KOÇ ÜNİVERSİTESİ GRADUATE SCHOOL OF BUSINESS

PETKİM PETROKIMYA HOLDING A.S

(Petkim-TI)

CLASS OF 2019-2021

KUINVEST, Turkey

ABOUT THE COMPANY:

Petkim Petrokimya Holding A.Ş. was established on April 3, 1965 under the leadership of the Turkish National Oil Company (TPAO). A giant manufacturing power with a strategic importance for the Turkish economy and industry, Petkim encompasses 53 years of experience and know-how. Petkim, which is Turkey's first and sole integrated petrochemical plant with 15 main and 6 auxiliary production facilities, is an indispensable raw material supplier of the industry with an annual average gross production capacity of 3.6 million tons and around 60 different kinds of petrochemical products.

Meeting 18% of Turkey's petrochemical raw material demand, Petkim contributes to a wide array of sectors including plastics, chemicals, packaging, piping, paint, construction, agriculture, automotive, electricity, electronics and textiles as well as the pharmaceuticals, detergents and cosmetics sectors with the high added value products in its portfolio such as thermoplastics, fiber and paint raw material. In addition to these, Petkim gives life to numerous sub-industries. It's main strengths include the fact that it owns and operates Turkey's only ethylene cracker, with 600,000tpa of production capacity.

OWNERSHIP STRUCTURE:

Currently, Petrokimya A.Ş. is 51.39% owned by Socar with 7.68% owned by GoldmanSachs International and 40.93% traded on the BIST.

BACKGROUND

Petkim's privatisation, in June 2008, opened the way for the expansion of the Turkish petrochemicals industry. A 51% stake was sold to a consortium comprising Azerbaijan's SOCAR, Turkey's Turcas and Saudi Arabia's Injaz. The consortium won the stake with a bid worth USD2.04bn. In July 2011, it was announced that SOCAR had raised its stake in the joint venture (JV) to 75% from a previous 51%. SOCAR acquired 23.98% from Aksoy Holding, which owns 0.02% in the JV after the deal. Turcas owns the remaining 25%. The increase in SOCAR's holding is indicative of the Azerbaijani company's enthusiasm for expanding Petkim's operations, with a view to adding value to its own hydrocarbons output.

IMPORTANT HIGHLIGHTS OF THE COMPANY:

- **TANAP - Trans Anatolian Natural Gas Pipeline** is the 3,500-kilometer energy corridor linking Azerbaijan with Europe. Turkey intends to become one of the world's biggest energy corridors with through the TANAP (Trans Anatolian Natural Gas Pipeline) project, which has an estimated investment cost of approximately USD 8 billion and is expected to meet 12% of Turkey's gas demand. The first phase of TANAP is completed. It was opened with a ceremony held on 12 June 2018 and the gas flowed for the first time through the pipeline on 30 June 2018.

- **Equity Investment in Rafineri Holding;** In January 2018, Petkim acquired a 30% stake in Rafineri Holding, a shareholder in a refinery currently being built in Aliaga, Izmir, for USD720mn from its controlling owner
- **Equity Investment in Star Refinery ;**SOCAR Turkiye Enerji acquired an 18% stake in the STAR refinery on March 31 2019, Theshare purchase price will be paid in three instalments.

- **Petlim Container Port;** In January 2017, SOCAR Turkey Energy announced that the second phase of Turkey's Petlim container port would be put into operation in June 2017. The port will be able to receive vessels with load-carrying ability of up to 13,000 containers and allow saving USD200-250 per container. It will be the largest port in the Aegean Sea. The work on the first phase of the Petlim port's construction was completed in December 2016 and the cargo terminal with the capacity of 1.5mn TEUs has started commercial operations.

The TANAP Project: The most strategic step taken so far for Turkey to become an energy corridor

TANAP - Trans Anatolian Natural Gas Pipeline is the 3,500-kilometer energy corridor linking Azerbaijan with Europe. It also has a symbolic meaning of the cooperation in Anatolia between the two countries akin to each other - Turkey and Azerbaijan.

Turkey intends to become one of the world's biggest energy corridors with through the TANAP (Trans Anatolian Natural Gas Pipeline) project, which has an estimated investment cost of approximately USD 8 billion.

Having established the legal infrastructure on 26 June 2012 and receiving the "Environmental and Social Impact Assessment (ESIA) Positive Certificate" on 24 July 2014, the founding stone of TANAP was laid on 17 March 2015.

The aim of the TANAP is to transport the natural gas produced by Azerbaijan at the Shah Sea 2 Gas Field in the Caspian Sea and other fields located at the south of Caspian Sea primarily to Turkey and then on to Europe. TANAP is connected to the South Caucasus Pipeline (SCP) and the Trans-Adriatic Pipeline (TAP) to form the Southern Gas Corridor.

Expected to meet 12% of Turkey's natural gas requirements, 16 billion m3 of natural gas will be transported in the first phase via TANAP. Corresponding to the annual natural gas requirement of Tbilisi, Ankara, Athens, Tirana and Rome, 6 billion m3 of the natural gas will be used in Turkey, while 10 billion m3 will be transported to Europe. The carrying capacity of the pipeline is aimed to rise to 24 billion m3 and then to 31 billion m3 with additional investments.

The first phase of TANAP is completed. It was opened with a ceremony held on 12 June 2018 and the gas flowed for the first time through the pipeline on 30 June 2018.

The ownership structure of TANAP is as follows: SGC 51% (51% of SGC is owned by The Republic of Azerbaijan Ministry of Economy, while the remaining 49% belongs to "SOCAR" - The State Oil Company of the Azerbaijan Republic), SOCAR Turkey Enerji A.Ş. 7%, BOTAŞ Boru Hatları ile Petrol Taşıma A.Ş. 30% and BP Pipelines (TANAP) Limited 12%.

SOCAR Fiber – the optic infrastructure that will share the route with TANAP

The SOCAR Fiber Optic Network is planned as a communication infrastructure project that will be rolled out in parallel with the TANAP Natural Gas Pipeline. Starting from the Georgian border, the fiber-optic network will end at the border of Greece, passing through Turkey from end to end in an east-west axis through 20 provinces and 67 districts.

Established to realize investments in fiber optic infrastructure, SOCAR Turkey Fiber Optik A.Ş. (SOCAR Fiber) will expand fiber optic infrastructure in the region with the investments that it has initiated to support the global need for the expansion of communication infrastructures, thereby providing the operators and telecommunication companies in Turkey and the region with access to world-class data transfer speeds and additional capacity and line backup to their services.

The Network Operation Centers of the line are located in Ankara and Eskişehir, and the security of the line is provided by 2 separate fiber-optic cables in 2 separate channel systems along the fiber-optic route.

Construction studies for the SOCAR fiber-optic line are in progress and are expected to be completed in 2019.

Star Refinery

Realized with an investment value of 6.3 billion dollars by SOCAR, the STAR Refinery started its activities on 19 October 2018. With its annual crude oil processing capacity of 10 million tons, it will meet the needs of Turkey for petroleum products substantially. The newly-opened refinery of SOCAR will provide a substantial revenue for the economy of both Azerbaijan and Turkey in the following years.

As the first refinery to be established in Turkey since 1984, and the largest investment undertaken by the private sector at a single location, the STAR Refinery focuses on strategic products taking into consideration the needs of the national economy and the industrial sectors. In addition to the production of major raw materials for the petrochemicals industry such as naphtha, xylene and reformate, the STAR Refinery will also produce petroleum products such as diesel, jet fuel, LPG and petroleum coke, which are major components of the current account deficit, hence meeting more than 25% of Turkey's processed petroleum product needs. To this end, Turkey's external dependency will be reduced, contributing USD 1.5 billion to bringing down the current account deficit.

With a total project cost of USD 6.3 billion, the project finance of the STAR Refinery is the largest and longest-term loan agreement so far signed in Turkey in terms of loan size and maturity. This was defined as one of the largest petroleum and gas project finance operations in the Europe, Middle East and North Africa (EMEA) region in 2014. Having completed the construction and installation studies, the official opening of the STAR Refinery was carried out on 19 October 2018. Approximately 2 million tons of the refinery's production will be used by Petkim.

On 9 January 2018, a stake sale and transfer agreements were signed between Petkim and SOCAR Turkey, ensuring Petkim held an 18% indirect stake in the STAR Refinery. It was agreed that Petkim would pay the consideration for the shares subject to the agreement in three instalments, which are expected to be completed by 30 June 2020 the latest.

We expect Star Refinery’s operations to contribute significantly to Petkim’s income, which will in turn increase its market price. In addition to providing the necessary raw materials that Petkim needs, its income derived by selling diesel and other petroleum products in the Turkish market will also result in increased income.

The only company that supplied diesel and other petroleum products to the Turkish market is Tupras, which operates four refineries in Turkey. However, because of the high demand for diesel in Turkey, it is unable to meet the local demand in diesel products. According to Tupras’ investor presentation dated September 2019, the combined output of Tupras and the Star Refinery of diesel will not be able to meet Turkish diesel demand. Therefore, we do not expect Star Refinery to lose income due to competition with Tupras; which will also benefit Petkim.

2019 mn ton	Production			Turkish Demand	Balance
	Tüpraş	Star	Total		
LPG	1.1	0.3	1.4	4.1	-2.7
Petchem Feeds	0.2	2.6	2.8		
Gasoline	6.1		6.1	2.4	3.7
Jet Fuel	5.2	1.6	6.8	5.2	1.6
Diesel	10.7	4.5	15.2	26.5	-11.3
Coke	0.8	0.7	1.5	4.6	-3.1
Fuel Oil	1.8		1.8	1.3	0.5
Bitumen	3.1		3.1	3.1	

Petlim Port

Petlim Limancılık Ticaret A.Ş. (Petlim) was established on 22 November 2010 for the development of Petkim Port, for it to be operated more economically and to build “The Largest Integrated Port of Aegean Region”. 30% of Petlim’s shares, which Petkim has established as a wholly owned subsidiary, were acquired by Goldman Sachs which was one of the world’s leading investment banks in the last quarter of 2014. Built by Petkim, the terminal was realized to complete the logistics integration step. The port investment had a cost of USD 400 million, including financing costs.

With its 700-meter single-dock structure and a minimum water depth of 16 meters, the SOCAR Aliağa Terminal is the first and only port facility in the Aegean Region able to efficiently serve ships of up to 18,000 TEU. The terminal is the biggest port in the Aegean Region with a container handling capacity of 1.5 million TEU.

The development of the Petlim container port by chemicals producer SOCAR, owner of Turkish petrochemicals producer Petkim, will improve the external competitiveness of the country's industrial output. Port operations will reduce the cost of petrochemicals trade, providing the basis for export-focused growth. The depreciation of the lira is also likely to favour Turkey's petrochemicals exports.

FINANCIAL HIGHLIGHTS

According to the Petkim Q2 Income Statement, its revenue increased by 32.1% yoy and 9.8% ytd. The higher sales volume led to the higher revenue. Although FX losses adversely affected Petkim's net debt in 2019, the sales and upward fluctuations on FX rates, the company reached 3,108 mio TL. Şeker Investment also mentioned in their sector report which was published on August 8, 2019 (Graph 1), that classification of decreasing prices of raw materials and inventory between 2018 and 2019 resulted in increasing revenues and EBITDA of Petkim. EBITDA also performed higher than the market expectations with 15.3% yoy and 85.9% ytd. EBITDA margin is expected to be between 15% and 16% at the end of the 2019 financial year. In light of this analysis, net profit is expected to increase at the end of 2019 and stay high in the foreseeable future. In addition, the net profit margin is expected to be around 9%.

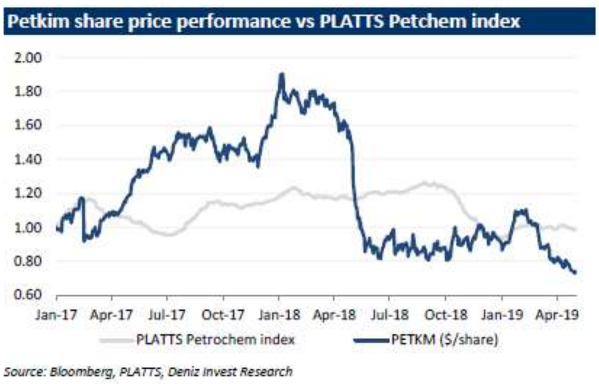
	2Q19 (TRY m)	2Q18 (TRY m)	*Change (y-y %)*	1Q19 (TRY m)	*Change (q-q %)*
Total sales volume ('000 tonne)	570	490	*16.3*	598	*(4.7)*
Revenues	3,108	2,353	*32.1*	2,832	*9.8*
Gross profit	545	472	*15.6*	334	*63.4*
Operating profit	453	416	*8.9*	217	*109.1*
EBITDA	536	465	*15.3*	288	*85.9*
EBITDA (USD/tonne)	160	217	*(26.1)*	90	*78.4*
Net profit	319	371	*(14.0)*	154	*107.4*
Net debt (cash)	4,933	2,892	*70.6*	4,987	*(1.1)*
Gross margin (%)	17.5	20.0	*(2.5)*	11.8	*5.8*
Operating margin (%)	14.6	17.7	*(3.1)*	7.6	*6.9*
EBITDA margin (%)	17.3	19.8	*(2.5)*	10.2	*7.1*

Table 1: Petkim Income Statement Source: TEB Investment

INDUSTRY FORECAST

Despite Turkey's overall economic woes, its petrochemicals industry has managed to sustain growth and is set to see more strong growth in a broad range of petrochemicals andpolymers over the forecast period. The depreciation of the lira coupled with the rise in the price of crude oil could hit the sector harder than other sectors of the Turkish economy. Furthermore, the channelling of substantial credit into construction has come at the expense of manufacturing and other sectors, which will restrain export potential nd higher value-added production growth in the years ahead. While this lending is now likely to be reduced following the election, the overall economic situation will remain poor and Turkish petrochemicals production will see slower growth and lower margins.

Compared with the PETROCHEMICAL INDEX (PGPI), Petkim had performed aabove the sector average until April 2018, we expect the past performance to pick up again.



STOCK PRICE PERFORMANCE AND FUTURE EXPECTATIONS

Below data shows yearly stock price performance for Petkim and BIST 100 (XU100). As it can be seen from the below (Graph 2), the stock price performed nearly the same trend with XU100 index. XU100 index indicates top 100 stock company performance index. Even though the Petkim stock performance decreased by 13,60% yearly, EV/EBITDA shows us the Enter Price Value is expected to grow up in terms of increasing the revenues and sales. The graph indicates that the stock performed lower than XU100 towards the end of the year, which we believe creates an opportunity for a correction. Especially when we consider last two months in 2019, correlation between XU100 and Petkim, we made time series analysis and used moving average analysis between August and October 2019, we are expecting Petkim stock price will increase in parallel with XU100 index.

Graph2 : Petkim and BIST100 (XU100) trend line, Source: Bloomberg

KEY STOCK DATA

YE Dec (TRY m)	2018A	2019E	2020E	2021E
Revenue	9,315	12,584	14,668	16,107
Rec. net profit	872	844	1,437	1,829
Recurring EPS (TRY)	0.41	0.40	0.68	0.87
Prior rec. EPS (TRY)	0.41	0.40	0.68	0.87
Chg. In EPS est. (%)	-	-	-	-
EPS growth (%)	(43.5)	(3.2)	70.3	27.3
Recurring P/E (x)	8.8	9.1	5.3	4.2
Dividend yield (%)	0.0	1.9	3.2	4.0
EV/EBITDA (x)	7.0	5.1	3.4	2.6
Price/book (x)	1.9	1.6	1.3	1.1
Net debt/Equity (%)	104.4	81.2	50.6	24.3
ROE (%)	22.1	19.2	27.4	28.4

Table 2: Petkim Financial Ratios and Expectations Source: TEB Investment