Krol is a medium large round wood trading company in the Netherlands.

"Most information on developments on the market is collected from the media. The company is not active on the biomass markets and has no factual information about streams of biomass. By analysing the information, the company expects that within five years the market for OSB and biomass for fuel will be divided more or less equally. In the past half year the company has had great difficulty to buy timber for the right prise in order to be able to meet contractual obligations. Eventually the company was able to persuade a forest manager to sell, by offering a "crazy" amount of money. According to the company, the argument for not selling was, that the harvest was not planned in the management plans. This confirms that forest managers are not market oriented and work strictly and rather inflexible along the lines of the management plans. The company is not selling any OSB timber on the energy market yet but recognises the fact that more and more competing trading companies, specialised in harvesting timber only for the biomass branch, are entering the round wood market."

Weijtmans

This company is specialised in the harvest of trees from outside the forests (Lanes, green strips along roads and high ways, Gardens, Parks etc.) and one of the largest players on this market.

"The company policy is to gain as much as possible value from a tree that is felled. So not all material is chipped but the trees are carefully graded and cut into assortments for the designated processors. In the past the company has supplied biomass to the power plant of Cuijk but due to a lack of trust in the company as a result of a couple of incidents (deliveries were refused), all biomass is supplied to German biomass clients (with satisfying results). The company is convinced that the MEP regulation for power companies is influencing the market negatively as they can demand the highest qualities for competing prizes."

Gooskens hout Moerdijk

This company is specialized in the trading, storage and distribution of soft woods from Scandinavia, the Baltic States and Russia. The company import directly from the mills.

"The demand and supply mechanism is affected by the economic forecast of last year. The predicted growth appeared to be much larger than expected. As timber contracts are made at the end of the year and mainly based on the economic predictions, the volumes of the purchase contracts were too low. The existing stocks were sold out much earlier than expected which resulted in an earlier and higher demand. Also the demand of timber as an alternative for oil based and steel products has increased as well over the last six to eight months. The effect of the increasing global market is becoming more evident. The company recognises this, as less timber is available from the other side of the Ural. The flow of material from the Eastern Europe and Russia is more and more diverted to the far east with the effect that sources more close to the western markets are forced to produce to the



maximum capacity. The increment of the demand has grown substantially faster in the building sector than in other sectors like the packaging industries.

Stora Enso Skog

This company is one of the largest trading companies in Scandinavia, supplying the processing Industry (pulp, paper and timber processing) and is part of the multinational Stora Enso group.

"In the last six to eight months the demand for timber in the timber processing departments has become bigger than the demand in the pulp and paper departments. This indicates an important increase of the marked for sawn timber and panel products. The exports to the US has decreased were the exports to the European market has increased. The company is also importing round wood from the Baltic States and Russia but this is getting more and more difficult. This due to the fact that the local processing capacity has been extended over the last few years and the export of round and sawn timber from the Baltic States and Russia to the Far East has increased rapidly. Timber from the Scandinavian sources and specifically Finland has decreased substantially as a result of the changed tax regulations. Forest owners are more hesitated to harvest as the tax system has changed as per 2006 where before tax rates were based on an estimated net income from the forest, the new system calculates the tax from the actual income/production."

Norbord Genk

This company is based in Belgium and one of the leading producers of OSB, MDF and chipboard panels in Europe.

"The OSB stock is sold out and the supply period is ten weeks. Chipboard is sold only in large quantities with a supply period of two weeks. All OSB is supplied to the building sector at the moment. As a result of the changed VAT rate from 16% to 19% in Germany, the German trading branch is stockpiling building material and purchasing as much as possible before the end of 2006. The prise of panels is affected by other raw material more than the timber prise as other raw material for the panel industry are oil based or linked otherwise to the oil market. The production capacity of the timber processing branch and the forest exploitation branch has increased gradually over the last few years but as the sectors are entering the max capacity because of the growing demand, a shortage on the supply side drives the prises of round timber up. This effect is evident during the timber auctions in Belgium were only the big ("read rich") companies are able to buy. Luckily private forest owners respond to the market situation and put their timber on the market. Despite the fact that the company is one of the bigger players on the market and able to buy from local forests, the company had to decide to import timber from Scotland in order to fulfil the demand. Concerning the input of recycled timber as raw material for the panel industry, the market is shifting towards the energy sector. According to the company this can be explained by the fact that recycling companies have improved their refinery techniques and are able to sell high quality recycle material that can be used as fuel as well."

EPF European Pallet Federation

This organisation represents the European pallet industry.

"The situation on the oil market has a direct effect on the prises on the timber market. Especially in Belgium, more and more timber is used as fuel on industrial scale i.e. green houses, bio energy etc. as the use of natural gas is not subsidised as it is in the Netherlands. But also on the scale of households, the consumption of wood as fuel has increased.

Dekker Hout Den Haag

This company is specialized in the trading, storage, processing and distribution of soft woods from, Scandinavia, the Baltic states and Russia and hardwoods from tropical regions like south east Asia and south America . The company import directly from the mills.

"The so-called China effect is not the reason for the explosive increase of the timber prise as the markets in the far east have been growing more or less steadily over the past ten years. The shock on the market of timber from Malaysia is a direct effect of changing policy on illegal timber from Indonesia. The government of Indonesia has, under pressure of the international community, put more effort in tackling the problem with illegal harvested timber. This, in combination with a growing demand in Europe and low stock has an immediate effect on the prise of timber. The current situation is stable. The development of the timber prise is more or less normal but can be disrupted easily in case alternatives for timber are becoming economically competitive. Developments can already been seen on the market of frames and windows were plastic and aluminium frames are gaining a more important place on the market.

Platform Hout Nederland

This organisation operates as platform and representative for several branches in the timber industry in the Netherlands.



"The representative from the platform has no up to date information about market trends and refers to the statistics that have been up dated last December 2005. Following the trends of these statistics, the recent peak in the development of the timber markets cannot been explained.

NRC

Trading company, specialised in the trade of round wood biomass.

"The current development of the timber prises is a direct effect of the hampering supplies from the forest. During the harvest season no new contracts are made in order to respond to the growing demand. Concerning the developments on the market of biomass, especially in Germany the market has developed substantially and an increasing flow of biomass (i.e pellets) towards South Germany, Austria and Italy is supplied from the German timber processing industry. The company is getting an increasing demand for supplies of biomass and is exploring overseas sources. (South and North America) These sources are already supplying SCA and other big companies.

SFI Swedish forest industries federation

This organisation represents the Swedish timber and forest industry.

"The representative of the organisation is market annalist and states that the current developments on the timber market is the effect of a wide range of factors that affect the balance in the mechanism of supply and demand. Most important factors are: The growing demand for timber on the European market, growing exports of timber to Asia and Africa from the Baltic states and Russia, the EU import policies and taxes on timber and timber product from outside the EU, The decrease of production in Austria and Finland."

Biomassa stroomlijn

This company is specialised in the trade of recycled timber and biomass from outside the forest.

"The export of recycled timber to Germany and Belgium has increased substantially over the past six to eight months. Most recycled timber is sold to the panel industries. In Belgium the greenhouse industry is changing from gas to biomass as fuel as a result of the gas prize. In response to the information from the Belgium panel industry, the company doe not confirm the competition of the panel industry with the power plants as a result of the improved refine techniques. The company states that the panel industry has a lack of raw material due decision to shift entirely to the processing of recycled timber. With the growing demand of building material the panel branch has an instant shortage of raw inputs and shifting to fresh chips is rather difficult."

Fritz Schainhorst

This company is based in Germany and specialized in the trade of round wood.

"As a result of the expanded processing capacity in Germany the demand for round timber has increased rapidly. Also the demand for firewood has increased more than in recent years."

Bockelman-Holz

This company is also based in Germany and is specialized in the trade of round wood.

"The representative of the company states that the demand for fire wood has increased strongly compared to last year, but is growing in the same pace as other timber and timber products. Reason is the increased processing capacity in Germany."

Holzhandlung Sachse.

This company is also based in Germany and is specialized in the trade of round wood.

"The representative states that the development of the timber market is strongly influenced by the new VAT rates. The company is not able to indicate whether the demand for firewood has increased as firewood is traded in a wide range of units (m³, bag etc) and the company has only sales data in Euro's

Avison Management Services

This company is based in British Columbia Canada and operates as forest management consultancy agency. "The total amount of timber exported to the US is 50% of the total exports of Canada. The importance of the US market is evident. Since 2005 the ho9usebuilding market in the US has decreased about 30% and the expectations are not very positive. As a result of the mountain pine beetle pest, the annual harvest has been increased up to 4,6 million cubic meter from the Vanderhoof forest district whereas normally only 1,9 million cubic meter is harvested. This has an immediate effect on the timber prise.

Findings



The extreme price developments as seen over the past six to eight months is not the result of one or two reasons but is the result of a combination of several factors. Factors that have been developing over a longer period, for example the economic growth in the far East but also factors that have occurred relatively suddenly, for example the VAT rates in Germany. During this quick scan the market principle that prize development is depending on order and demand is used to analyse the development on the market. Below factors influencing demand and supply more than normal are summarized.

Factors that have been influencing the demand:

- The purchase of sawn timber in the first half year in 2006 was not optimal as the forecast of the economic growth was underestimated. Stocks were sold out more quickly than expected which forced the trading sector to buy more early than expected.
- The demand of timber from the region has increased as the flow of timber from Eastern Europe are shifting to the far East.
- The VAT rates in Germany are altered as from the beginning of 2007. The trading sector is stockpiling building material rapidly.
- The economic growth of in Europe is strong with the direct effect on the demand.
- The MEP regulations for the energy sector has a positive effect on the demand. Power producers have become a serious competitor on the market of fresh wood chips.

Factors that have been influencing the supply:

- Supply from Eastern European countries and Russia is decreasing. The processing capacity is extended locally this opened possibilities of export to the far East and made the eastern region less dependent on the western regions.
- Forest mangers are despite the urge and better offers from the timber trading sector not able or not willing to respond to the situation on the market.
- Timber harvest in Finland has decreased as a result of the changed tax system. Forest owners are hesitating to harvest.
- The efforts of the international community to stop the flow of illegally harvested timber is taking effect. The current developments on the Malaysian timber market is the direct effect of the decreasing exports from Indonesia.
- In the past decades, the supply from European forest has been artificially high as a result of a series of storms. The compensation has started in the last harvesting season (2005-2006).

Expected developments.

The developments in North America will probably cause a surplus on the timber market. The economic developments and the housing market in the US is decreasing. In Canada and especially BC timber harvest has grown three times in regions affected by the mountain pine beetle. This development can release the market in the rest of the world temporarily with a positive effect on the prize.

The overall supply of timber on a global scale will gradually change and stabilize but will not increase in the same pace as the demand. Unexplored sources like Bolvia and Peru already show that exploitation is very expensive and probably economically invalid on the long term. Illegally harvested timber will be banned. Harvesting rates will be decreased as a result of the introduction of responsible management systems.

The demand will grow worldwide. Markets in Latin America, Africa and South East Asia are developing and will also in future.



Conclusion.

Considering the developments on the timber market and the economic developments on global scale, all signs point in the direction that timber is becoming a scarce commodity. The timber market shows similarities with the oil market where relative small incidents have big effects. For example the miscalculations of the trading sector and the VAT change in Germany cause an extreme peek in the demand with an unpredictable effect on the balance between demand and supply.

The total demand is growing and the total supply from the global sources will not grow equally and are spread over more actors on the global market.

The availability of (woody) biomass will probably follow the developments of the timber market in general as substantial amount of biomass are derivates (wood pellets) from the processing sector.

With increasing cost for transport and the competition on the global market, the European market will be increasingly depending on (own) local sources. This opens up possibilities for forestation and biomass plantations in the near future.