



Turk Tuborg: A Turkish Brewer in a Duopoly offering an 8.0% NOPAT Yield

Investment Thesis

Türk Tuborg is the second largest company in a Turkish Beer market that is a duopoly. Along with Anadolu (Anadolu), the two companies have controlled over 99% of the market for many years. There are significant barriers to entry in the form of economies of scale and brand as the Turkish Beer market requires a two way distribution system and there are restrictions on advertising. Türk Tuborg has outperformed Anadolu increasing its market share from 11.5% in 2010 to 31.4% in 2015. The company also increased its pre-tax ROIC significantly from -3.3% in 2010 to 95.2% in 2015. These improvements came just after new ownership introduced a number of new products to the market. The company offers an 8.0% EBIT yield with pricing power leading to an expected return of 13.0% per year, which is attractive given the barriers to entry in the market and the company's outperformance under current management.

- Expected annual return between 13.0%-15.5%
- We will initiate a 4.0% position in Turk Tuborg.

Key Stats 5/20/2016	INR	USD
Current price	6.53	2.19
Shares outstanding (mn)	322.51	322.51
Market capitalization (mn)	2,106	708
Net debt (cash) (mn)	(313)	(105)
Other claims (mn)	13	4
Enterprise value (mn)	1,793	602
EV per share	5.56	1.87
Average daily trading volume (mn, 6 mths)	335,047	112,575

	TTM	5 Yr Avg		TTM	5 Yr Avg
NOPAT yield	8.0%	5.2%	Revenue growth	26.7%	31.5%
FCF yield	5.4%	2.7%	NOPAT growth	27.6%	- to +
Div yield	0.0%	0.0%	FCF growth	-7.2%	- to +
EV/IC	9.4	11.2	Invested capital growth	15.8%	9.2%
Net debt (cash)/EBIT	(1.7)	(1.1)	ROIC	75.5%	49.1%

Company Description

Türk Tuborg was founded in İzmir-Pınarbaşı in 1967 with production starting in 1969 through a partnership between Tuborg and Yasar Holding Production. Carlsberg took a majority shareholding of Türk Tuborg in 2001 increasing its stake from 2.24% to 50.01% after purchasing 47.77% from Yasar Holding. This transaction valued Türk Tuborg at roughly USD110 million (DKK960 million). Over the course of the next few years, Carlsberg continued to increase its stake until reaching 95.69% in 2003. In 2008, Israel Beer Breweries Ltd, a Carlsberg partner in Israel and Romania, purchased 95.69% stake from Carlsberg for USD44.5 million valuing Türk Tuborg at USD80 million. After the purchase, Türk Tuborg retained its license to continue to produce Carlsberg and Tuborg brands. The 4.31% not owned by Israel Beer Breweries is free float with the company listed on the Borsa Istanbul.

Türk Tuborg owns one of the largest breweries in Turkey with 36,000 tons of malt and 333 million liters of beer capacity. The company produces Tuborg (Gold/Amber/Special/Fici), Carlsberg, Skol, Venus Pilsner, and Troy Light for both Turkey and export markets. The company also produces Vole, Thelch, and F5 for export markets. Türk Tuborg also imports Leffe, Hoegaarden, Guinness, Corona, Weihenstephan, Kilkenny, and Somersby.

Türk Tuborg's products are sold through direct sales and dealers all over Turkey. Corona, Leffe Brune, Leffe Blonde, Leffe Radieuse, Hoegaarden, Weihenstephan, Kilkenny, and Guinness brands are positioned at the super premium beer segment. Carlsberg brand is positioned at the premium beer segment. Tuborg Gold, Tuborg Fici, and Tuborg Special brands are positioned at the standard segment, while, Skol and Venus brands are positioned at the economical beer segment in 2015.

In 2015, Türk Tuborg was the second largest player in the market with a 31.4% volume share of the Turkish beer market behind Andalou's 68.4% volume share.

In 2011, Türk Tuborg launched the Türk Tuborg Brewmaster project with the goal of delivering product variety to Turkish consumer. The company introduced super premium brands Corona, Guinness, Leffe, Weihenstephan, Kilkenny, and Hoegaarden. The project has help increase the company's volume share in the Turkish beer market from an estimated 11.0% in 2010 to 31.4% in 2015.

Barriers to Entry

Within the Turkish beer market the evidence points to significant barriers to entry.

1. Türk Tuborg and Anadolu have accounted for over 99% of the Turkish beer market for many years. At the end of 2015, these two companies represented 99.8% of the market. The high and consistent market share points to no significant new entrants or exits from the market. The duopolistic market structure with a no significant entry or exit from the industry points to significant barriers to entry. Heineken attempted to enter the Turkish beer market, but withdrew in 2006 as it was unable to reach the minimum efficient scale needed to compete.
2. Distribution is a significant barrier to entry. In 2012, 64% of Turkish beer volume was returnable bottles and kegs making a two way distribution system a requirement to compete in the Turkish beer market increasing the investment requirements and complexity of the required distribution network.
3. The distribution network required to compete also points to economies of scale as distribution is a fixed cost independent of units sold. Over the past five years, Türk Tuborg has averaged roughly TRY155 million per year in selling, distribution, and marketing expenses. In 2015, both Türk Tuborg (TRY134.3) and Anadolu (TRY137.6) had a gross profit of roughly TRY135 per hectoliter. Just to cover the fixed costs associated with Türk Tuborg's distribution, a competitor would need to achieve 12% market share.
4. There are significant advertising restrictions on beer and other alcohol decreasing a new entrant's ability to building a brand. There is no alcohol advertising on television or radio. Also, alcohol companies cannot sponsor any sports team and, similar to smoking, all alcohol on television or in movies is blurred.
5. Türk Tuborg seems to have significant pricing power. Since 2008, Türk Tuborg has been able to increase its average selling price by 7% per year. The company's cash gross margin has increased from 49.0% in 2008 to 60.1% in 2015.
6. Total Turkish beer market volume has not grown since 2008, decreasing the attractiveness of the market, and increasing the difficulty of entering the market as lower growth often leads to increased competitive rivalry.

7. Türk Tuborg has little or no working capital requirements. In 2014 and 2015, working capital per unit has been negative and averaged TRY63 million. Negative working capital is a strong sign of a company's bargaining power over both its suppliers and customers.

While the evidence pointing to barriers to entry are strong, there is evidence against barriers to entry.

- Türk Tuborg's recent profitability has been strong with a ROIC averaging over 100% over the past two years, but from 2008 to 2011 ROIC averaged 0%. The lack of inconsistent ROIC is evidence against a competitive advantage.

Overall, the evidence overwhelmingly points to significant barriers to entry that would take years for a new competitor to reach the necessary scale to compete.

Given the evidence points to the presence of barriers to entry, what form do they take? Barriers to entry take the form of economies of scale and brand. Economies of scale are in the form of a two way distribution network that requires a minimum efficient scale of roughly 12.0% just to replicate the smaller of the two large competitors' annual spend on selling and distribution expenses. Additionally, large breweries require expensive equipment that is much cheaper on a per unit basis if the depreciation is spread over many units. Additionally, larger brewers can acquire raw materials and package goods cheaper due to the size of their purchases.

Brand advantage also exists. The restrictions on advertising help existing brands as new entrants cannot build a brand to displace incumbents making brands with an existing relationships and positions more resilient and less resistant to change.

Intensity of Rivalry

Given the duopoly within the Turkish beer market, the intensity of the rivalry between will be a significant factor in determining industry profitability. The industry rivalry seems low. Since 2011, Türk Tuborg has raised prices on average by 8.4% per year while Anadolu has raised prices on average by 8.0% per year. Since 2008, Türk Tuborg has raised prices on average by 7.2% per year while Anadolu has raised prices on average by 7.1% per year. Price inflation has been during a period of increasing excise tax. If the intensity of the rivalry was high, both firms would not have increased prices in an attempt to gain market share given the importance of economies of scale in the industry.

The presence of economies of scale in the industry points to increased intensity of rivalry as one of the drivers of profitability is your size or market share leading competitors to attempt to maintain or increase their share to maintain profitability.

(Capex)/depreciation ratio is used to determine the amount of supply in the industry. If capex exceeds depreciation, industry participants are increasing supply. If supply increases outpace demand profitability will suffer. Currently, the Turkish beer industry volumes are not growing with total volume estimated at 9.67 million hectoliters since 2008. The lack of growth in and of itself typically increases rivalry but with the duopoly it is easier to keep track your one competitor making coordination easier. Despite the lack of growth, the industry capex/depreciation ratio has averaged 134%. A more appropriate capex/depreciation ratio for a no growth, mature industry is somewhere below 75% as less investment goes to the industry leading to depreciation exceeding capex. The capex/depreciation ratio may point to increased rivalry as competitors attempt to fill their new capacity.

The participants sell products that are similar but are differentiated in the form of taste and brand decreasing competitive rivalry as price is an important but not the sole factor in purchasing the good.

Anadolu net debt has ballooned from 0.8 times EBIT in 2011 to 6.1 times EBIT in 2015. The change in fortunes occurred when SAB Miller and Anadolu created an alliance with Anadolu acquiring some of SAB Miller's assets in the region and SAB Miller taking a 26.5% stake in Anadolu. The increase geographical presence and increased debt decreases the Anadolu's flexibility, but it may lead to an increase intensity of rivalry as Anadolu's Turkish beer operations are not generating sufficient operating profit to cover interest expenses.

Türk Tuborg's market share gains also can just after the launch of Türk Tuborg's Brewmaster project. The increased product offerings may be striking a cord with customers that Anadolu is unable to replicate.

Overall, the intensity of rivalry in the industry is low and expected to remain low but this may change given Anadolu's market share losses, profitability declines, and increasing debt load.

Bargaining Power of Suppliers

Suppliers have very little bargaining power. The main inputs into beer are commodity products sold by many sellers where the customers are pure price takers. This bargaining power is reduced further by the duopolistic nature of the market. Barley largest use is not beer but animal feed, which accounts for 67% of consumption. Industrial uses such as beer are the next largest consumer of barley accounting for 21% of total consumption. The variety of uses for barley increases the bargaining power of suppliers. Hops on the other hand are primarily used for beer. The United States is seeing high demand for hops due to the trend towards craft beer, as craft beer uses much more hops than traditional beer. Turkey is not seeing the trend toward craft beer therefore there is a lot less pressure. Hops have less uses and there is much fewer uses for the product decreasing its bargaining power. Overall, due to the commodity nature of inputs, the numerous suppliers of these products, the limited uses of the products, and the duopoly in the Turkish beer market suppliers have very little bargaining power.

Bargaining Power of Customers

The customers of Anadolu and Türk Tuborg are dealers, distributors and large retail chains. In 2012, off-premise accounted for 61.5% of sales in the Turkish Beer market, on-premise accounted for 23.2% of sales, and key accounts accounted for 15.2% of sales. Off-premise and on-premise are serviced by dealers and distributors. In 2014, Anadolu had a network of 170 dealers and 27 distributors in 15 sales regions. The number of dealers and distributors illustrated the fragmented nature of the customer base decreasing the bargaining power of customers.

Similar to bargaining power of suppliers, the duopoly and differentiated products decreases the bargaining power of customers combined with the fragmentation of the customer base leads to low bargaining power of customers.

Threat of Substitute

The main alcohol substitutes for beer are wine and spirits. In 2012, Beer accounted for 58% of alcohol consumption within Turkey, spirits accounted for 33% of alcohol consumption, and wine accounted for 9% of alcohol consumption. Beer is the



cheapest of all alcohol at a cost of TRY11.26 per liter, wine is the next cheapest at TRY54.67 per liter, and spirits are the most expensive with raki costing TRY73.48 per liter. While wine and spirits are substitutes for beer, personal preferences are probably the biggest impediment to substitution. Additionally, the significantly higher cost of wine and spirits makes substitution unlikely.

Growth

As mentioned, volumes in the Turkish Beer market have stagnated at 9.66 million hectoliters since 2008. During this period, Türk Tuborg's revenue increased by 23.69% per year driven by increased volumes (15.41% CAGR) and increased price (7.17% CAGR). Despite the lack of volume growth, Türk Tuborg's volumes increase from 1.1 million hectoliters in 2008 to 3.0 million hectoliters in 2015 with growth coming at the expense of Anadolu's volumes (8.5 mhl in 2008 to 6.6 mhl in 2015). Given the lack of volume growth in the market, growth from volume increases will eventually slow as Anadolu should retaliate in an attempt to win back volume share given the importance of economies of scale on profitability.

Türk Tuborg's ASP (7.2% since 2008) increases are more sustainable given the duopoly in the Turkish Beer market and the relative cheapness of beer to substitutes.

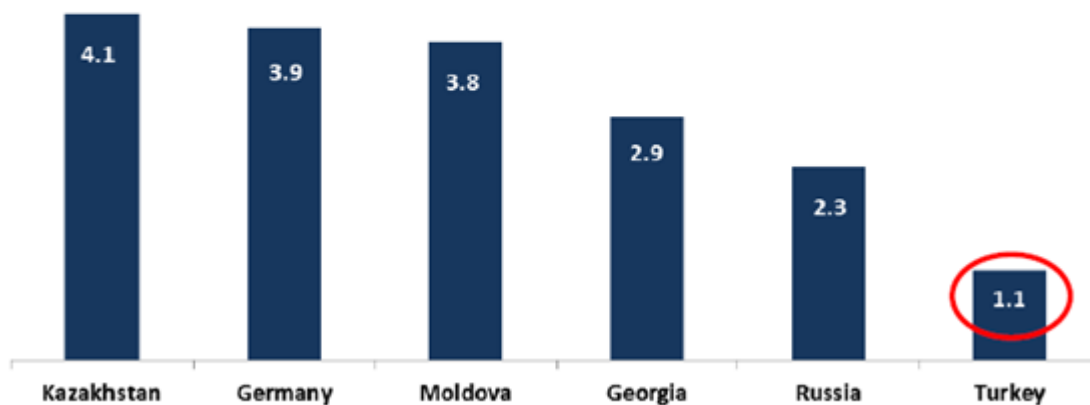
Many often quote Turkey's low per capita consumption of beer and alcohol as a potential source of growth. Turkey consumes beer at 17% of the EU average. This statistic is misleading as Turkey is predominantly Muslim and there are estimates between 40% and 80% of the population do not drink alcohol, which is unlikely to change. Assuming 75% of the population does not drink alcohol, the per capita consumption is 67% of the EU average for beer consumption. With a religion that forbids alcohol consumption playing a large role in the society, there is not going to be a significant growth from increased per capita consumption. Additionally, the current ruling party has a religious slant and has increasing excise tax and advertising restrictions in an attempt to "protect" the public from themselves.

There is a potential for increased penetration of beer companies' distribution channel as there are only 1.1 off-premise outlets per 1,000 people well below regional peers.



Limited Availability Of Beer In Off-Premise Channel

Number of beer selling outlets per 1,000 people



Source: Anadolu Efes

Management

In 2008, Israel Beer Breweries Ltd, a Carlsberg partner in Israel and Romania, purchased 95.69% stake from Carlsberg from USD44.5 million giving Türk Tuborg a total enterprise value of USD80 million. The company is owned by Central Bottling Company, which has held the Israel franchise for Coca Cola products since 1968.

Israel Beer Breweries has done a good job of increasing the intrinsic value of the company since acquiring its ownership position. Since 2008, revenues have increased by 23.69% per year as volumes increased by 15.41% per year and prices increased by 7.17% per year. The volume increases are particularly impressive given volumes have not grown in the Turkish Beer since 2008.

The company has significantly outperformed its main rival Anadolu. Since 2011, Türk Tuborg has taken almost 19% volume share, increasing its share from 12.5% to 31.4%. Over that period, the company's ROIC increased from 1.1% to 95.2% while Anadolu' Turkish Beer operation's ROIC decreased from 76.5% to 29.3%, illustrating the importance of economies of scale on profitability.



Per Unit (TRY/hl)	2015		2011		2008	
	Turk Tuborg	Anadolu Efes	Turk Tuborg	Anadolu Efes	Turk Tuborg	Anadolu Efes
Total volume (mhl)	3.0	6.6	1.2	8.4	1.1	8.5
Market share	31.4%	68.4%	12.5%	87.0%	11.5%	88.0%
ASP	245.1	225.0	177.7	165.6	151.0	139.1
COGS	(110.8)	(87.4)	(95.9)	(51.1)	(90.6)	(45.7)
Gross profit	134.3	137.6	81.8	114.4	60.4	93.4
Opex	(74.6)	(93.4)	(80.5)	(63.5)	(75.0)	(43.8)
EBIT	59.7	44.2	1.3	50.9	(14.6)	49.6
Working capital	(23.4)	76.5	21.5	20.8	14.7	17.6
Fixed assets	86.1	74.0	99.5	45.8	94.6	38.6
Invested capital	62.7	150.5	121.0	66.6	109.3	56.2
ROIC (pre-tax)	95.2%	29.3%	1.1%	76.5%	-13.4%	88.2%
Net Debt/EBIT	(1.7)	6.1	28.8	0.8	(2.6)	0.2
Interest cover	15.0	(0.8)	(0.2)	(40.7)	0.4	(1,054.5)

Source: Company data

Since 2008, Türk Tuborg's ASP premium averaged 5.9%.

ASP (TRY/hl)	2008	2009	2010	2011	2012	2013	2014	2015
Turk Tuborg	151.0	166.5	170.2	177.7	190.1	204.4	205.7	245.1
Anadolu Efes Turkish Beer Operations	139.1	148.7	152.2	165.6	186.8	207.9	209.7	225.0
Turk Tuborg's absolute premium	11.9	17.7	18.1	12.1	3.3	(3.5)	(4.0)	20.2
Turk Tuborg's relative premium	8.6%	11.9%	11.9%	7.3%	1.8%	-1.7%	-1.9%	9.0%

Source: Company data, Reperio Capital Research estimates

Türk Tuborg's market share gains came during a period where the ASP premium declined.

	2008	2009	2010	2011	2012	2013	2014	2015
Turk Tuborg's relative ASP premium	8.6%	11.9%	11.9%	7.3%	1.8%	-1.7%	-1.9%	9.0%
Anadolu Efes volume share	88.0%	88.0%	88.0%	87.0%	83.0%	76.0%	71.0%	68.4%
Turk Tuborg volume share	11.5%	11.5%	11.5%	12.5%	16.5%	23.5%	28.5%	31.4%

Source: Company data, Reperio Capital Research estimates

It seems Türk Tuborg's products are viewed as premium products by the public given the consistent ASP premium relative to Anadolu. With Türk Tuborg prices decreasing relative to Anadolu, consumers may see themselves getting a higher quality product at a more attractive price. The price premium returned in 2015, yet Türk Tuborg continued to gain market share, which seems to invalidate the theory of consumers purchasing due to the decrease in Türk Tuborg's premium.

Over the review period, Türk Tuborg's cost of goods per unit increased by 3.7% while Anadolu' cost of goods sold increased by 14.3%. Anadolu' Turkish Beer operations still produce goods cheaper than Türk Tuborg but there has been a significant convergence of costs. Anadolu producing goods cheaper makes sense given the presence of economies of scale in the industry allowing the company to obtain a discount for raw materials purchased in bulk and spread depreciation over a greater number of units.

Since 2011, Türk Tuborg has been able to decrease operating expenses per unit by 1.9% per year while Anadolu' operating expenses have increased by 10.1% per year. Türk Tuborg is much more operational efficient with operating expenses per unit at TRY74.6 compared to Anadolu TRY93.4. In 2011 and 2008, Anadolu' operating efficiency was well ahead of Türk Tuborg's but declining volumes and cost inflation lead to the increase in operating expenses per unit increased.

Türk Tuborg's operating efficiency is the key differentiator allowing the company to generate an operating profit per hectoliter that is 35% greater than Anadolu, not an insignificant gap.

Türk Tuborg also has a big advantage on capital efficiency in 2015 as working capital per unit is TRY-23.4 compared to TRY76.5 at Anadolu. Fixed assets are similar with Anadolu having a slight advantage as expected given the presence of economies of scale as larger breweries can spread fixed capital investments over a larger number of units. As the volume differential has shrunk, so has the difference in fixed capital efficiency.

Overall, Türk Tuborg's ROIC is much higher than Anadolu in 2015 at 95.2% compared to 29.3%, a change from 2011 and 2008 where Anadolu' ROIC averaged 82.4% compared to an average ROIC of -6.2% at Türk Tuborg in 2011 and 2008.

Overall, management has done well operationally increasing volumes, ASP, operating margins, capital efficiency, and ROIC.

The company has not allocated capital to anything but the business. There have been no dividends meaning net debt has decreased from TRY42 million to a net cash position of TRY313 million. Cash is starting to build up on the balance sheet at almost 2 times operating income so the company could start returning that cash to shareholders in the form of a dividend.

There are no corporate governance issues other than related party transactions at 5.8% of sales and 4.8% of assets but it is nothing too significant.

Valuation

Given the existence of the barriers to entry, the best method of valuing Türk Tuborg is based on earnings. Our preferred valuation method is IRR, using the company's current free cash flow yield plus expected growth. At the close of business on May 20, 2016, the company was trading on a current free cash flow yield of 5.4%. Given the pricing power in the industry the company can expect at least 5.0% increases in prices and if it can continue to grow volumes at 5.0% per year than it offers a 15.3% expected return.

Valuing the company using current EBIT yield plus and organic growth rate, the company is trading on an EBIT yield of 8.0% with pricing growth of 5.0% bring the current expected return to 13.0%. Given the strength of the barriers to entry within the industry, a 13.0-15.0% return using conservative estimates is very attractive.

Why is it Cheap

The stock is cheap due to economic and political issues within Turkey. It also has a very small free float and illiquid with an average trading volume of USD137,000 over the past six months.



Risks

Türk Tuborg has been gaining market share and outperforming Anadolu significantly. Anadolu Turkish beer operations have seen deteriorating profitability. The combination of market share gains and deterioration of profitability may lead to Anadolu increasing the intensity of rivalry to win back market share and profitability.

Turkey has one of the highest excise taxes on alcohol in Europe, which is 3.91 times the European average. This is making alcohol more expensive and suppressing demand in the country leading to the stagnation in volume since 2008. From 2002 to 2013, Turkish excise tax increased by 6.63% per year. Given the ruling party's religious slant, it would not be a surprise to see a continuation of excise tax increases.

There are increasing restrictions on alcohol in Turkey. Retail alcohol sales licenses are limited between the hours of 10 am and 6 pm, as well as completely ban alcohol advertising and promotions of alcohol-related products. New licenses for the sale of alcohol are restricted. There is an ever increasing shift towards prohibition.

There is political risk in Turkey with it becoming more dictatorial. The increasing restrictions on freedom may bring a reaction.

A slowdown in macroeconomic growth or tourism is a short term risk.



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