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CREDIT OPINION
30 June 2020

Update

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RATINGS

Turkiye Petrol Rafinerileri A.S.

Domicile	Turkey
Long Term Rating	B1
Type	LT Corporate Family Ratings - Dom Curr
Outlook	Negative

Please see the ratings section at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

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Turkiye Petrol Rafinerileri A.S.

Update following first quarter performance

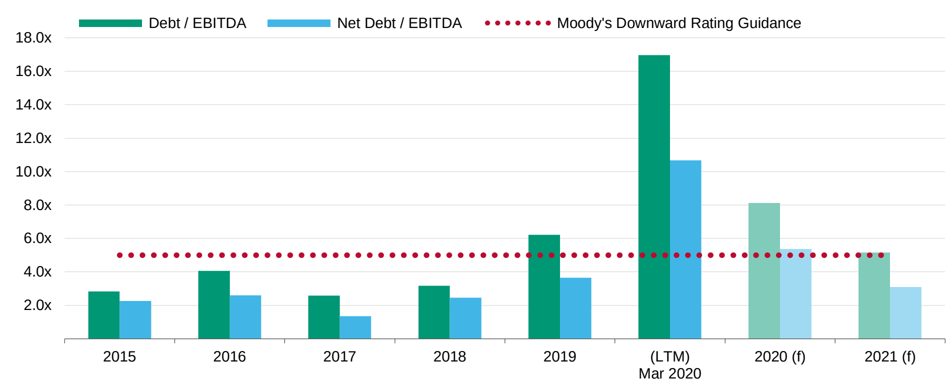
Summary

Tupras' B1 rating reflects (1) the company's dominant position in the Turkish market being the leading refiner with strategically located refineries in the country; (2) a relatively high weighted average plant complexity of 9.5 and high grade product slate with about 53% production of high margin middle distillates; (3) exposure to a supportive domestic market, with Turkey having a sizable net deficit position of diesel; and (4) a liquidity profile underpinned by sizable unrestricted cash totalling TRY9.1 billion as of 31 March 2020 that covers sizable short term funding, but with exposure to weak credit quality of Turkey based financial institutions.

The rating positioning also takes into consideration (1) the company's exposure to cyclical market conditions inherent to the refining industry and high working capital swings that result in volatile credit metrics; (2) asset concentration in Turkey (B1 negative); and (3) potential for increased competition and supply/demand imbalance risk over the medium term, stemming from capacity addition by international and local players both in Turkey and in the MENA region.

Exhibit 1

Coronavirus led demand disruptions will weaken Tupras' credit metrics in 2020, before improving in 2021



Note: All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. Forecasts represents Moody's forward view, not the view of the issuer and does not incorporate inventory and foreign exchange gains/losses. Last 12 months (LTM) Mar 2020 leverage includes a sizable inventory losses of around TRY2 billion in first quarter 2020.
Source: Moody's Financial Metrics™

We expect Turpas' credit metrics to be weak in 2020 because of the reduced demand for transportation fuels and low refining margins caused by the travel restrictions imposed by the government as a result of the outbreak of coronavirus. Furthermore, the material decline in oil prices in first quarter 2020 has resulted in sizable inventory-related losses, which will also weigh on Moody's adjusted credit metrics for 2020. With the expectation of no further coronavirus-induced disruptions and recovery of oil prices, profitability and credit metrics are expected to rebound in 2021. Consequently, we expect Tupras' debt / EBITDA to increase toward 8.0x for 2020 from 6.2x in 2019, before falling to 5.0x in 2021.

Turkey is a significant importer of diesel; therefore we believe that Tupras' competitive position will remain solid even if domestic demand for refined products were to fall. Furthermore, Tupras has the flexibility to sell its refined products in the international markets, which contributed 23% of 2019 revenue.

Credit strengths

» Leading and dominant position in the domestic market, with established infrastructure including storage, pipeline and terminal facilities

» Supportive long term fundamentals in the domestic market

» Sizable cash buffer with financially strong shareholder

Credit challenges

» Exposure to cyclical market conditions inherent to the industry, combined with emerging market risk factors, including public policy, regulatory, and currency volatility risks

» Asset concentration risk with all core assets located in Turkey

Rating outlook

The negative outlook on Tupras is in line with the negative outlook on the ratings of the Government of Turkey reflecting the operational exposure to the Government of Turkey's political, legal, fiscal and regulatory environment. In addition, the negative outlook also highlights the weakness in its credit metrics that has been exacerbated by the coronavirus outbreak, which if sustained could exert negative ratings pressure.

Factors that could lead to an upgrade

Given the negative outlook and credit linkages with the Government of Turkey, an upgrade of Tupras' ratings is unlikely over the next 12-18 months. The rating could be upgraded if the Government of Turkey's rating is upgraded and demand for transportation fuels and net refining margin improves, such that the company's credit metrics revert to pre-2018 levels. We would also expect Tupras to maintain good liquidity.

Factors that could lead to a downgrade

Tupras' ratings could experience downward ratings pressure if plant utilisation and net refining margins remain low, leading to depressed operating cash flow in 2021. Specifically, the ratings could be downgraded if Moody's adjusted debt/ EBITDA (including inventory gains/losses) remains above 5.0x or adjusted EBITDA/interest remains below 1.5x, on a sustained basis.

Tupras' ratings could be downgraded as a result of a downgrade of the Government of Turkey's rating as well as signs of a deterioration in liquidity.

Key indicators

Turkiye Petrol Rafinerileri A.S.

	12/31/2016	12/31/2017	12/31/2018	12/31/2019	3/31/2020(L)	2020(f)	2021(f)
Crude Distillation Capacity (mbbls/day)	611	611	611	652	652	652	652
EBIT / Total Throughput Barrels ($/Bbl)	$4.4	$6.9	$6.2	$2.0	$0.5	$1.9	$3.0
EBIT / Average Capitalization	13.9%	23.1%	20.3%	8.4%	2.0%	5.9%	10.1%
EBIT / Interest Expense	3.5x	6.9x	4.0x	1.2x	0.4x	0.9x	1.5x
Debt / EBITDA	4.1x	2.6x	3.2x	6.2x	17.0x	8.1x	5.1x
Net Debt/ EBITDA	2.6x	1.4x	2.5x	3.7x	10.7x	5.4x	3.1x
RCF / Debt	7.7%	21.7%	9.0%	-9.4%	-2.3%	8.0%	9.7%
Debt / Capitalization	63.0%	60.5%	67.1%	61.7%	69.3%	64.9%	63.0%

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. Leverage ratios use gross debt unless specified otherwise.
Source: Moody's Financial Metrics™

Profile

Turkiye Petrol Rafinerileri A.S. is the leading refiner in Turkey, with a dominant position in the domestic petroleum product market. The refining business consists of one very high complexity refinery in Izmit, two medium complexity refineries located in Izmir and Kirikkale and one simple refinery in Batman, with a combined annual crude processing capacity of 30 million tonnes (652 mbbl/day). Other core companies include (1) a 40% effective ownership stake in Opet, Turkey's second-largest oil-products distribution company with 1,693 stations operating under the Opet and Sunpet brands as of 31 March 2020; (2) an 80% stake in Ditas, a shipping company which primarily serves Tupras' logistic needs; and (3) a 100% stake in Korfez Ulastirma A.S., Turkey's first private railway operator that began freight operations in December 2017 with the aim to transport fuel across Turkey.

The company was established in 1983 when various state-owned refineries were combined under the Tupras name. As part of the privatisation process, 2.5% of its shares were publicly floated in 1991, which had increased to 49% by 2005. The company was fully privatised on 26 January 2006 when the remaining 51% stake was bought by EYAS, a special purpose vehicle owned by a consortium led by Koc Holding, one of the largest business groups in Turkey.

Headquartered in Korfez in Turkey, Tupras generated sales of TRY85.8 billion ($14.7 billion) and reported a net loss of TRY1.4 billion ($232.9 million) for the last 12 months (LTM) ending 31 March 2020.

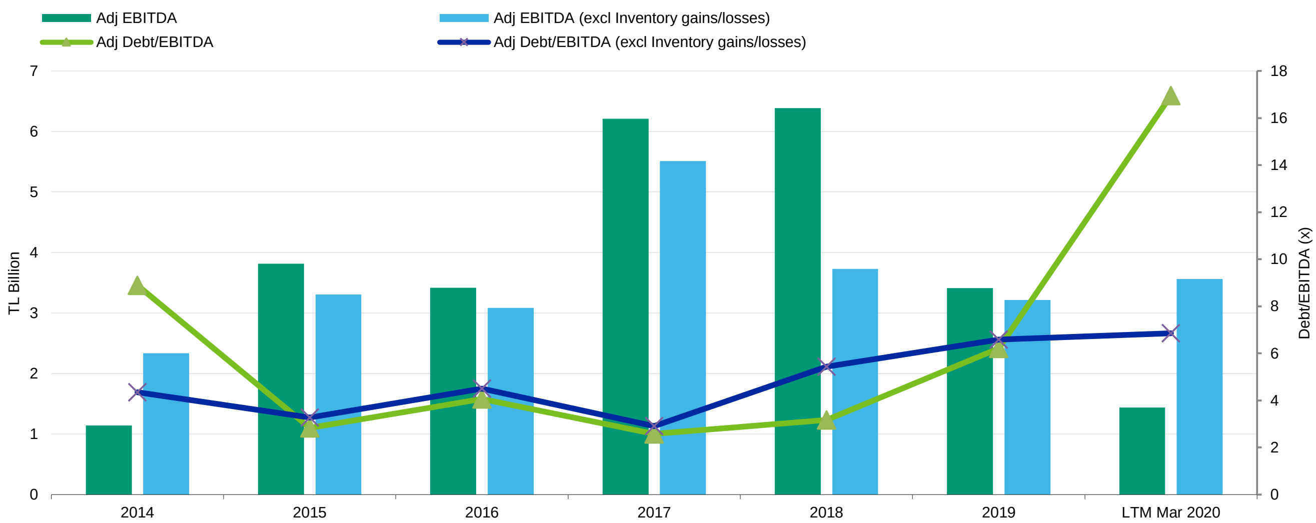
Detailed credit considerations

Weak demand for transportation fuels in 2020 will weigh on Tupras' cash flow and credit metrics

Tupras is exposed to a highly competitive industry which is cyclical and susceptible to external events. Global and domestic supply/ demand dynamics of both crude oil and refined products has a direct impact on the profitability of the company. We expect 2020 to be a difficult year for Tupras and the refining industry. The refining sector has been affected by the combined shock of the coronavirus outbreak, deteriorating global economic outlook and falling oil prices given its sensitivity to consumer demand and sentiment. Tupras' weaker depressed credit metric has left it vulnerable to shifts in market sentiment in these unprecedented operating conditions and remains vulnerable to the outbreak continuing to spread.

Following strong operating performance with high net refining margins in 2018 Tupras' financial metrics weakened in 2019 due to the RUP maintenance and narrowed crude oil price differentials because of US sanctions on Iran which stopped cheaper heavy crude imports from Iran. During the first quarter of 2020 travel restrictions imposed by the Turkish government in March 2020 combined with the significant declining in oil prices resulted in weaker operating performance and high inventory-related losses. This exemplifies the volatility inherent in the refining industry because of changes in market dynamics and crack spreads. Adjusted gross debt/EBITDA increased to 17.0x as of 31 March 2020 from 6.2x as of year-end 2019, mainly as a result of an abnormally high inventory loss which we have not removed. Excluding the inventory losses results in a lower gross debt/EBITDA of 6.9x. Furthermore, because Tupras' maintains high cash balances in excess of day to day operational needs, the companies net debt/EBITDA is materially lower at 10.7x and 4.3x excluding inventory losses, as of LTM Mar 2020.

Exhibit 3
High inventory losses driving the higher leverage



Source: Moody's Financial Metrics™, Company presentations

In our base case, we expect the effects from the coronavirus will persist with a gradual improvement in economic activity in Turkey during the second quarter of 2020. In addition the recovery of the oil price to around $40 per barrel in the second quarter of 2020 should help reduce the inventory losses recorded in the first quarter. Under this scenario, we estimate Tupras adjusted debt / EBITDA will be around 8.0x in 2020 and decline to around 5.0x in 2021. We also expect the retained cash flow (RCF) / debt to improve to between 5% and 10% over the next 12 to 18 months from -9.4% for 2019, helped by the non payment of the 2019 dividend.

With the completion of an intensive multi-year capital spending programme and no major investment plan over the next several years, we believe that Tupras' gross debt would steadily decline as project finance loans amortise.

Dominant position in the Turkish market

As the dominant refiner in Turkey, Tupras benefits from the location of its main refineries that lies near major domestic consumption centres, and from operational flexibility in having multiple distillation units across its refineries. Tupras continues to benefit from a supportive domestic market with long term demand for refined products, specifically diesel given Turkey is a net importer. In 2019, diesel consumption in Turkey was relatively flat and gasoline consumption increased by 3.2% compared to a year earlier. Jet fuel consumption increased 6.5% over the same period driven by increased airline passenger traffic. For the first three months of 2020, diesel and gasoline demand in Turkey increased strongly by 8.4% and 4.4%, respectively, because of the improving domestic economy. However, demand for all fuels declined in March as travel restrictions imposed by the Government of Turkey came in effect.

Turkey's second oil refining company — the STAR refinery — became fully operational in August 2019 with among other products, production of 4.5 million tons (MT)of diesel and 1.6 MT of jet fuel. The STAR refinery is designed to have the flexibility to convert 1.0 MT of jet fuel (out of the 1.6 MT capacity) to diesel. Tupras still produces most of domestic production with 10.4 MT of diesel and 4.3 MT of jet fuel in 2019. Given the sizeable diesel deficit in Turkey and high freight costs for importers, should domestic demand fall Tupras will still be able to sell its diesel production. We also note that in an environment of high currency volatility, domestic commodity producers such as Tupras generally have an advantage over distributors that import commodities, since the latter are generally more exposed to foreign exchange risks and therefore may shy away from importing or doing business in the country unless they can reliably hedge their currency exposure.

Moderate sized refiner with limited upstream/downstream operations

Unlike some other rated peers such as Polski Koncern Naftowy ORLEN S.A. (Baa2 negative; baa3 baseline credit assessment (BCA)) and MOL Hungarian Oil and Gas Plc (Baa3 stable), Tupras does not have material vertical integration with the absence of upstream/downstream operations apart from its 40% stake in Opet, Turkey's second largest refined products distributor. Most of Tupras' operating profit is derived from the refining business, with the distribution business complementing the former, although it does not provide a large scale of earnings diversification.

The company's asset base comprises of one very high, two medium and one simple-complexity refineries geographically located in a single market and with dependency on imported crude oil. Under our industry rating methodology assessment for operational scale, Tupras maps to the lower end of the Baa ranges for both the Crude Distillation Capacity sub-factor (500-1,000 mbbl/day capacity range) and Number of Large-Scale Refineries sub-factor (3-5 refineries range). We define a large-scale refinery as one that has more than 100 mbbl/day of crude distillation capacity and in light of this see both the Izmit and Izmir refineries being large-scale refineries (239 mbbl/day each) while the Kirikkale refinery is at the lower end of the definition (109 mbbl/day). Putting all these considerations together, we see Tupras as having a business that is comparable to peers at the cusp of a high Ba/low Baa rating.

Tupras competitive position was enhanced by the completion of the RUP upgrade on its Izmit refinery in May 2015. This enabled Tupras to process high sulphur/low value fuel oil into higher yielding products (diesel, jet fuel, gasoline and LPG) translating into improved net refining margins that have been consistently above the regional mediterranean benchmark. Tupras' net refining margin however remain vulnerable to change in heavy crude differentials, as experienced in late 2018 when US sanctions were placed on Iran, a material supplier of cheaper heavy crude to Tupras at the time. Given Tupras' broad supplier base, there was no disruption of supply, however it forced Tupras to source more expensive alternatives in the region, leading to lower net refining margins in 2019.

Asset concentration in Turkey constrains rating

All of Tupras' core assets are located in Turkey and a material portion of its profitability is derived from the domestic market which creates credit linkages with the Turkish sovereign. On average, around 20% of the refiner's revenue are from exports, of which gasoline and fuel oil are key products sold in the international market. Under normal conditions the company's ability to increase the export of its refined products is a mitigating factor against drop in domestic demand. However, given the unprecedented decline in global demand for transportation fuel, demand for exports is likely to be weak in 2020. Combined with low domestic demand, has resulted in Tupras reducing its plant utilisation guidance to 80%-85% from 95%-100%. In the absence of a resurgence of further lock downs, we expect demand for fuels will increase over the second half of 2020, with jet fuel taking longer to recover.

Government and regulatory policy changes are risk factors, such as increases in taxes which could impact the demand for refined products. In 2018, the Government of Turkey made an adjustment to the special consumption tax on petroleum products such that increases in product prices because of the lira depreciation and/or higher crude oil prices would offset the special consumption tax. This mechanism enabled petroleum product prices to remain fixed and this change did not have any financial impact on Tupras. While not anticipated, any amendment in Turkey’s regulatory framework that causes a financial burden on Tupras is likely to weigh on the current rating.

The Turkish lira has weakened significantly over the past few years and remains vulnerable to further volatility. The company actively manages its currency risk, and its cash flow are naturally hedged from the lira depreciation because domestic sales of petroleum products are indexed to the US dollar.

ESG considerations

Environmental considerations for Tupras include the risk that environmental concerns, penetration of electric cars and regulation result in a declining demand for Tupras' main products gasoline, diesel and other derivatives of oil. Moody's monitors the carbon transition risks closely and notes that Tupras has positioned its operations and product mix to benefit from IMO 2020 regulations requiring the shipping industry to switch to low sulphur fuels, starting from 1 January 2020.

Tupras’ credit profile positively incorporates a financially strong and supportive shareholder in the form of Koc Holding A.S. (B1 negative; 39.3% effective holding) – one of Turkey’s largest business groups. While Koc Holding's rating is also constrained by Turkey's foreign currency rating, we recognise that it has a strong balance sheet, with sizable cash balances. We also recognise that Koc Holding provides strict governance and financial oversight.

Liquidity analysis

Tupras' liquidity is adequate, underpinned by sizable cash balances of TRY9.1 billion ($1.4 billion, excluding blocked deposits) which is sufficient to cover TRY7.9 billion of short-term debt ($1.2 billion) over the next 12 months. We however view the weakening of the credit quality of Turkey-based financial institutions to be a growing risk for Tupras given its reliance on short-term funding from and have foreign currency cash deposits with the local banks because of the exposure to lower rated banks and ongoing requirement to roll over short term debt.

Liquidity will be helped by the lower capital spending of around $125 million for 2020 compared to longer term capital spending target of around $200 — $250 million. We also recognise the company's strategic importance to the country and to its main shareholder, Koc Holding, which could step-in to alleviate any unanticipated liquidity pressures.

Rating methodology and scorecard factors

Based on our Refining and Marketing Industry methodology (November 2016), Tupras maps to a score-indicated output of Ba2 over the next 12-18 months, which is 2 notches above the company's B1 credit rating. This reflects the Turkish sovereign risks and the inherent cyclical nature of the refining market.

Exhibit 4

Scorecard Factors				
Turkiye Petrol Rafinerileri A.S.				
Energy, Oil & Gas - Refining & Marketing Industry Scorecard [1][2]	Current LTM 3/31/2020		Moody's 12-18 Month Forward View As of 6/28/2020 [3]	
Factor 1 : Scale (25%)	**Measure**	**Score**	**Measure**	**Score**
a) Crude Distillation Capacity (mbbls/day)	652	Baa	652	Baa
b) Number of Large-Scale Refineries	Baa	Baa	Baa	Baa
Factor 2 : Business Profile (20%)				
a) Business Profile	Ba	Ba	Ba	Ba
Factor 3 : Profitability and Efficiency (15%)				
a) EBIT / Total Throughput Barrels ($/Bbl)	$0.5	Caa	$1.9 - $3	Ba
b) EBIT / Average Capitalization	2.0%	Caa	6% - 10%	Ba
Factor 4 : Financial Policy (20%)				
a) Financial Policy	Ba	Ba	Ba	Ba
Factor 5 : Leverage and Coverage (20%)				
a) EBIT / Interest Expense	0.4x	Ca	0.9x - 1.5x	B
b) Debt / EBITDA	17.0x	Ca	5x - 8x	Caa
c) RCF / Debt	-2.3%	Ca	8% - 10%	B
d) Debt / Capitalization	69.3%	B	60% - 65%	B
Rating:				
a) Scorecard-Indicated Outcome		B1		Ba2
b) Actual Rating Assigned				B1

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. Leverage ratios use gross debt.
[2] As of 31/03/2020
[3] This represents Moody's forward view, not the view of the issuer, and unless noted in the text, does not incorporate significant acquisitions and divestitures. The forward-looking credit metrics assume no foreign exchange gain or loss from financial liabilities.
Source: Moody's Financial Metrics™

Appendix

Exhibit 5

Peer Comparison Table

	Turkiye Petrol Rafinerileri			Polski Koncern Naftowy ORLEN			Thai Oil Public Company Limi			S-OIL Corporation		
	B1 Negative			Baa2 Negative			Baa2 Negative			Baa2 Stable		
(in US billions)	FYE Dec-18	FYE Dec-19	LTM Mar-20	FYE Dec-18	FYE Dec-19	LTM Mar-20	FYE Dec-18	FYE Dec-19	LTM Mar-20	FYE Dec-17	FYE Dec-18	FYE Dec-19
Revenue	$18.9	$15.8	$14.7	$30.4	$29.0	$27.9	$12.1	$11.7	$11.3	$18.5	$23.2	$20.9
EBITDA	$1.4	$0.6	$0.2	$2.4	$2.4	$2.1	$0.7	$0.5	-$0.1	$1.7	$0.8	$0.7
Distil. Capacity (MB/day)	611	652	652	707	707	707	275	275	275	NA	NA	NA
EBIT/Throughtput Bbls	6	2	1	7	6	5	4	3	NA	NA	NA	NA
EBIT/Avg Book Capital	20.3%	8.4%	2.0%	12.1%	11.1%	9.0%	6.6%	3.4%	-4.6%	13.9%	3.7%	1.8%
EBIT / Int. Exp.	4.0x	1.2x	0.4x	25.0x	17.7x	13.4x	3.9x	2.2x	-3.1x	12.8x	2.7x	1.3x
Debt / EBITDA	3.2x	6.2x	17.0x	1.7x	1.4x	1.8x	5.2x	8.4x	-42.3x	2.6x	7.8x	7.9x
RCF / Debt	9.0%	-9.4%	-2.3%	41.4%	53.0%	37.8%	8.4%	5.4%	-4.3%	13.4%	3.9%	7.6%
Total Debt/Capital	67.1%	61.7%	69.3%	27.8%	24.6%	28.0%	47.6%	53.1%	57.2%	41.2%	49.5%	49.9%

[1] All figures and ratios calculated using Moody's estimates and standard adjustments. FYE = Financial Year-End. Last 12 months = Last Twelve Months. RUR = Ratings under Review, where UPG = for upgrade and DNG = for downgrade. Leverage ratios use gross debt.
Source: Moody's Financial Metrics™

Exhibit 6

Moody's-Adjusted Debt Breakdown

Turkiye Petrol Rafinerileri A.S.

(in TRY Millions)	FYE Dec-15	FYE Dec-16	FYE Dec-17	FYE Dec-18	FYE Dec-19	LTM Ending Mar-20
As Reported Debt	**9,848.3**	**12,032.9**	**14,916.1**	**17,760.5**	**18,905.2**	**23,043.4**
Pensions	144.5	159.2	167.9	186.5	232.1	232.1
Operating Leases	56.4	59.2	81.6	0.0	0.0	0.0
Securitizations	778.1	1,625.8	860.8	2,332.0	2,059.0	1,132.1
Moody's-Adjusted Debt	**10,827.3**	**13,877.1**	**16,026.4**	**20,279.0**	**21,196.3**	**24,407.5**

[1] All figures and ratios calculated using Moody's estimates and standard adjustments. FYE = Financial Year-End.
Source: Moody's Financial Metrics™

Exhibit 7

Moody's-Adjusted EBITDA Breakdown

Turkiye Petrol Rafinerileri A.S.

(in TRY Millions)	FYE Dec-15	FYE Dec-16	FYE Dec-17	FYE Dec-18	FYE Dec-19	LTM Ending Mar-20
As Reported EBITDA	**3,244.4**	**3,193.4**	**5,749.1**	**5,656.0**	**2,405.0**	**-229.4**
Operating Leases	18.8	19.7	27.2	0.0	0.0	0.0
Securitizations	119.3	93.9	97.1	124.7	171.5	158.5
Unusual	502.2	266.4	582.7	869.2	1,033.2	1,476.2
Non-Standard Adjustments	-70.1	-158.8	-244.6	-265.9	-197.4	34.1
Moody's-Adjusted EBITDA	**3,814.6**	**3,414.7**	**6,211.4**	**6,384.1**	**3,412.3**	**1,439.4**

[1] All figures and ratios calculated using Moody's estimates and standard adjustments. FYE = Financial Year-End.
Source: Moody's Financial Metrics™

Ratings

Exhibit 8

Category	Moody's Rating
TURKIYE PETROL RAFINERILERI A.S.	
Outlook	Negative
Corporate Family Rating -Dom Curr	B1
Senior Unsecured	B1/LGD4

Source: Moody's Investors Service

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