

Overcapacity

MMMA Newsletter for PF Asia Mar/Apr 2019

It is no secret that the South East Asian MDF and Particleboard businesses have encountered severe problems of declining prices and reduced profitability. So why has the darling of the wood panel business which has experienced significant growth for the past 30 years encountered such a problem?

In a single word, “Overcapacity”, has been the cause.

Karl Max famously wrote that *“A capitalist society will tend towards overproduction in the pursuit of profits, ultimately resulting in diminished returns, a crisis of capital and eventual poverty.”*

So what is Overcapacity?

The simplest definition is when **Supply exceeds Demand**.

In the case of MDF, it is not the per se decline in the demand for these products nor even the introduction of new disruptive technology. It is over investment in new capacity without a similar increase in demand. On the Demand side, the growth in usage of MDF had slowed significantly to only 1% globally as of 2017, whereas in 2010, global consumption increased by 17% p.a.

The latest figures available for 2017 showed that the global consumption of MDF was approximately 100million cubic meters annually. My estimate is that the growth in 2018 and 2019 will probably be insignificant or could even register a slight decline due to the absence of synchronous global economic growth.

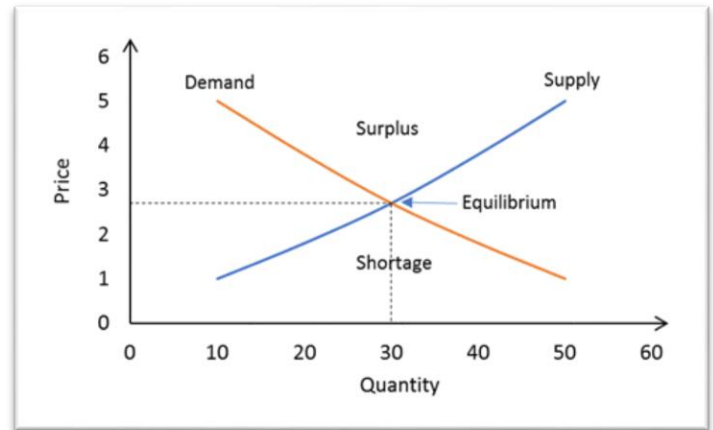
I would first like to examine some of the issues and concerns regarding the Demand side of the equation before considering the Supply issues and then to ponder some possible Outcomes.

Global consumption of MDF has increased steadily by approximately 6% Year on Year since 2007, but that growth has slowed significantly since 2015. China accounts for more than half of that consumption and is estimated to consume over 55million cubic meters annually, but this rate of increase has declined slightly since 2015. The other major consuming countries lag far behind China with the second largest consumer, the US only using 4.6million m3 p.a. Following behind the US is Turkey, Iran, Brazil, Poland and South Korea. These countries including China account for 80% of the global consumption in 2017. If we examine the data in more detail, we find that the annual growth rate of consumption was the highest in Iran, averaging at more than 14.5% p.a. between 2007 and 2017. Iran was followed by Turkey and Poland, the only other two countries with significant growth in consumption.

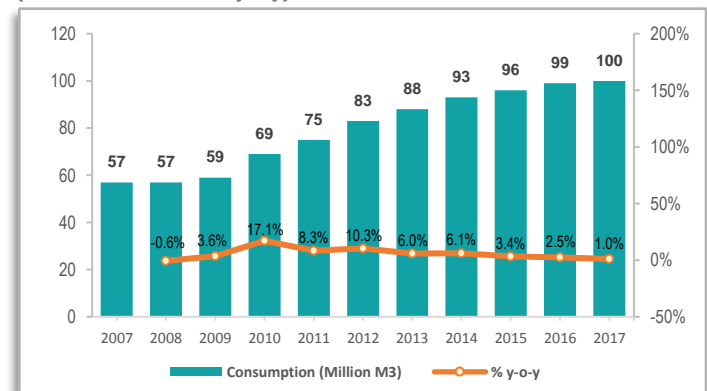
If we look at the data for 2017 we see that the Production capacity (Supply) of MDF was approximately 102million cubic meter p.a. globally. The first thing that we noticed was that this is not such a large mismatch between Supply vs Demand, the difference is less than 2%, so the markets were considered to be healthy. Breaking down the figures further we note that China was the largest producer with an output of about 59million m3. The next largest producers were Turkey, Brazil, US, Thailand, Poland, Russia and South Korea with between 3 to 5% global share each.

When we tie these Demand and Supply figures for 2017 together, we can conclude that:

- China was a Net Exporter (Producer) even though it was the largest consumer.
- The US, Turkey, Poland, Brazil and South Korea were nearly balanced in terms of Supply v Demand.
- Iran was the largest Net Importer.
- Thailand was the 2nd largest Net Exporter.



Market Volume, in Physical Terms, 2007 – 2017
(Million cubic meters, % y-o-y)



Source: IB AI Platform, IndexBox analysis

When we take into account what has happened in 2018 and what is likely to happen in 2019, we can perhaps understand why the industry especially in South East Asia is facing so many problems.

MDF consumption is dependent on economic conditions, the production of furniture, joinery and construction materials.

The Chinese construction market is poised to slow down as China adjusts its economy to be more service orientated as opposed to manufacturing based. Urbanisation will continue and investments will be made in infrastructure, albeit at a reduced pace. This could potentially mean that China will find itself as a larger net producer of MDF!

The US, Turkey, Poland, Brazil and South Korea will continue to balance domestic Supply with Demand. Opportunities could arise for exporters in these markets if the landed cost from exporting countries can compete with local delivered prices.

Regretfully, Iran has fallen upon very hard economic times. The US has withdrawn from the Iran Nuclear Deal and has imposed the most severe sanctions to befall any country for decades. The local currency has depreciated by about 40% since the beginning of 2018, investments have ground to a halt and US Dollar transactions have become near impossible. Within one year Iran has fallen from being the largest single net importer of MDF (approximately 2.2million m3 in 2017), to becoming one of the smallest importers of MDF.

Thailand was already a significantly large exporter of MDF in 2017 (1.3million m3), second only to China. In 2018 and 2019 Thailand will be adding a conservative further 2.5million m3 in capacity. If domestic consumption does not increase this means Thailand will potentially have 3.8million m3 of MDF per annum available for export.

So where will this additional MDF capacity be sold?

You may ask what about India, the Middle East, Vietnam and Japan?

India should be a driver for MDF consumption but the up-take has been slow at best and the market has become very protective of local producers of MDF thus further slowing consumption.

The Middle East is a very significant market when considered as a region but demand has been adversely affected by the weak oil prices, and the Syrian & Yemen conflicts.

Vietnam has found itself in a very unique position. Over the past few years, the furniture manufacturing capacity has grown almost exponentially, driven in part by the US sanctions against China. This has propelled Vietnam into one of the fastest growing MDF markets, but at the same time Vietnam has continued to invest in MDF capacity. The result is that its consumption of MDF has risen but its net imports remain stable.

Japan is a very special case, its claim to fame is to be the world's 'most lucrative' MDF market with the highest prices per cubic meter, not seen anywhere else in the world. However, through a policy of non-trade barrier legislation and the control of the "Sogo Shosha" Trading Houses, it is very difficult for non-Japanese companies to penetrate this market.

Looking forward, what can we predict?

Fuelled by the rapid increase in the production capacity of Thai MDF, without the growth in imports from consuming markets, especially to Iran and to a lesser extent the Middle East, we will continue to see weakness in the prices for South East Asian rubberwood MDF for the foreseeable future.

John Maynard Keynes in his thesis on Overproduction, stated that if demand could not be increased naturally, then the only solution was direct government intervention otherwise financial ruin and diminished returns on capital would become inevitable. He was of course, referring to national economies and not the MDF industry, but the same principles apply.

There are many examples in recent history regarding the dilemma of Overcapacity but in the end, they follow the same path. Case studies have been written about the Steel Industry, Car Industry, Container Shipping, Cement Industry, and even commodities like Coal and Oil.

What can be done to overcome this problem?

1. Lower the Selling price to stimulate demand.

This is still a work in progress since 2018, but unfortunately the outcome has not been very positive with markets not being able to increase consumption, whilst other markets have actually reduced consumption due to other factors.

2. Reducing the Production Volume.

Unilaterally, this is a very tough call, because if one company cuts production the reduction in volume would be quickly taken up by one of its competitors resulting in long-term loss of market share. The only way this strategy could work is if the industry multilaterally agree to cut production, which unfortunately is very unlikely.

3. Develop New Markets.

Many companies are attempting to do this, but with limited success. MDF is considered a "high volume, low value" item and distribution and logistics expenses form a very significant portion of costs.

4. Seek Government Assistance.

This has been done for industries that are considered of national importance such as steel and car producers. History has taught us that these measures at best, just delay the inevitable and can cause industries to become even less efficient in the medium and long-term.

5. Impose Import Taxes and Duties or other Non-Trade Barriers.

This is an effective way to protect a specific industry sector at the expense of other industries or the consumer within a domestic market. This has been successfully implemented in India with high import duties on MDF resulting in an inefficient furniture and construction industry. Whilst in Japan, complex Non Trade Barriers have created the highest MDF prices in the world.

Personally, I think that it will be very difficult if not politically impossible to implement the above solutions in any meaningful way for the MDF industry in South East Asia. Regretfully the industry has to be prepared for;

- Further Price Cuts
- Unsold Goods and High Stocks
- Increasingly aggressive or unfair trade practices
- Economic Losses
- Reduced profits and the potential collapse of companies
- Wage cuts
- Long term and irreversible damage to the industry

On a slightly more positive note, it is interesting to see how China has been tackling the problem. I think there is a common sense approach within the political hierarchy in China that sees the inevitability of manufacturing Overcapacity. As a result, they have been accelerating the transformation of the economy from being the “lowest cost” global manufacturer to being a “high productivity, high tech and high quality” service provider. This is demonstrated where China is forcing the closure of older, polluting factories through environmental legislation and encouraging Chinese companies to merge to drive efficiencies and consolidate export sales. The Chinese government is even making the financing of new investments for such industries more difficult and encouraging re-investment in more value added, efficient, automated and downstream manufacturing.

To grow its export market despite the threat of US Tariffs, China is expanding through the Belt and Road initiative.

Perhaps we can all learn some lessons from China, or we should not have found ourselves in this position in the first place!