

FUNDAMENTAL ANALYSIS DEPARTMENT PALM OIL INDUSTRY REPORT



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Introduction

Oil palm is derived from the reddish pulp of the fruit of a palm oil seed. Through a series of processes, it has the ability to produce two different types of oil, namely palm oil and palm kernel oil. Palm oil remains the main output as it is used in a wide variety of food products such as cooking oil, shortenings and margarine. In contrast, palm kernel oil is a raw material used in the production of non-food products which include soaps, toiletries and candles.

Although a wide variety of oils remains available apart from palm oil, the many advantages palm oil possesses allows it to remain the most consumed oil at 52.1 million tonnes¹. One key advantage is its unique chemical composition in contrast to other vegetable oils. This peculiar trait creates a longer shelf life and also results in palm oil to remain in a natural semi-solid state, thereby reducing wastages and boasting superior health benefits.

With its unique chemical composition, palm oil remains a necessity we use in our everyday lives. Demand for palm oil thus grows in tandem with population growth. However, certain extraordinary events may still hamper demand. For example, a global economic downturn creates a possibility of a slowing food demand, affecting the global demand for palm oil. In addition, price of competing vegetable oils may also effect the demand for palm oil. However, as the masses becomes more consciously aware of the many health benefits palm oil brings, its demand remains inelastic, growing steadily and at a faster pace as compared to the other competing vegetable oils.

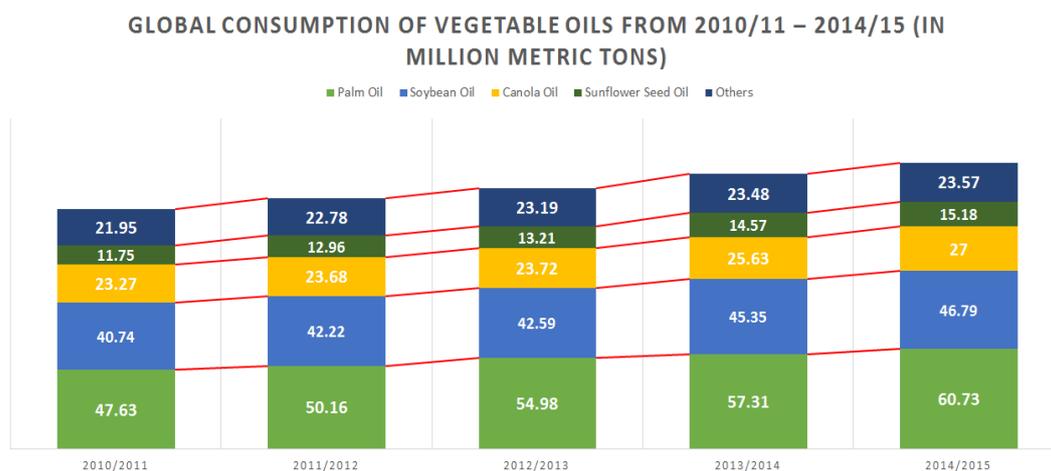


Table 1: Growth of Consumption of Vegetable Oils²

The global production of Palm Oil remains dominated by both Indonesia and Malaysia, accounting to 85% of the world's palm oil production. This is due to the fact that palm trees require warm temperature, sunshine and plenty of rain in order to maximise production. Efficient producers may achieve yields as high as eight tonnes of oil per hectare. With both Indonesia and Malaysia enjoying a somewhat monopolistic position amongst Palm Oil producers, this industry remains crucial to the countries' economy as it remains an important foreign exchange earner and a source of producing jobs. Therefore, Palm Oil prices are heavily regulated by policies enforced by the two countries, as it protects its economy. One such example is a recent export tax imposed by Indonesia that benchmarks the price of crude palm oil in the market and export levies coming in the year 2015 should they miss out on the export taxes due to low palm oil prices.

¹ Year 2014. http://www.simedarby.com/upload/Palm_Oil_Facts_and_Figures.pdf

² (<http://www.statista.com/statistics/263937/vegetable-oils-global-consumption/>)

Porter's five forces

To illustrate the overview of the industry, we use Porter's Five Forces to analyse the palm oil industry:

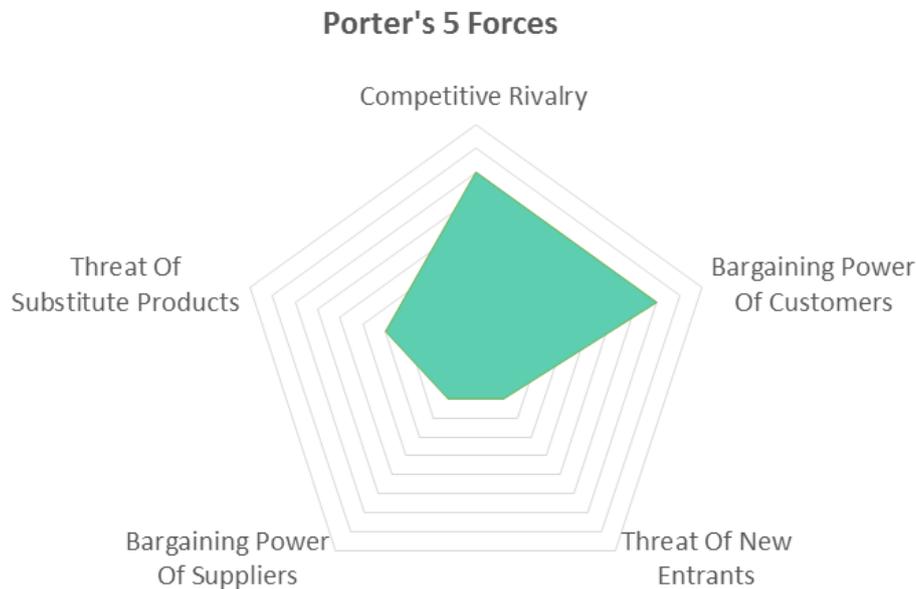


Figure 1: Porter's 5 forces overview of the Palm Oil industry

Bargaining Power of Consumers: High

Palm oil and its products are sold through large-scale retailers and distributors, customers hold a certain degree of bargaining leverage. In addition, the lack of product differentiation, both in terms of its physical attributes as well as in branding, allows products to be easily substituted amongst other competitors' products on the basis of price. This is exacerbated as one of the key factors in the demand for palm oil is the value of its low price, and hence consumers of palm oil are highly sensitive to prices.

Threat of New Entrants: Low

The palm oil upstream business is one that generates economies of scale at high quantity-outputs. As new entrants would either need to build a large network of farmers or amass a large amount of land to get a business of similar operations going, the threat of new entrants is very low. These options require high capital costs and extensive lengths of time to achieve the necessary economies of scale, before the firm can be seen as a legitimate threat. On the flip side, firms already engaging in similar manufacturing processes could enter particular downstream markets, which may demonstrate low mobility barriers.

Bargaining Power of Suppliers: Low

The biggest players in the industry are typically vertically-integrated agricultural products conglomerate – they own and manage the entire production chain from upstream raw material sourcing, to downstream refining, and to selling and distribution of products. Many of the firms' input raw materials are self-derived, hence it has few major suppliers, and supplier power is low. Costs associated with production are thus highly stable, as its input costs are independent on commodity prices. In addition, the major players have geographically diverse business interests, most commonly having large interest in Malaysia, Indonesia, Africa, China and India that help to spread out potential cost risks.

Threat of Substitute Products: Moderate

On one hand, palm oil is a fundamental raw material, especially working as substitutable inputs to certain industrial-grade products. On the other, in the retail space palm oil is often substituted by related commodities including soybeans and rapeseeds. Also, the threat of economically competitive biotechnology is a point to watch into the future, where healthy commercially-viable alternatives are being developed.

Competitive Rivalry: High

The Palm Oil industry is characterised by a large number of established conglomerates in the industry, with strong business interests and fundamentals across the entire supply chain, as well as a fringe of small-scale upstream producers. The threat from substitutes and bargaining power of consumers, coupled with heavy investment costs mentioned previously, have made exiting the industry expensive and difficult.

Outlook

Anemic Economic Growth

Lackluster global economic growth has weakened demand for commodities on an international scale. Consumption from China and Europe, two major importers of palm oil have softened, leading to a direct impact on Palm Oil Prices. Falling economic growth has led to a 12% fall in volume Palm Oil exports from Malaysia.

Healthy Output Levels

In contrast to weakening demand, global production of palm oil seems to be very healthy due to good growing conditions. The July production in Malaysia was up 9% from a year earlier, with Indonesia's production volumes rising by more than 10% for 2015.

Rising Stockpile Levels

With increasing production levels combining with slowing demand, stockpiles of palm oil have risen significantly, with Malaysia experiencing a 28% increase in its stock levels over the past year, and inventories standing at record levels of 2.91M tonnes. Similarly, inventory levels in Indonesia have risen by almost 25% year-on-year and are only just below record output levels set in the middle of 2015.

Prices of Related Commodities

Oil



Figure 2: 5-Year WTI Oil Price

Crude oil spot prices have fallen by nearly two-thirds in the past 18 months, falling below the \$40 level, as the oil glut has persisted. Futures have priced in the likelihood that oil prices will stay at depressed levels for the next few years. This represents a major blow to palm oil's push to be seen as a viable alternative biofuel, and demand for palm oil biofuels is likely to stay depressed in the short to medium term.

Soybean

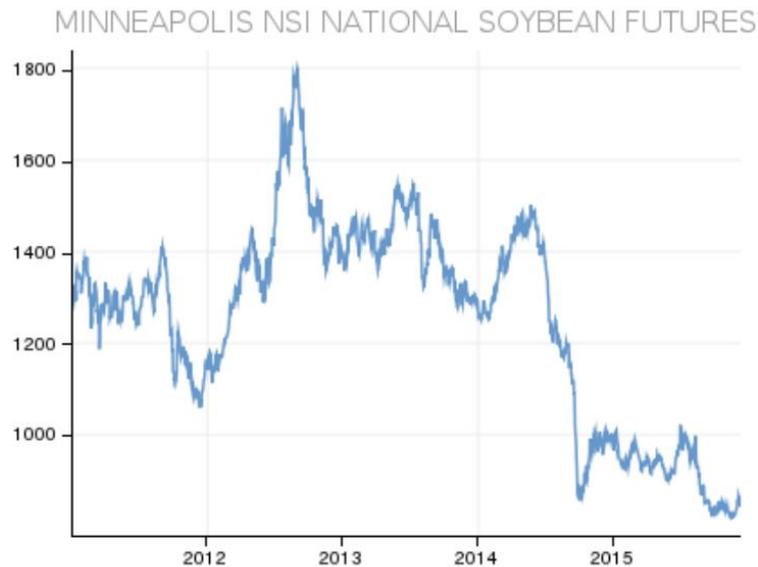


Figure 3: 5-year Soybean Price Chart (Source: Quandl)

Soybean oil is the second largest edible-oil behind palm oil. Prices of Soybean have been on a general downtrend over the recent past, with spot prices having fallen by 40% from its peak in 2012. Recent forecasts by the U.S. Department of Agriculture for a strong soybean harvest will inevitably lead to a fall in soybean prices leading to fears of a global oilseed glut.

Indonesia Palm Oil Pledge (IPOP)

The Palm Oil industry has long been accused of poor environmental practices, where the act of burning high-carbon peatlands to cultivate plantations contributed high levels of greenhouse gases. The clearing of significantly areas of rainforest were also seen as unsustainable. To counter these criticisms, the IPOP was signed by the big 5 palm oil players in Indonesia in 2014. A central theme of this pledge is to cut carbon emissions, and achieve international certification in environmental sustainability.

Whilst achieving certification would improve the image of palm oil globally, compliance with environmental sustainability is expected to materially increase the costs of production, which threatens the competitiveness of Indonesia's palm oil relative to production in Malaysia and elsewhere. Furthermore, the Indonesian government has been a vocal opposition to the industry's push towards sustainable development, believing the restrictions it puts on small-scale farmers will jeopardise the country's palm oil industry. This has created uncertainty over possible future ramifications of the pledge.

Key Sector Drivers

Supply side: adverse weather conditions

El Niño effect has proven to push up prices by reducing yield. It has re-emerged in May 2015 and seriously decreased rainfall levels over the August-October 2015 period in South East Asia. Palm oil tree yields in the 2015/16 season would drop significantly and slow down production. Performance of the upstream segment (plantations and mills) in FY16 is bleak.

In particular, plantations in large parts of Indonesia will be more badly affected by the drought conditions recorded in South East Asia over the August-October period. Indeed, some of Indonesia's keys growing palm oil regions were more severely affected than others, including Kalimantan states (central, southern, western and eastern states in Borneo) and the island of Sumatra, which together represent more than 40% of Indonesia's palm oil production. Meanwhile, Peninsular Malaysia and Malaysia's Sarawak region (in Borneo) received lower rainfall than in previous years, but were relatively spared compared with the Indonesian regions mentioned above.

Demand side: lacklustre except India

Global demand will be weak relative to historical levels in 2015 and 2016, as import demand growth is declining in key markets, including China, US and the EU. China's slowing GDP and development of local crushing capacity (which prefers soybean rather than palm oil) has led to continual decline in palm oil imports. The environmental concerns regarding deforestation as a result of growing palm oil has also led to weak demand from US and E.U., in addition to the health issues as some study has shown that palm oil's high fat content is detrimental to the heart.

Whereas in India, domestic demand from rapidly growing population consistently outpaces domestic supply of oilseed, leading to increase in demand for imports. The trend is further stimulated by monsoon season and inclement domestic weather that has wiped out part of domestic supply.

Key Industry Trends

Efficiency gains

Yield has stagnated over the years as companies focus on investing on expansion of plantations rather than efficiency improvement. As land available for expansion is shrinking, margins are on the decline due to low prices. We expect companies to focus on efficiency gains, through cost control, research and development.

Lower capital expenditure

In view the downturn in the sector at the moment, and the declining cash flow to palm oil firms, most firms have revealed plans to decrease or maintain a low level of CAPEX over the next five years. Many projects have been delayed or cancelled.

Case Study – Wilmar International Limited (SGX: F34.SI)

Current Price: \$2.85

Company Description

Wilmar International Limited is one of Asia's leading agribusiness groups. Wilmar's business activities include oil palm cultivation, oilseed crushing, edible oil refining, sugar milling and refining, specialty fat, oleochemical, biodiesel and fertiliser manufacturing and grain processing. Wilmar International Limited was founded in 1991 and is headquartered in Singapore.

Key Financials		(USD mil)	FY12A	FY13A	FY14A	FY15E
Market Capitalization (mil)	16740 SGD	P/E (x)	13.90x	12.10x	13.9x	10.0x
Shares Outstanding (mil)	6403.4	P/B (x)	1.20	1.20	1.00	-
Free Float (%)	29.4	ROE (%)	9.07	8.79	7.98	10.4%
52-Wk High	3.42 SGD	Div Yield (%)	1.53	1.61	2.31	-
52-Wk Low	2.51 SGD	Net D/E	0.31	0.45	0.46	-
P/E (ttm)	9.4	EBITDA (mil)	3368.4	3404.8	3007.2	3109.4

Table 2: Key Financial Ratios of Wilmar International (Source: Bloomberg)

Dominant regional position across diversified sectors

Despite being a relatively young firm, Wilmar has established a strong market position and has grown into a dominant regional player. It has seven segments, five of which are leaders in the respective market. Wilmar entered the sugar market in 2010 and is now one of the largest sugar producer and refines 75% Australia and New Zealand's sugar requirements. In the consumer pack oil sector, it has a 45% market share in China, 35% in Indonesia, 20% in India and 55% in Vietnam. Given the relatively high barriers of entry and the vast potential for development in the region, Wilmar is bound to benefit from the rising population and increasing consumption in the developing markets.

Unique vertically integrated agribusiness model promises lower cost

Over the years Wilmar has invested substantial resources to develop a comprehensive chain of business, from origination, processing to branding, merchandising and distribution. It owns the entire supply chain upstream to downstream, with a huge complex operation that is rarely seen in Asia. This poses a challenge for the operations management but this also promises tremendous opportunity for better control, higher efficiency and greater stability, all achieved at a lower cost and greater resilience. Wilmar has proven to overcome the challenge and successfully duplicated the vertically integrated model it uses for palm oil industry to the sugar industry. We believe that with further refinement and R&D efforts, Wilmar is bound to benefit from the model's multiple advantages in the future.

Commitment to research and development effort in China key to product differentiation

Wilmar's R&D efforts took place in China, Malaysia, Indonesia, India, Vietnam and Germany, and it is the key to providing sustainable solutions for optimization of resources and minimizing environmental impact. Its Shanghai R&D centre cooperated with China Nutritional Society to promote the 2014 Dietary Reference Intake guideline and subsequently designed a new formulation with balanced fatty acid composition for the group's bestselling Arawana blended oils. The Arawana Food Nutrition and Safety Fund also supported three projects by the China National Centre for Food Safety Risk Assessment. This strengthens Wilmar's already dominant presence and corporate reputation in China, and further differentiates its product as the healthy choice.

Tapping on African market with huge potential revenue boost

Africa has been the world's second fastest growing economy over the last two decades with economic growth averaging 4.5% per year in real terms over the past twenty years, and expected annual GDP rise of 6%. The youth population of 1.11 billion is a key driver for growth, and is set to boost consumption and hasten urbanization. With more than 60% of the world's unutilized arable land, of which only an estimated 14% is put to use, low per capita consumption and a young and rapidly growing population, Africa has great potential for agricultural development and consumer markets. Palm oil accounts for more than 70% of African edible oil consumption, and yet the continent is a net importer of palm oil. Wilmar has recognized the potential and seized through joint ventures 59,000 ha of oil palm planted area in West Africa and Uganda. The management has identified Africa as the key future revenue driver and would continue to invest in the continent.

Forward-looking management

Wilmar's management has been ahead of the curve, having introduced its "No Peat, No Deforestation, No Exploitation" policy in 2013, prior to the introduction of the IPO. We believe Wilmar's head start reduces the policy-related risks it faces, and holds the driving seat to the industry's push towards sustainability.

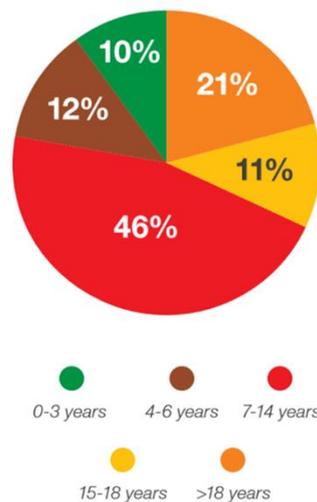


Figure 4: Wilmar's Plantation Age profile as at 31 December 2014

Similarly, Wilmar's management has maintained a highly favourable plantation profile with an average age of 13 years, and balancing the number of developing and mature plantations. Combined with a CAPEX budget that has remained stable over the years, is a display of management's propensity towards future planning.

Case Study – Golden Agri Resources (SGX: E5H.SI)

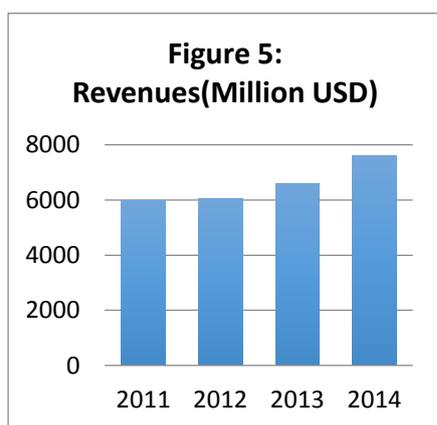
Golden Agri Resources (GAR) has been listed on the Singapore Stock Exchange ever since 1999 and has developed to become one of the leaders in Oil palm industry. GAR primary activities include cultivating; processing fresh fruit bunches into crude palm oil and palm kernel. GAR has close to 472800 Hectares in Indonesia alone and has plans to continually further expand into China and Malaysia via their vast distribution network and integrated business model.

Key Financial Ratios for Golden Agri Resources

Key Financials		(USD mil)	FY12A	FY13A	FY14A	FY15E
Market Capitalization (mil)	4108 SGD	P/E (x)	-	-	16.9x	38.6x
Shares Outstanding (mil)	12837.55	P/B (x)	-	-	0.5	0.5
Free Float (%)	29.4	ROE (%)	4.95	3.61	1.30	0.57
52-Wk High	0.47 SGD	Div Yield (%)	-	-	1.14	-
52-Wk Low	0.28 SGD	Net D/E	0.17	0.17	0.16	0.19
P/E (ttm)	57.27	EBITDA (mil)	803	658	420	331

Source: Morningstar

Bearish forecast for commodity prices and limited scope of operations



With the bearish outlook in the commodities market and the slumping crude oil prices decreasing more than 45% from \$69USD to \$38USD from the start of the year, this makes GAR a very risky company to invest in at the moment. Despite their huge market share in the oil palm industry this makes them very volatile as their profitability and revenues are very closely related to the oil prices. Figure 5 represents the increase in revenues from 2011 to 2014, however with decreasing oil prices over the past year, this will surely reduce the revenues for 2015. Furthermore, GAR has a very limited scope of operations compared to its competitors such as Wilmar International. GAR focuses on 3 segments, Palm oil, Palm & Laurics and Oil seeds, with a huge majority of

operations purely on palm oil, thus demonstrating that GAR's scope of operations is very clustered and there is very little diversification in the company to absorb the decline in commodity prices.

Increasing debt and poor environmental efforts

Furthermore, GAR has gained a sizeable amount of debt over the past fiscal year as it has increased its liabilities from US\$503Million to US\$5.8Billion due to long-term borrowings and medium term notes being issued. This increase the liabilities reduces the potential of GAR and due to the increase in Total debt/Total capital ratio to 27.4% compared to the previous year of 21.6%. This make GAR less attractive to the investors as future profits generated will have to be used to pay of the interest bearing loans under taken by GAR. Companies also take an active approach in abiding to the regulations ruling palm oil production. Recently the Roundtable for Sustainable Palm Oil (RSPO) required GAR to provide proof of their operations in Indonesia and whether they comply with the rules on environmental and socially responsible practices. This questions GAR's stand towards environmental practices and puts doubt into investors about the company social responsibility. This is very different compared to other companies such as Wilmar, London Sumatra and Sime Darby who have taken conscious efforts to maintain environmental footprint in their respective regions of operations

Biological assets and dividend policy

Furthermore GAR has a poor range of biological assets in its 2 regions-China & Indonesia with 30% of its plantations greater than 19 years and & 7% of the lands deemed as immature (less than 6 years), this lowers the potential yield of oil palm for GAR as it cannot fully maximise and tap on its lands to produce a sizeable harvest. The company also wishes to declare up to 30 % of its underlying profits to its shareholders, however this figure seems relatively too high for a young company like GAR, who should channel profits earned into further investment such as new infrastructure or invest in untapped markets such as Africa.

Conclusion

In conclusion, we believe GAR does not have strong fundamentals in place to weather the decline in commodity prices. In an industry where yield and climate are crucial factors which determine the profitability and revenues for a company, GAR has done very little compared to its peers to mitigate these risk and to broaden its operations hence allowing it to rely on other stream of income in case some of their core streams are affected. Furthermore due to the increasing debt and decreasing crude oil prices, we would expect performance in the short term to be weak.

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