



1 Weekly Commentary

국제  
유가

**Dubai \$58.7/bbl [w/w -11.3%], Brent \$58.8/bbl [w/w -11.9%], WTI \$50.4/bbl [w/w -10.7%]**

- 공급과잉 우려에 따른 국제유가 하락세 지속. 미국의 원유 생산량이 1,170만배럴을 기록하며 최대치를 갱신하고 있고, 최근 이란 경제제재에 8개 국가가 열외국으로 포함됨에 따른 실효성 논란, 달러 강세가 유가의 하락세를 유도한 것으로 보임
- 지난 21일 도널드 트럼프는 트위터에 "Oil prices getting lower. Great! Like a big Tax Cut for America and the World. Enjoy! \$54, was just \$82. Thank you to Saudi Arabia, but let's go lower!"라 언급하며 지속적으로 사우디를 압박
- 국제유가의 지속적인 약세가 전반적인 석유화학 시장 참여자들의 관망세를 유도하고 있음

정제  
마진

**Spot 정제마진 \$7.9/bbl [w/w +\$1.1/bbl], 1M Lag 정제마진 -\$12.4/bbl [w/w -\$5.4/bbl]**

**Naphtha \$52.1/bbl [w/w -11.0%], Gasoline \$62.3/bbl [w/w -8.2%], Diesel \$74.4/bbl [w/w -9.1%]**

**JetKero \$78.0/bbl [w/w -8.1%], FuelOil \$66.1/bbl [w/w -6.9%], BunkerC \$69.7/bbl [w/w -6.6%]**

- 국제유가 급락으로 Spot 정제마진은 개선되었으나, 잇따른 석유제품 가격 하락으로 1M Lagging 정제마진은 더욱 악화

Feed  
stock

**Naphtha \$488.0/t [w/w -10.5%] Ethane 33.1ct/gal [w/w -4.0%] Propane \$441.4/t [w/w -14.6%] Butane \$414.9/t [w/w -16.1%]  
Coal \$103.1/t [w/w 0.0%] Methanol \$441.4/t [w/w -14.6%]**

- 국제유가의 급락이 대부분의 Feedstock 가격 약세 유도

기초  
유분  
&  
중간  
원료

**Ethylene \$980.0/t [w/w +1.0%], Propylene \$845.0/t [w/w -6.1%], Butadiene \$1,075.0/t [w/w +2.4%]**

**Benzene \$654.7/t [w/w -3.5%] Toluene \$632.5/t [w/w -2.8%], MX \$717.0/t [w/w -9.0%], SM \$971.5/t [w/w -4.0%]**

- **Ethylene** : 중국발 수요 호조에 따라 Ethylene 가격은 강세를 보였으나, 원유 선물 가격 하락이 지나친 강세를 제한. 그러나 대부분의 시장 참여자들은 향후 Ethylene 가격의 약세 전환을 전망하고 있음. Naphtha/PE대비 지나치게 가격이 높을 뿐만 아니라, 역내 Steam Cracker 가동률 상승으로 공급도 충분한 상황. 지난 10월 일본의 NCC 가동률은 전월대비 0.3%p 상승한 95.2%를 기록. 유럽/중동발 deepsea cargo 물량도 아시아지역에 꾸준히 유입되고 있어, 부담으로 작용 중
- **Propylene** : 수요 부진으로 가격 하락. 다만 중국 Oriental Energy가 기술적 문제로 인해 Zhangjiagang PDH [Propylene 66만t, PP 50만t]의 가동중단을 계획하고 있어 [20일간, 12월말/1월초 예상], 역내 4만t의 Propylene 공급감소가 예상됨
- **SM** : 가격 변동성 확대 지속. 다만, 최근 중국 동부지역 재고 증가가 부담으로 작용할 것 [81만t, w/w +8,200t, m/m +2.1만t, y/y +4.8만t]

합성수지

**HDPE \$1,050.0/t [w/w -4.5%], PP \$1,130.0/t [w/w -3.4%], PVC \$860.0/t [w/w +1.2%]**

**PS \$1,250.0/t [w/w -2.3%], ABS \$1,430.0/t [w/w -3.4%], PET \$1,125.0/t [w/w 0.0%]**

- **HDPE** : 중국 DCE 선물 가격 하락에 따라 약세 지속. 미-중 무역분쟁 지속에 따라 미국산 PE가 중동산 대비 \$80-100/t 저렴하게 시장에 유입되고 있고, 중국은 미국산 대신 중동/인도/동남아시아 물량으로 대체하고 있음. UAE의 Borouge #3 [150만t]가 정기보수로 인해 1Q19에 가동 중단될 것이나 [50-60일간], 사측에서 정기보수 이전 재고를 비축하고 있다 전해지고 있어 시장에 영향은 제한적일 것
- **PP** : 수요 부진으로 가격 하락. 상대적으로 저렴한 LDPE가 PP 대신 사용되고 있음도 수요 부진에 일조. 인도네시아의 PT Polytama Propindo가 Jawa Barat PP공장의 Debottlenecking을 추진중 [1H19 목표, 24만t→30만t]. 사우디의 Al-Waha의 Jubail PP공장이 보수를 마치고 12월 중순 재가동 예정 [30일, 45만t]
- **PVC** : 동절기 진입에 따라 중국의 수요가 둔화되었으나, 디월리 이후 인도의 수요가 회복됨에 따라 견조한 수준의 가격 유지
- **ABS** : 1) 가전제품 수요 부진, 2) SM 가격 변동성 확대에 따라 가격 약세 지속. (-) 마진에 따라 북아시아 지역의 일부 생산업자는 가동률을 50%까지 낮춘 것으로 전해짐

합성섬유

**PX \$1,015.7/t [w/w -7.2%], TPA \$840.0/t [w/w -7.7%], MEG \$677.0/t [w/w -6.9%]**

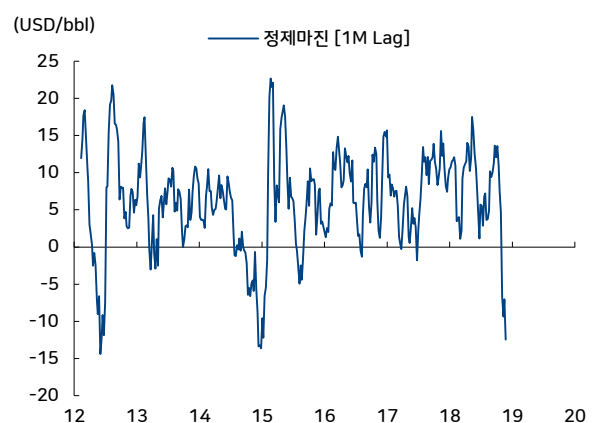
- **PX** : 폴리에스터 업황 둔화에 따른 PTA 수요 부진으로 가격 약세 지속. 한국 현대코스모가 보유한 대산 Aromatics #2 공장의 정기보수가 '19년 4-5월간 예정되어 있음 [30-35일, BZ 13만t, PX 80만t]
- **PTA** : 수요 부진에 따라 가격 약세 지속. 한 중국의 trader는 "The crude oil price is still in a fall and PX is still on a downtrend, and many buyers have sufficient inventories"라 언급. 또한 타이완의 trader에 따르면 인도의 수요처들이 통상적으로 PTA를 구매해가던 단위가 2,000mt이었는데, 최근 관망세 지속에 따라 500mt로 감소하였다고 언급
- **MEG** : 최근 국제유가 급락에 따른 구매지연으로 가격 약세. Bargain hunting 수요 급감한 것으로 파악됨

2 Weekly Key Charts

<그림 1> 미국의 정제 가동률 추이



<그림 2> 정제마진 [1M Lag, SKI 기준]





Issue #2 / 4th Week of November / '18.11.26

3 Major Chemical Product Prices

구분		Current	7D		1M		3M		1Y		YTD	
			Price	Chg%	Price	Chg%	Price	Chg%	Price	Chg%	Price	Chg%
원료	Naphtha	488.0	545.3	-10.5%	669.9	-27.2%	658.9	-25.9%	574.6	-15.1%	615.3	-20.7%
	Ethane	33.1	34.5	-4.0%	38.3	-13.4%	39.3	-15.6%	26.1	26.8%	23.1	43.2%
	Propane	441.4	516.6	-14.6%	611.9	-27.9%	642.5	-31.3%	596.1	-26.0%	609.4	-27.6%
	Butane	414.9	494.6	-16.1%	618.1	-32.9%	692.4	-40.1%	578.5	-28.3%	589.5	-29.6%
	Coal(호주)	102.0	100.5	1.5%	100.6	1.4%	114.6	-10.9%	97.7	4.4%	100.3	1.7%
	Coal(중국)	103.1	103.1	0.0%	104.6	-1.4%	103.3	-0.2%	110.1	-6.4%	114.4	-9.9%
기초유분	Methanol	435.0	435.0	0.0%	435.0	0.0%	420.0	3.6%	368.0	18.2%	439.0	-0.9%
	Ethylene	980.0	970.0	1.0%	1,070.0	-8.4%	1,370.0	-28.5%	1,249.0	-21.5%	1,329.0	-26.3%
	Propylene	845.0	900.0	-6.1%	1,130.0	-25.2%	1,095.0	-22.8%	877.0	-3.6%	937.0	-9.8%
	Butadiene	1,075.0	1,050.0	2.4%	1,060.0	1.4%	1,750.0	-38.6%	945.0	13.8%	1,100.0	-2.3%
	Benzene	654.7	678.3	-3.5%	804.7	-18.6%	887.0	-26.2%	834.0	-21.5%	877.5	-25.4%
	Toluene	632.5	650.5	-2.8%	822.5	-23.1%	793.5	-20.3%	679.0	-6.8%	697.0	-9.3%
	Xylene(Solv)	670.0	710.0	-5.6%	835.0	-19.8%	780.0	-14.1%	626.0	7.0%	659.0	1.7%
중간원료	Xylene(Iso)	717.0	788.0	-9.0%	900.0	-20.3%	945.5	-24.2%	683.0	5.0%	719.0	-0.3%
	SM	971.5	1,012.5	-4.0%	1,249.0	-22.2%	1,396.0	-30.4%	1,251.5	-22.4%	1,239.0	-21.6%
	PX	1,015.7	1,094.3	-7.2%	1,238.3	-18.0%	1,226.7	-17.2%	877.5	15.7%	907.0	12.0%
	OX	890.0	943.0	-5.6%	1,020.0	-12.7%	985.0	-9.6%	745.0	19.5%	767.0	16.0%
	HDPE(Inj)	1,050.0	1,100.0	-4.5%	1,160.0	-9.5%	1,180.0	-11.0%	1,169.0	-10.2%	1,154.0	-9.0%
합성수지	HDPE(Film)	1,140.0	1,170.0	-2.6%	1,270.0	-10.2%	1,297.5	-12.1%	1,260.0	-9.5%	1,280.0	-10.9%
	LDPE	1,030.0	1,030.0	0.0%	1,120.0	-8.0%	1,137.5	-9.5%	1,250.0	-17.6%	1,190.0	-13.4%
	LLDPE	1,030.0	1,030.0	0.0%	1,100.0	-6.4%	1,115.0	-7.6%	1,190.0	-13.4%	1,155.0	-10.8%
	PP(Homo)	1,130.0	1,170.0	-3.4%	1,250.0	-9.6%	1,225.0	-7.8%	1,115.0	1.3%	1,150.0	-1.7%
	PP(Film)	1,150.0	1,210.0	-5.0%	1,270.0	-9.4%	1,240.0	-7.3%	1,139.0	1.0%	1,159.0	-0.8%
	PVC	860.0	850.0	1.2%	840.0	2.4%	960.0	-10.4%	900.0	-4.4%	875.0	-1.7%
	GPPS	1,250.0	1,280.0	-2.3%	1,460.0	-14.4%	1,510.0	-17.2%	1,360.0	-8.1%	1,450.0	-13.8%
	HIPS	1,320.0	1,330.0	-0.8%	1,535.0	-14.0%	1,590.0	-17.0%	1,449.0	-8.9%	1,529.0	-13.7%
	EPS(GP)	1,240.0	1,290.0	-3.9%	1,550.0	-20.0%	1,580.0	-21.5%	1,404.0	-11.7%	1,489.0	-16.7%
	EPS(FR)	1,295.0	1,345.0	-3.7%	1,595.0	-18.8%	1,620.0	-20.1%	1,439.0	-10.0%	1,529.0	-15.3%
	ABS	1,430.0	1,480.0	-3.4%	1,750.0	-18.3%	1,910.0	-25.1%	1,899.0	-24.7%	2,029.0	-29.5%
	PET	1,125.0	1,125.0	0.0%	1,250.0	-10.0%	1,290.0	-12.8%	1,014.0	10.9%	1,069.0	5.2%
합성섬유	MEG	677.0	727.0	-6.9%	858.0	-21.1%	939.0	-27.9%	909.0	-25.5%	919.0	-26.3%
	TPA	840.0	910.0	-7.7%	992.0	-15.3%	990.0	-15.2%	699.0	20.2%	714.0	17.6%

자료 : Platts, 하이투자증권

※ 붉은색 : 상승 / 파란색 : 하락 / 검은색 : 변동 없음

4 Major Petroleum Product Prices

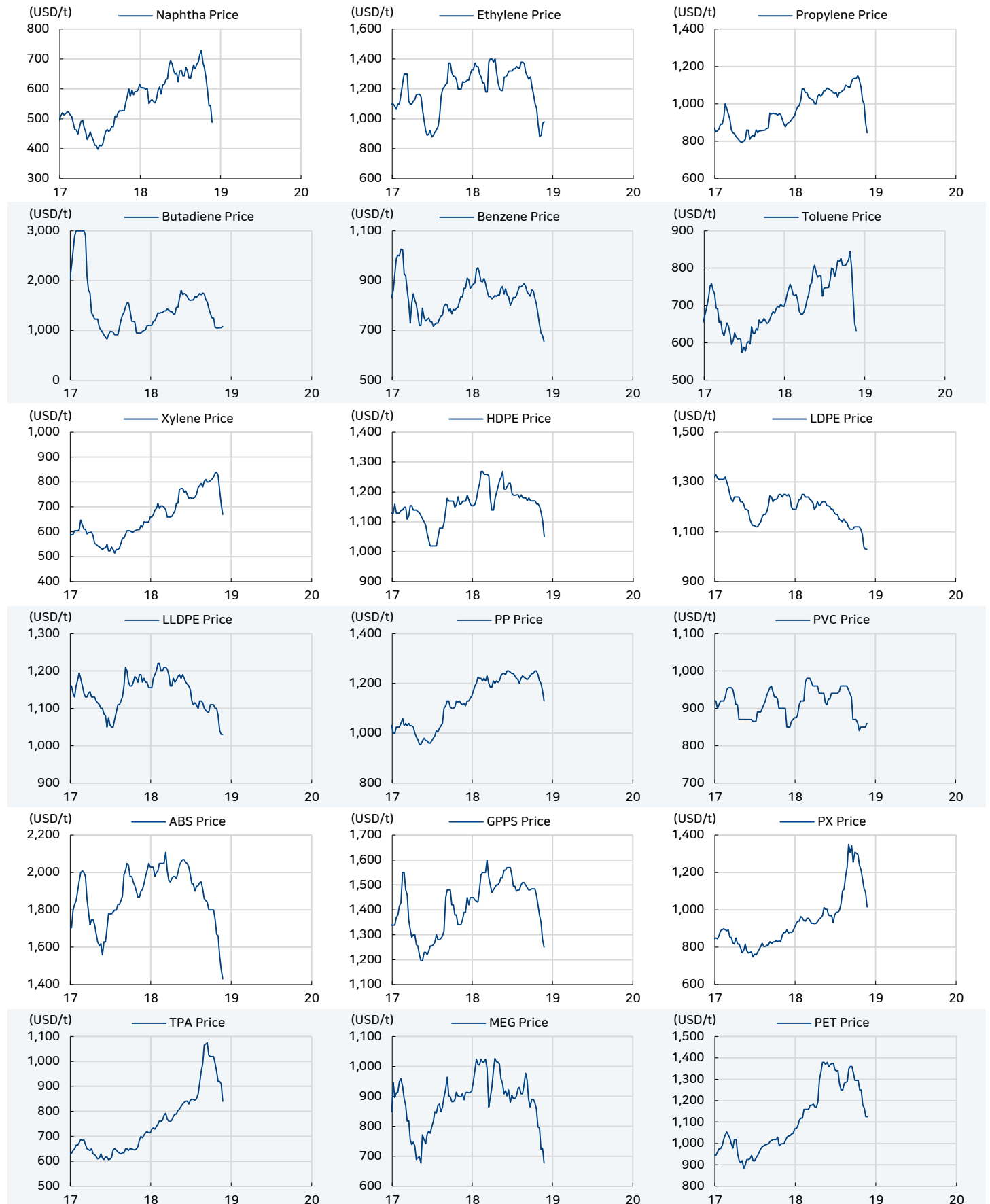
구분		Current	7D		1M		3M		1Y		YTD	
			Price	Chg%	Price	Chg%	Price	Chg%	Price	Chg%	Price	Chg%
원료	Dubai	58.7	66.2	-11.3%	79.0	-25.7%	74.8	-21.5%	60.9	-3.7%	64.0	-8.3%
	Brent	58.8	66.8	-11.9%	79.8	-26.3%	75.8	-22.4%	62.7	-6.3%	66.9	-12.1%
	WTI	50.4	56.5	-10.7%	69.1	-27.1%	68.7	-26.6%	56.6	-10.8%	60.4	-16.6%
석유제품 (싱가폴)	Naphtha	52.1	58.5	-11.0%	72.6	-28.3%	71.7	-27.3%	63.0	-17.4%	67.6	-22.9%
	휘발유92	62.3	67.9	-8.2%	82.9	-24.8%	83.7	-25.5%	71.5	-12.9%	74.6	-16.5%
	휘발유95	64.6	69.2	-6.7%	84.8	-23.8%	86.2	-25.1%	74.2	-13.0%	76.5	-15.6%
	휘발유97	66.2	70.8	-6.5%	86.4	-23.3%	87.9	-24.6%	75.5	-12.3%	77.6	-14.6%
	경유0.5%	74.4	81.8	-9.1%	92.4	-19.5%	88.2	-15.7%	71.1	4.6%	77.8	-4.4%
	경유0.25%	75.7	83.0	-8.7%	92.6	-18.3%	89.5	-15.4%	71.4	6.0%	78.0	-2.9%
	경유0.05%	75.9	83.4	-9.0%	94.4	-19.7%	90.0	-15.7%	72.5	4.6%	78.7	-3.6%
	등유/항공유	78.0	84.9	-8.1%	94.4	-17.3%	88.8	-12.1%	73.2	6.7%	79.4	-1.7%
	연료유180	66.1	71.0	-6.9%	78.5	-15.8%	71.0	-6.9%	57.1	15.8%	59.4	11.2%
	연료유380	65.6	70.4	-6.8%	77.4	-15.2%	70.1	-6.4%	56.7	15.8%	59.1	11.1%
	벙커C180	69.7	74.6	-6.6%	80.3	-13.3%	73.3	-5.0%	58.0	20.1%	60.4	15.4%
	벙커C380	68.5	73.6	-6.9%	79.1	-13.3%	72.0	-4.8%	57.4	19.4%	59.8	14.6%
	벙커C카고180	66.4	71.4	-6.9%	78.9	-15.8%	71.4	-6.9%	57.4	15.8%	59.7	11.2%
벙커C카고380	66.0	70.8	-6.8%	77.8	-15.2%	70.4	-6.4%	56.9	15.8%	59.4	11.1%	
석유제품 (일본)	Naphtha1H	53.9	60.3	-10.7%	74.1	-27.3%	73.2	-26.4%	64.9	-17.0%	69.3	-22.3%
	Naphtha2H	54.3	60.8	-10.7%	74.4	-27.0%	73.1	-25.8%	63.8	-14.9%	68.1	-20.4%
	경유	78.4	83.8	-6.4%	94.7	-17.2%	90.1	-12.9%	73.3	7.0%	78.0	0.6%
	등유/항공유	81.1	86.3	-6.0%	95.9	-15.4%	90.3	-10.1%	74.3	9.2%	78.4	3.4%
선박연료	MDO(한국)	92.8	92.8	0.0%	92.8	0.0%	92.8	0.0%	79.1	17.2%	79.1	17.2%
	MDO(싱가폴)	79.5	86.4	-8.1%	97.2	-18.2%	93.0	-14.5%	75.7	5.0%	81.6	-2.6%
	MDO(일본)	87.9	80.4	9.3%	85.9	2.2%	78.9	11.4%	61.0	44.1%	66.4	32.2%
	MGO(한국)	103.9	99.3	4.6%	105.0	-1.0%	93.2	11.5%	78.4	32.5%	81.7	27.1%
	MGO(홍콩)	102.7	96.1	6.8%	101.2	1.5%	90.2	13.8%	79.2	29.7%	78.3	31.2%

자료 : Platts, 하이투자증권

※ 붉은색 : 상승 / 파란색 : 하락 / 검은색 : 변동 없음

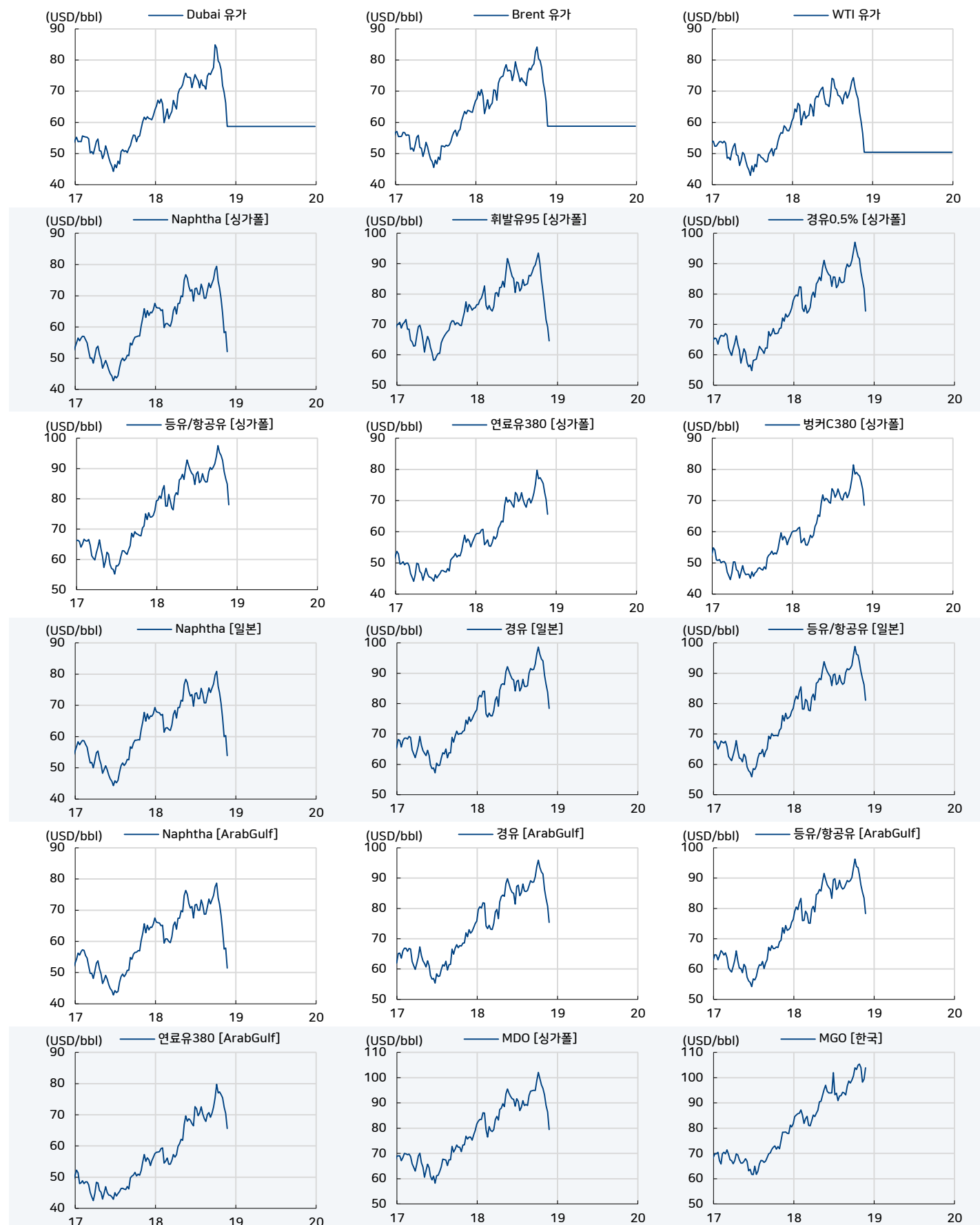


5 Major Chemical Product Prices Charts





6 Major Petroleum Product Prices Charts





7 Major Chemical Product - Naphtha Spreads [Spot]

구분		Current	7D		1M		3M		1Y		YTD	
			Price	Chg%	Price	Chg%	Price	Chg%	Price	Chg%	Price	Chg%
기초유분	Ethylene	492.0	424.8	15.8%	400.1	23.0%	588.8	-16.4%	674.4	-27.0%	713.8	-31.1%
	Propylene	357.0	354.8	0.6%	460.1	-22.4%	443.8	-19.5%	302.4	18.1%	321.8	11.0%
	Butadiene	587.0	504.8	16.3%	390.1	50.5%	748.8	-21.6%	370.4	58.5%	484.8	21.1%
	Benzene	166.7	133.1	25.2%	134.8	23.6%	146.8	13.6%	259.4	-35.7%	262.3	-36.4%
	Toluene	144.5	105.3	37.3%	152.6	-5.3%	115.8	24.8%	104.4	38.4%	81.8	76.8%
	Xylene (Solv)	182.0	164.8	10.5%	165.1	10.2%	108.8	67.4%	51.4	254.3%	43.8	316.0%
	Xylene (Iso)	229.0	242.8	-5.7%	230.1	-0.5%	204.3	12.1%	108.4	111.3%	103.8	120.7%
중간원료	SM	483.5	467.3	3.5%	579.1	-16.5%	709.3	-31.8%	676.9	-28.6%	623.8	-22.5%
	PX	527.7	549.1	-3.9%	568.5	-7.2%	564.8	-6.6%	302.9	74.2%	291.8	80.9%
	OX	402.0	397.8	1.1%	350.1	14.8%	323.8	24.2%	170.4	136.0%	151.8	164.9%
합성수지	HDPE (Inj)	562.0	554.8	1.3%	490.1	14.7%	478.8	17.4%	594.4	-5.4%	538.8	4.3%
	HDPE (Film)	652.0	624.8	4.4%	600.1	8.6%	578.8	12.7%	685.4	-4.9%	664.8	-1.9%
	LDPE	542.0	484.8	11.8%	450.1	20.4%	418.8	29.4%	675.4	-19.7%	574.8	-5.7%
	LLDPE	542.0	484.8	11.8%	430.1	26.0%	398.8	35.9%	615.4	-11.9%	539.8	0.4%
	PP (Homo)	642.0	624.8	2.8%	580.1	10.7%	538.8	19.2%	540.4	18.8%	534.8	20.1%
	PP (Film)	662.0	664.8	-0.4%	600.1	10.3%	553.8	19.5%	564.4	17.3%	543.8	21.7%
	PVC	372.0	304.8	22.1%	170.1	118.7%	178.8	108.1%	325.4	14.3%	259.8	43.2%
	GPPS	762.0	734.8	3.7%	790.1	-3.6%	788.8	-3.4%	785.4	-3.0%	834.8	-8.7%
	HIPS	832.0	784.8	6.0%	865.1	-3.8%	858.8	-3.1%	874.4	-4.8%	913.8	-8.9%
	EPS (GP)	752.0	744.8	1.0%	880.1	-14.6%	858.8	-12.4%	829.4	-9.3%	873.8	-13.9%
	EPS (FR)	807.0	799.8	0.9%	925.1	-12.8%	903.8	-10.7%	864.4	-6.6%	913.8	-11.7%
	ABS	942.0	934.8	0.8%	1,080.1	-12.8%	1,108.8	-15.0%	1,324.4	-28.9%	1,413.8	-33.4%
	PET	637.0	579.8	9.9%	580.1	9.8%	638.8	-0.3%	439.4	45.0%	453.8	40.4%
합성섬유	MEG	189.0	181.8	4.0%	188.1	0.5%	173.8	8.8%	334.4	-43.5%	303.8	-37.8%
	TPA	352.0	364.8	-3.5%	322.1	9.3%	333.8	5.5%	124.4	183.0%	98.8	256.5%

자료 : Platts, 하이투자증권

※ 붉은색 : 상승 / 파란색 : 하락 / 검은색 : 변동 없음

8 Major Chemical Product - Naphtha Spreads [1M Lag]

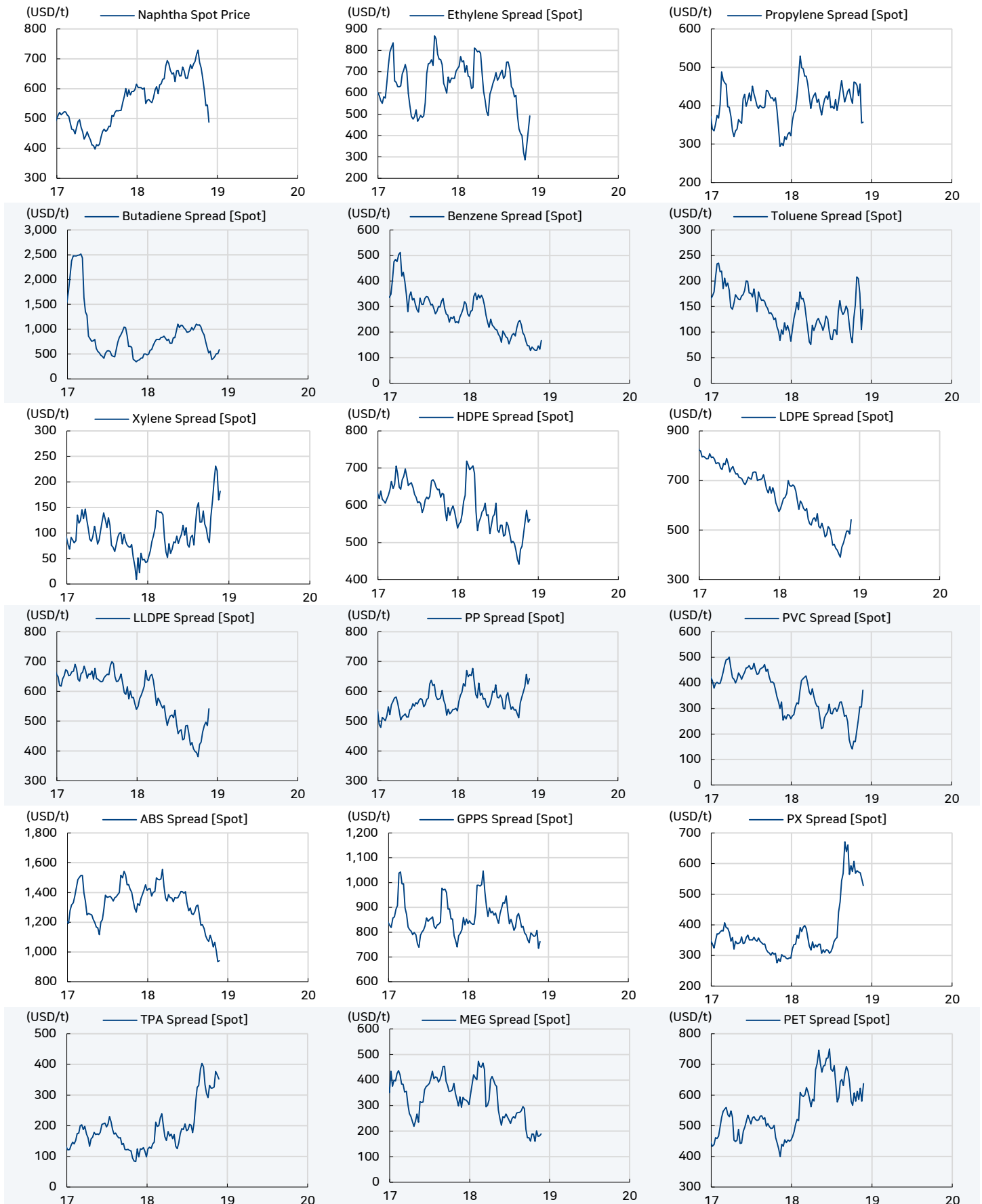
구분		Current	7D		1M		3M		1Y		YTD	
			Price	Chg%	Price	Chg%	Price	Chg%	Price	Chg%	Price	Chg%
기초유분	Ethylene	310.1	281.6	10.1%	378.8	-18.1%	621.1	-50.1%	722.3	-57.1%	749.5	-58.6%
	Propylene	175.1	211.6	-17.2%	438.8	-60.1%	476.1	-63.2%	350.3	-50.0%	357.5	-51.0%
	Butadiene	405.1	361.6	12.0%	368.8	9.9%	781.1	-48.1%	418.3	-3.1%	520.5	-22.2%
	Benzene	-15.2	-10.0	51.4%	113.4	-113.4%	179.1	-108.5%	307.3	-104.9%	298.0	-105.1%
	Toluene	-37.4	-37.9	-1.3%	131.3	-128.5%	148.1	-125.2%	152.3	-124.5%	117.5	-131.8%
	Xylene (Solv)	0.1	21.6	-99.4%	143.8	-99.9%	141.1	-99.9%	99.3	-99.9%	79.5	-99.8%
	Xylene (Iso)	47.1	99.6	-52.7%	208.8	-77.4%	236.6	-80.1%	156.3	-69.8%	139.5	-66.2%
중간원료	SM	301.6	324.1	-6.9%	557.8	-45.9%	741.6	-59.3%	724.8	-58.4%	659.5	-54.3%
	PX	345.8	406.0	-14.8%	547.1	-36.8%	597.1	-42.1%	350.8	-1.4%	327.5	5.6%
	OX	220.1	254.6	-13.5%	328.8	-33.0%	356.1	-38.2%	218.3	0.9%	187.5	17.4%
합성수지	HDPE (Inj)	380.1	411.6	-7.7%	468.8	-18.9%	511.1	-25.6%	642.3	-40.8%	574.5	-33.8%
	HDPE (Film)	470.1	481.6	-2.4%	578.8	-18.8%	611.1	-23.1%	733.3	-35.9%	700.5	-32.9%
	LDPE	360.1	341.6	5.4%	428.8	-16.0%	451.1	-20.2%	723.3	-50.2%	610.5	-41.0%
	LLDPE	360.1	341.6	5.4%	408.8	-11.9%	431.1	-16.5%	663.3	-45.7%	575.5	-37.4%
	PP (Homo)	460.1	481.6	-4.5%	558.8	-17.7%	571.1	-19.4%	588.3	-21.8%	570.5	-19.3%
	PP (Film)	480.1	521.6	-8.0%	578.8	-17.0%	586.1	-18.1%	612.3	-21.6%	579.5	-17.1%
	PVC	190.1	161.6	17.6%	148.8	27.8%	211.1	-9.9%	373.3	-49.1%	295.5	-35.7%
	GPPS	580.1	591.6	-1.9%	768.8	-24.5%	821.1	-29.3%	833.3	-30.4%	870.5	-33.4%
	HIPS	650.1	641.6	1.3%	843.8	-22.9%	891.1	-27.0%	922.3	-29.5%	949.5	-31.5%
	EPS (GP)	570.1	601.6	-5.2%	858.8	-33.6%	891.1	-36.0%	877.3	-35.0%	909.5	-37.3%
	EPS (FR)	625.1	656.6	-4.8%	903.8	-30.8%	936.1	-33.2%	912.3	-31.5%	949.5	-34.2%
	ABS	760.1	791.6	-4.0%	1,058.8	-28.2%	1,141.1	-33.4%	1,372.3	-44.6%	1,449.5	-47.6%
	PET	455.1	436.6	4.2%	558.8	-18.5%	671.1	-32.2%	487.3	-6.6%	489.5	-7.0%
합성섬유	MEG	7.1	38.6	-81.6%	166.8	-95.7%	206.1	-96.5%	382.3	-98.1%	339.5	-97.9%
	TPA	170.1	221.6	-23.2%	300.8	-43.4%	366.1	-53.5%	172.3	-1.2%	134.5	26.5%

자료 : Platts, 하이투자증권

※ 붉은색 : 상승 / 파란색 : 하락 / 검은색 : 변동 없음



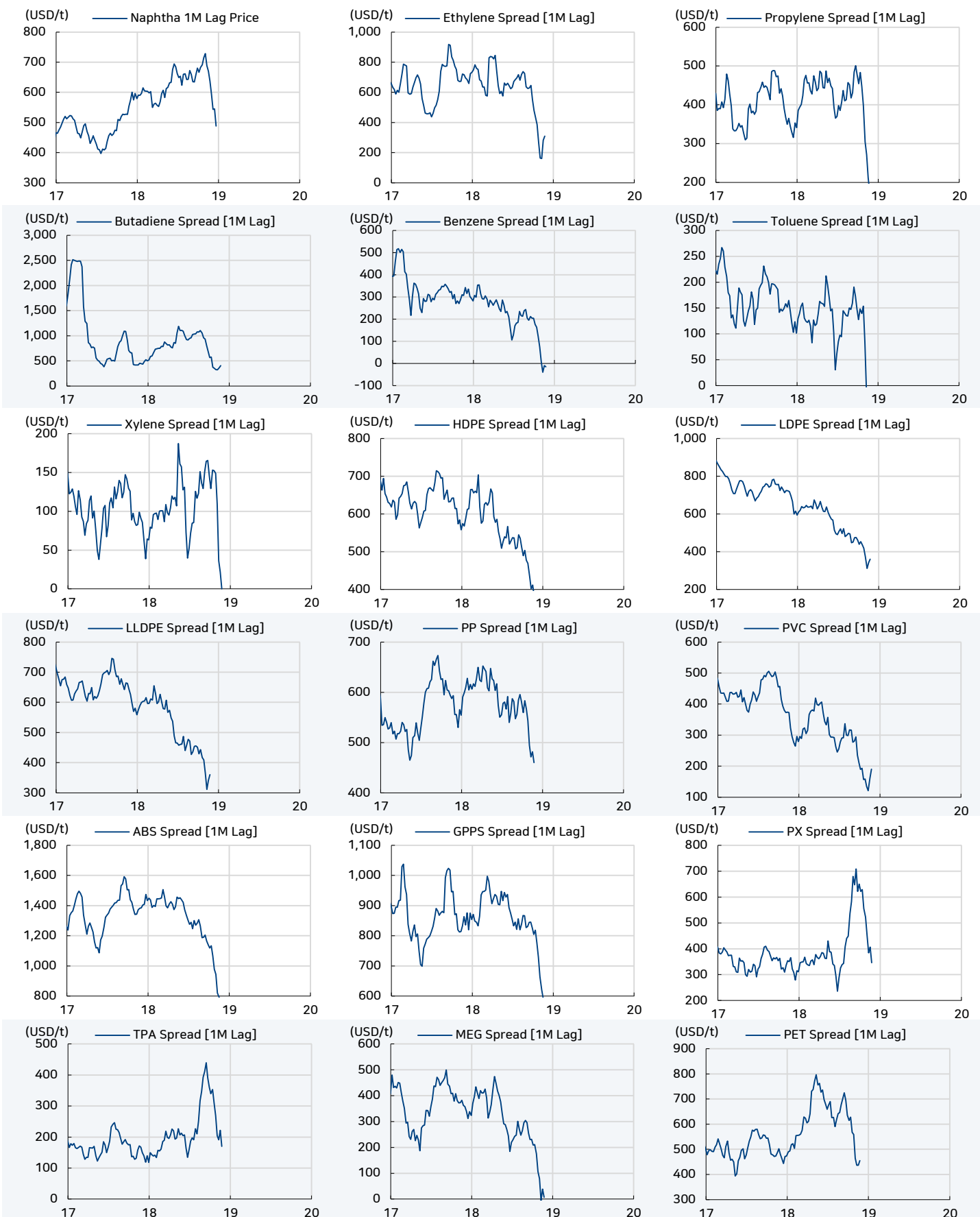
9 Major Chemical Products - Naphtha Spread Charts [Spot]







10 Major Chemical Product - Naphtha Spread Charts [1M Lag]





11 Petroleum Products Crack Margin [Spot]

구분	Current	7D		1M		3M		1Y		YTD	
		Price	Chg	Price	Chg	Price	Chg	Price	Chg	Price	Chg
정제마진	SKI 기준	7.9		6.5	1.4	5.1	2.7	6.4	1.4	6.7	1.1
	Naphtha	-6.6		-7.7	1.1	-6.4	-0.2	-3.2	-3.5	2.1	-8.7
	휘발유92	3.6		1.7	1.9	3.9	-0.3	8.8	-5.2	10.6	-7.0
	휘발유95	5.8		3.0	2.8	5.8	0.1	11.3	-5.5	13.3	-7.4
	휘발유97	7.5		4.6	2.9	7.4	0.1	13.0	-5.5	14.5	-7.0
	경유0.5%	15.7		15.6	0.0	13.4	2.3	13.4	2.3	10.1	5.5
	경유0.25%	17.0		16.8	0.3	13.6	3.4	14.7	2.3	10.5	6.5
	석유제품 (싱가폴)	경유0.05%	17.2		17.2	0.0	15.4	1.7	15.2	2.0	11.6
	등유/항공유	19.3		18.7	0.7	15.4	4.0	14.0	5.3	12.2	7.1
	연료유180	7.4		4.8	2.6	-0.5	7.9	-3.8	11.2	-3.9	11.3
	연료유380	6.9		4.2	2.7	-1.6	8.5	-4.7	11.7	-4.3	11.2
	벵커C180	11.0		8.4	2.6	1.3	9.6	-1.5	12.5	-2.9	13.9
석유제품 (일본)	벵커C380	9.8		7.4	2.4	0.1	9.8	-2.8	12.6	-3.6	13.4
	벵커C카고180	7.7		5.2	2.6	-0.1	7.8	-3.4	11.2	-3.6	11.3
	벵커C카고380	7.3		4.6	2.7	-1.2	8.5	-4.4	11.6	-4.0	11.2
	Naphtha1H	-4.8		-5.9	1.1	-4.9	0.1	-1.6	-3.2	4.0	-8.8
	Naphtha2H	-4.4		-5.4	1.0	-4.6	0.2	-1.7	-2.8	2.8	-7.3
	경유	19.7		17.6	2.1	15.7	4.0	15.3	4.5	12.3	7.4
	등유/항공유	22.4		20.1	2.3	16.9	5.5	15.5	7.0	13.4	9.1
	Naphtha	-7.3		-8.3	1.1	-7.0	-0.2	-3.7	-3.6	1.8	-9.1
	석유제품 (ArabGulf)	경유	16.7		14.6	2.1	13.1	3.6	12.8	3.9	9.7
	등유/항공유	19.6		17.2	2.3	14.5	5.1	13.1	6.5	10.9	8.7
	연료유180	7.4		4.8	2.6	-0.5	7.9	-3.8	11.2	-5.4	12.8
	연료유380	6.9		4.2	2.7	-1.6	8.5	-4.7	11.7	-5.9	12.8
선박연료	MDO(한국)	34.1		26.6	7.5	13.8	20.3	17.9	16.1	18.2	15.9
	MDO(싱가폴)	20.8		20.2	0.5	18.2	2.6	18.1	2.6	14.7	6.0
	MDO(일본)	29.2		14.2	15.0	6.9	22.2	4.0	25.1	0.0	29.1
	MGO(한국)	45.2		33.1	12.1	26.0	19.2	18.3	26.9	17.4	27.7
	MGO(홍콩)	44.0		29.9	14.1	22.2	21.8	15.4	28.6	18.3	25.7

자료 : Platts, 하이투자증권

※ 붉은색 : 상승 / 파란색 : 하락 / 검은색 : 변동 없음

12 Petroleum Products Crack Margin [1M Lag]

구분	Current	7D		1M		3M		1Y		YTD	
		Price	Chg	Price	Chg	Price	Chg	Price	Chg	Price	Chg
정제마진	SKI 기준	-12.4		-7.0	-5.4	7.6	-20.0	10.2	-22.6	12.3	-24.7
	Naphtha	-26.9		-21.2	-5.7	-5.0	-21.9	0.6	-27.5	7.3	-34.3
	휘발유92	-16.7		-11.8	-4.9	5.3	-22.0	12.6	-29.3	15.8	-32.5
	휘발유95	-14.5		-10.5	-3.9	7.2	-21.6	15.1	-29.5	18.5	-33.0
	휘발유97	-12.8		-8.9	-3.9	8.8	-21.6	16.8	-29.6	19.8	-32.6
	경유0.5%	-4.6		2.1	-6.7	14.8	-19.4	17.2	-21.8	15.4	-20.0
	경유0.25%	-3.3		3.2	-6.5	15.0	-18.3	18.4	-21.7	15.7	-19.0
	석유제품 (싱가폴)	경유0.05%	-3.1		3.7	-6.8	16.8	18.9	-22.1	16.8	-20.0
	등유/항공유	-1.0		5.2	-6.1	16.8	-17.7	17.8	-18.7	17.5	-18.4
	연료유180	-12.9		-8.7	-4.2	0.9	-13.8	0.0	-12.9	1.4	-14.3
	연료유380	-13.4		-9.3	-4.1	-0.2	-13.2	-1.0	-12.4	1.0	-14.3
	벵커C180	-9.3		-5.2	-4.2	2.7	-12.1	2.2	-11.6	2.3	-11.7
석유제품 (일본)	벵커C380	-10.5		-6.1	-4.3	1.5	-11.9	1.0	-11.4	1.7	-12.1
	벵커C카고180	-12.6		-8.3	-4.2	1.3	-13.9	0.3	-12.9	1.7	-14.2
	벵커C카고380	-13.0		-8.9	-4.1	0.2	-13.2	-0.6	-12.4	1.2	-14.3
	Naphtha1H	-25.1		-19.4	-5.7	-3.5	-21.6	2.1	-27.2	9.2	-34.3
	Naphtha2H	-24.7		-18.9	-5.8	-3.2	-21.5	2.1	-26.8	8.1	-32.8
	경유	-0.6		4.1	-4.7	17.1	-17.7	19.0	-19.6	17.6	-18.1
	등유/항공유	2.1		6.6	-4.4	18.3	-16.2	19.2	-17.1	18.6	-16.5
	석유제품 (ArabGulf)	Naphtha	-27.6		-21.9	-5.7	-5.6	-21.9	0.1	-27.6	7.1
	경유	-3.6		1.1	-4.7	14.5	-18.1	16.5	-20.1	14.9	-18.5
	등유/항공유	-0.7		3.7	-4.4	15.9	-16.6	16.8	-17.6	16.1	-16.9
	연료유180	-12.9		-8.7	-4.2	0.9	-13.8	0.0	-12.9	-0.2	-12.7
	연료유380	-13.4		-9.3	-4.1	-0.2	-13.2	-1.0	-12.4	-0.6	-12.8
선박연료	MDO(한국)	13.8		13.0	0.7	15.2	-1.4	21.7	-7.9	23.4	-9.7
	MDO(싱가폴)	0.5		6.7	-6.3	19.6	-19.1	21.9	-21.4	20.0	-19.5
	MDO(일본)	8.9		0.6	8.2	8.3	0.5	7.8	1.1	5.3	3.6
	MGO(한국)	24.9		19.6	5.3	27.4	-2.5	22.1	2.8	22.7	2.2
	MGO(홍콩)	23.7		16.4	7.3	23.6	0.1	19.1	4.6	23.5	0.2

자료 : Platts, 하이투자증권

※ 붉은색 : 상승 / 파란색 : 하락 / 검은색 : 변동 없음





Issue #2 / 4th Week of November / '18.11.26

13 Petroleum Product Crack Margins [Spot]

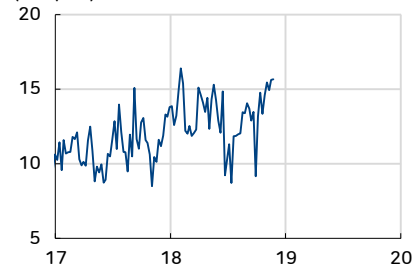
(USD/bbl) — Naphtha [싱가폴]



(USD/bbl) — 휘발유95 [싱가폴]



(USD/bbl) — 경유0.5% [싱가폴]



(USD/bbl) — 등유/항공유 [싱가폴]



(USD/bbl) — 연료유380 [싱가폴]



(USD/bbl) — 병커C380 [싱가폴]



14 Petroleum Product Crack Margins [1M Lag]

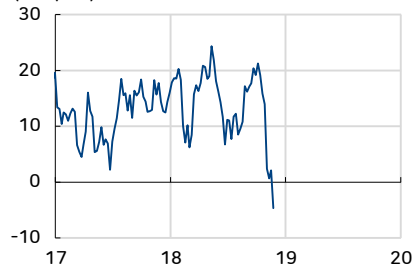
(USD/bbl) — Naphtha [싱가폴]



(USD/bbl) — 휘발유95 [싱가폴]



(USD/bbl) — 경유0.5% [싱가폴]



(USD/bbl) — 등유/항공유 [싱가폴]



(USD/bbl) — 연료유380 [싱가폴]

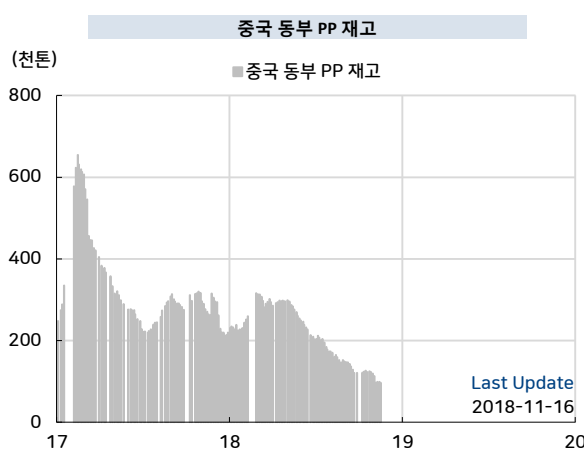
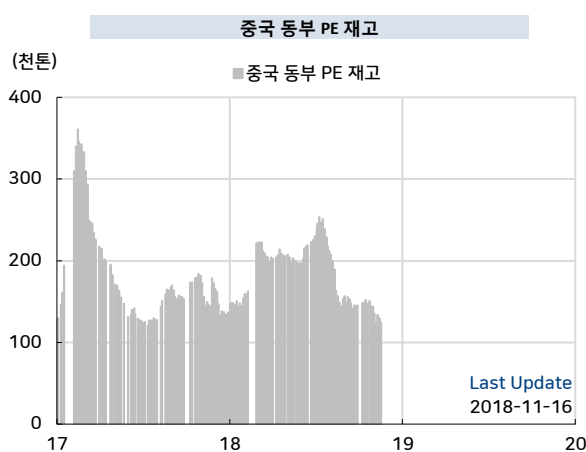
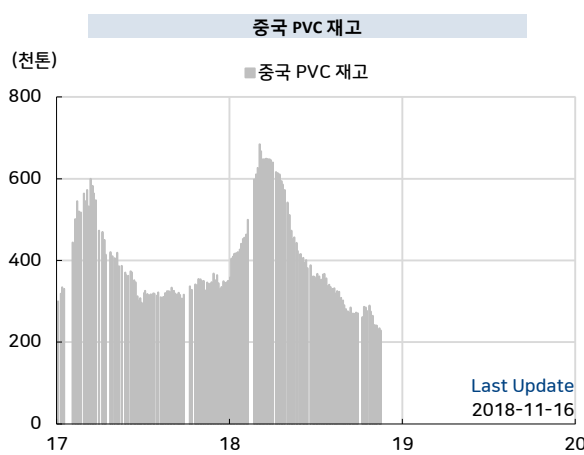
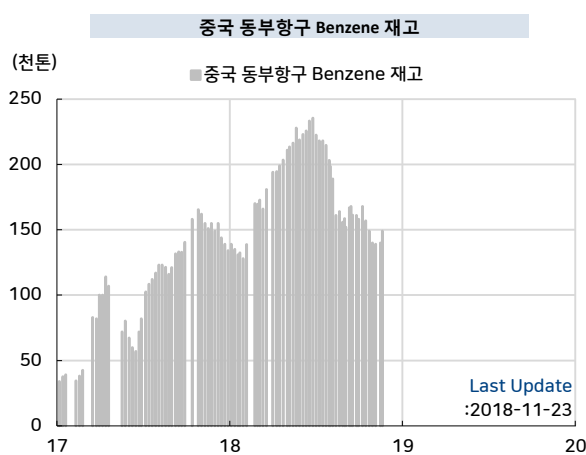
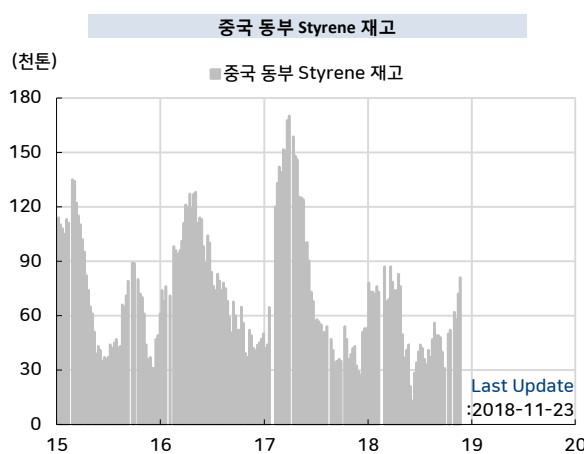
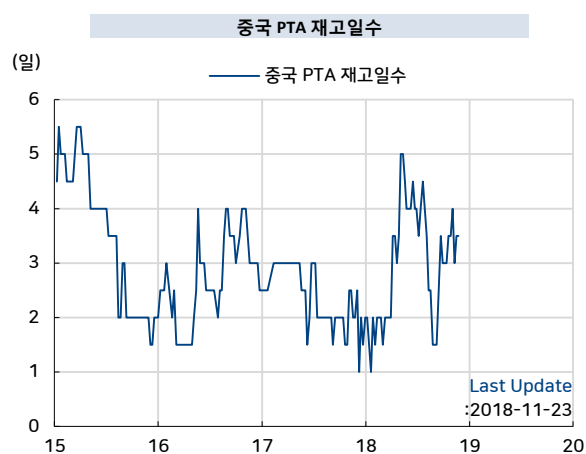


(USD/bbl) — 병커C380 [싱가폴]



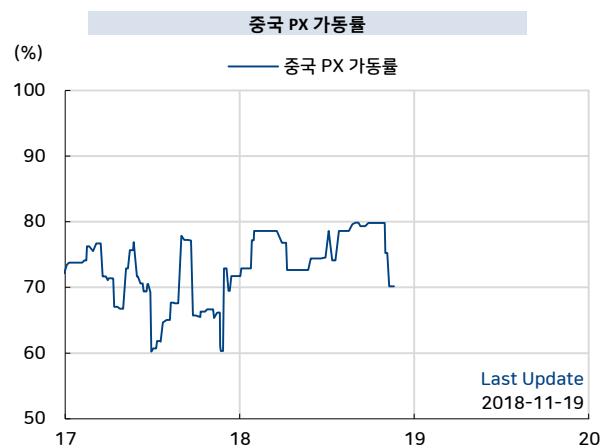
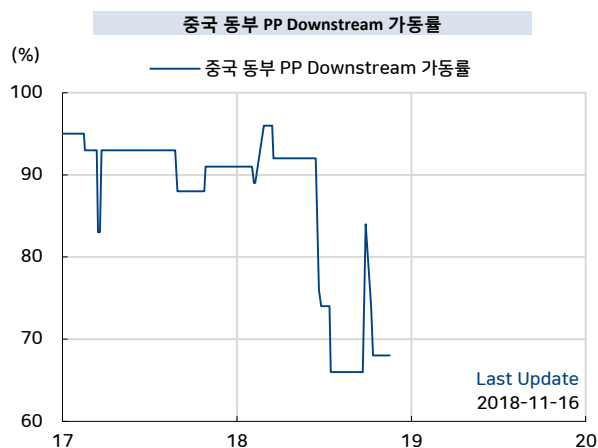
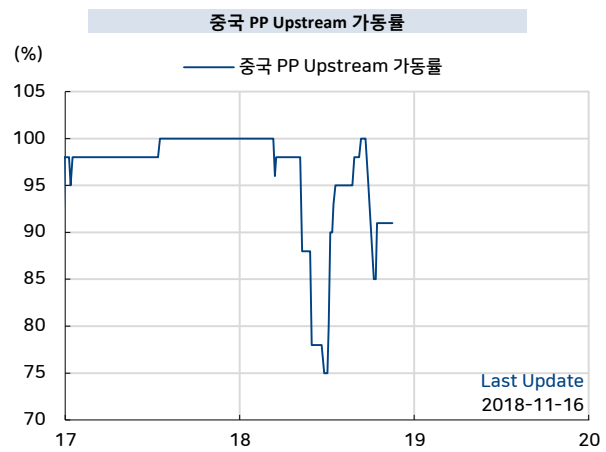
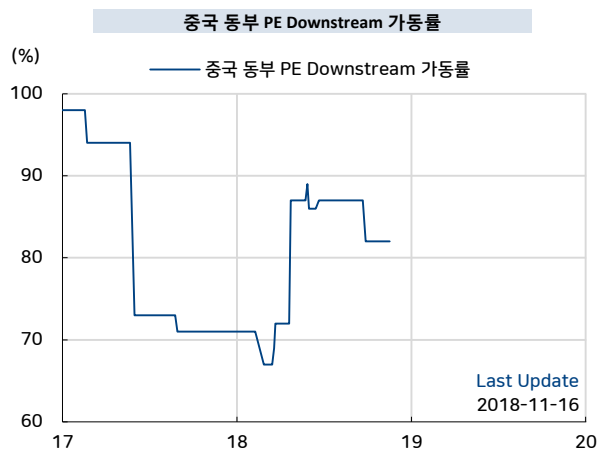
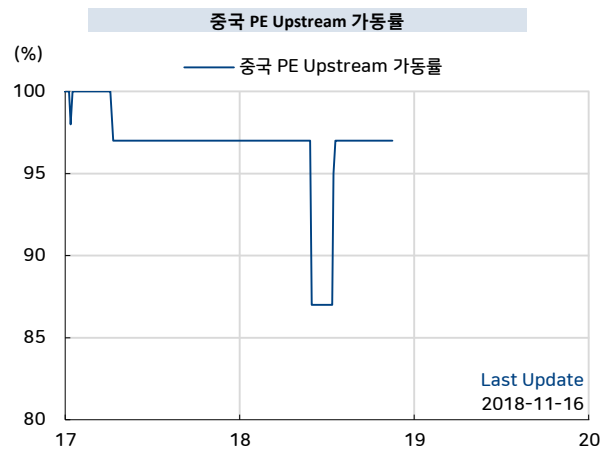
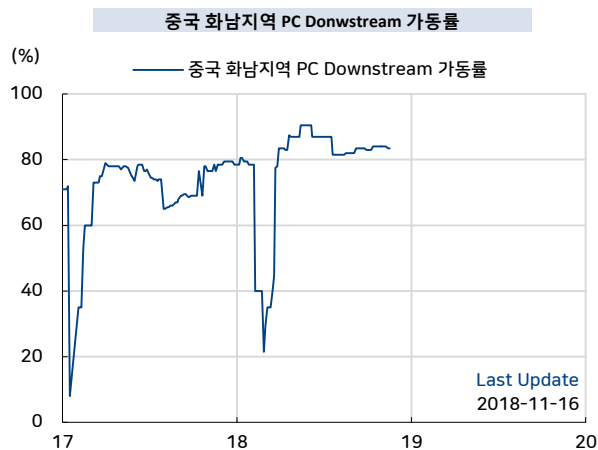


15 [화학] 중국의 화학제품별 재고 및 재고일수



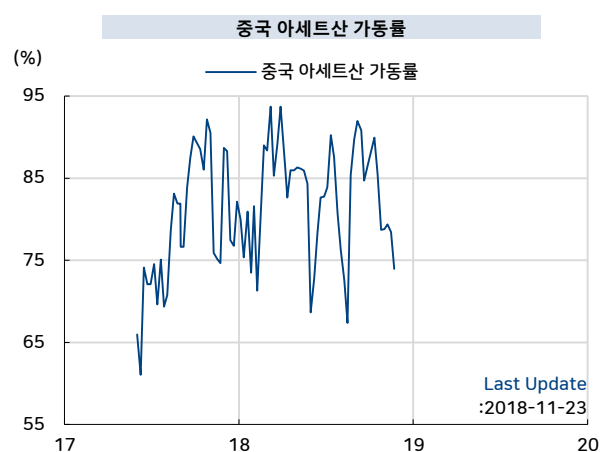
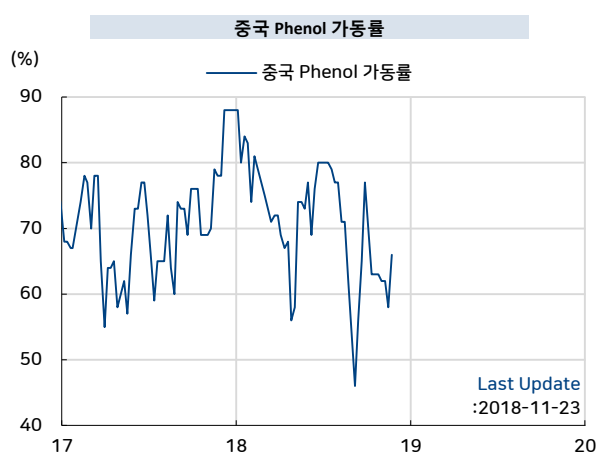
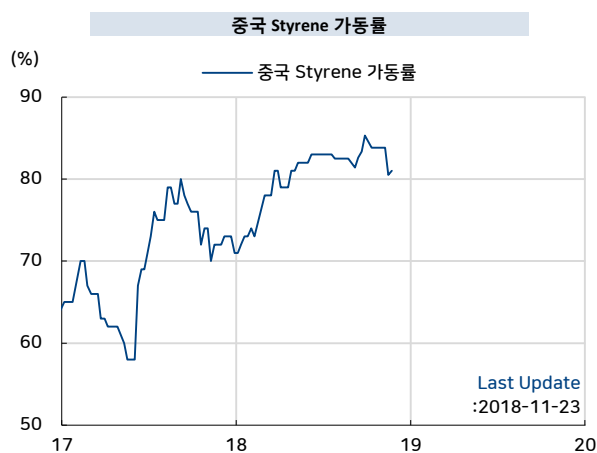
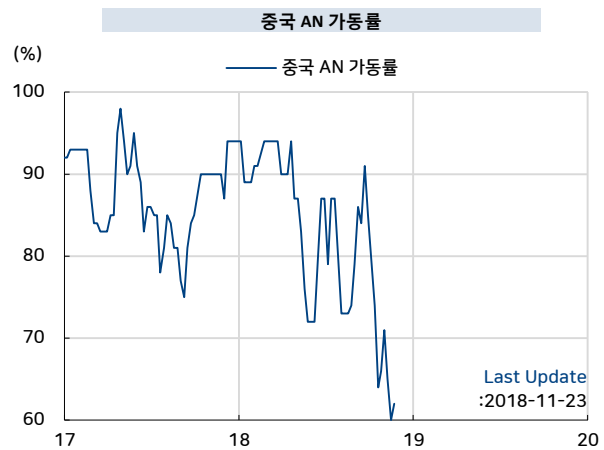
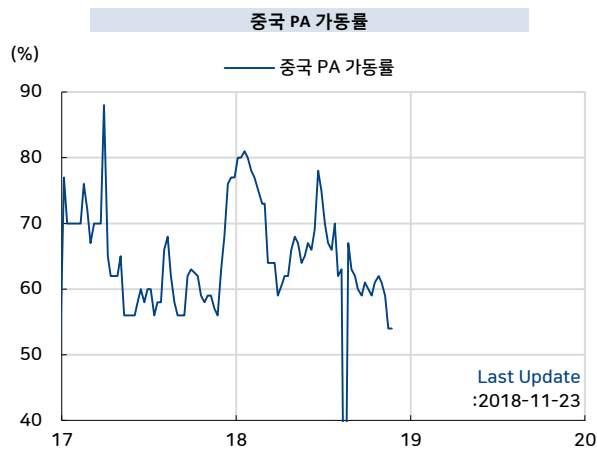
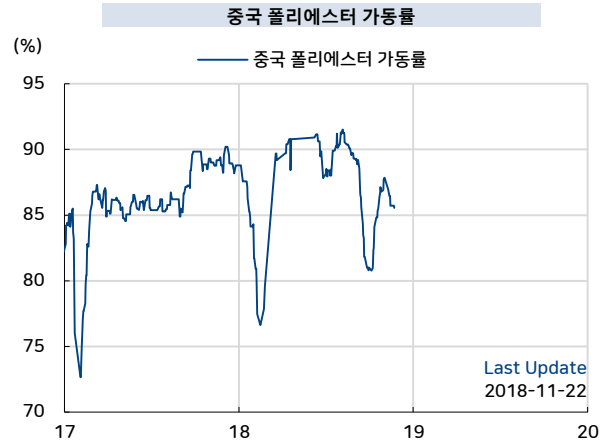


16 [화학] 중국의 화학제품 가동률 (1/2)



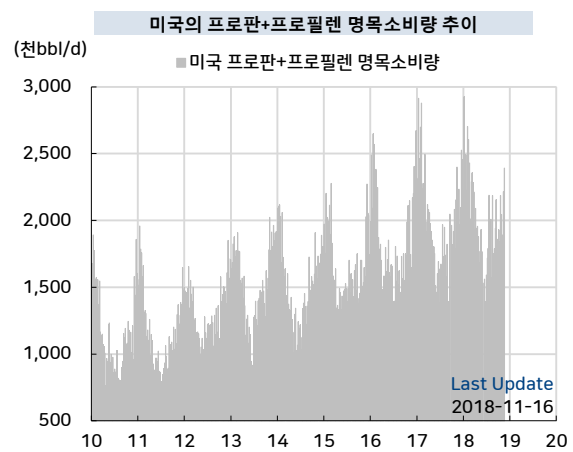
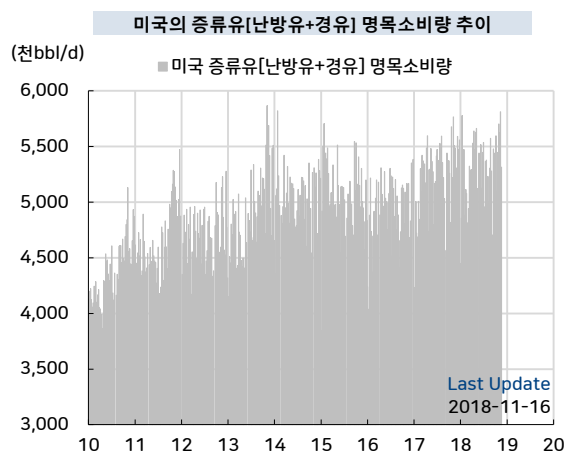
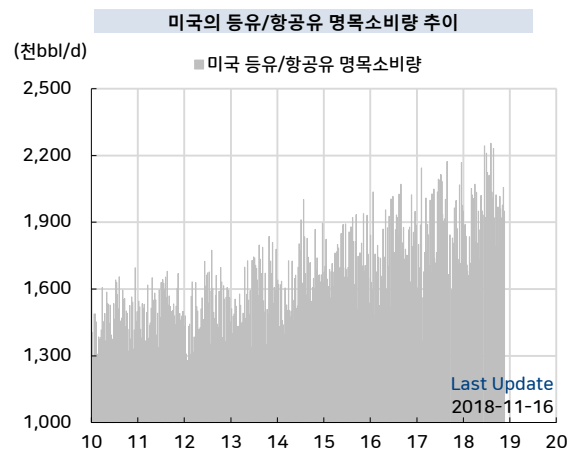
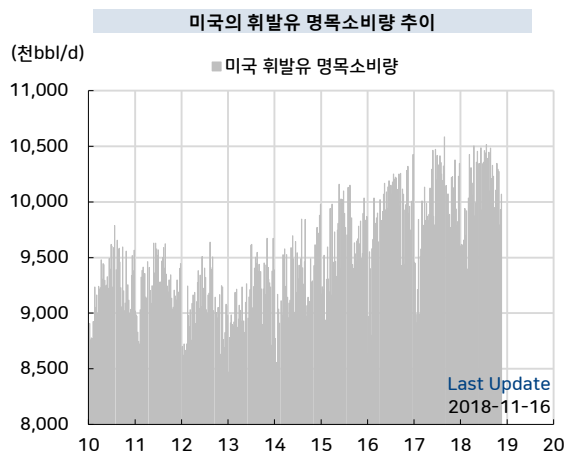
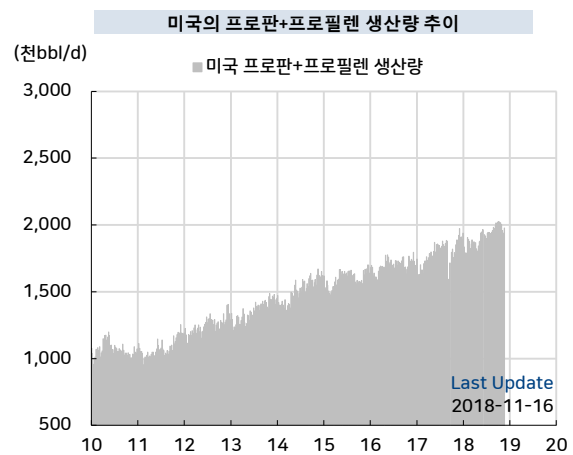
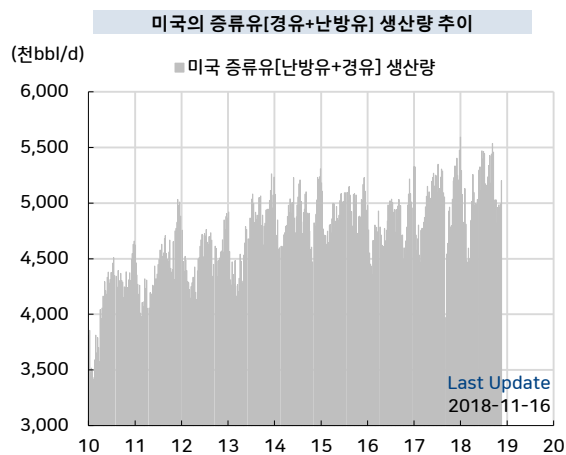
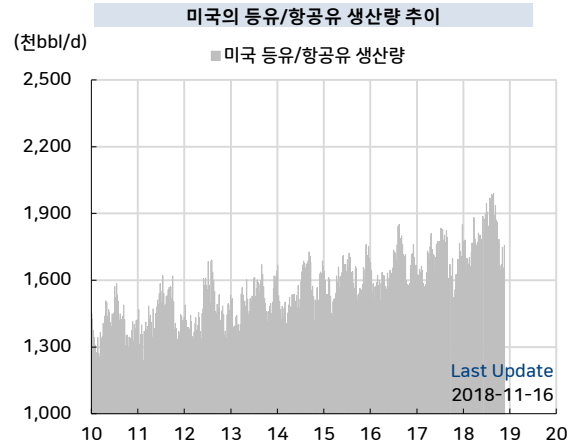
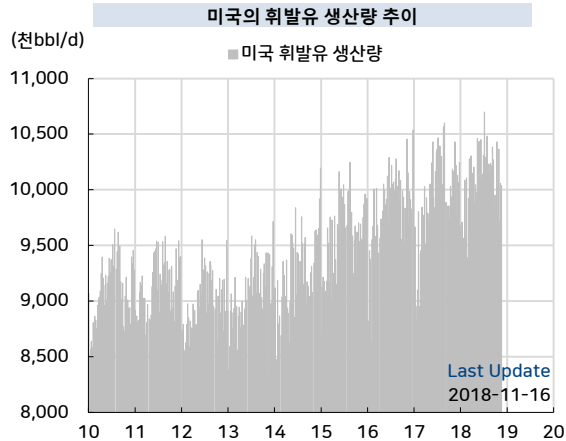


17 [화학] 중국의 화학제품 가동률 (2/2)



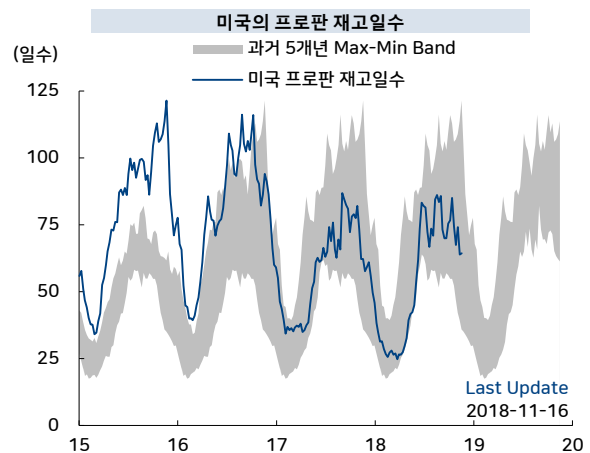
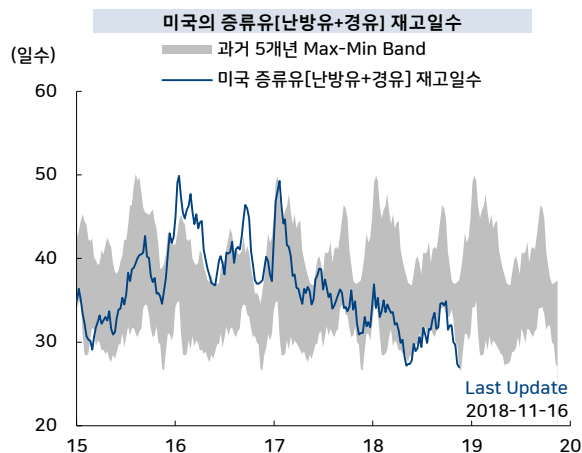
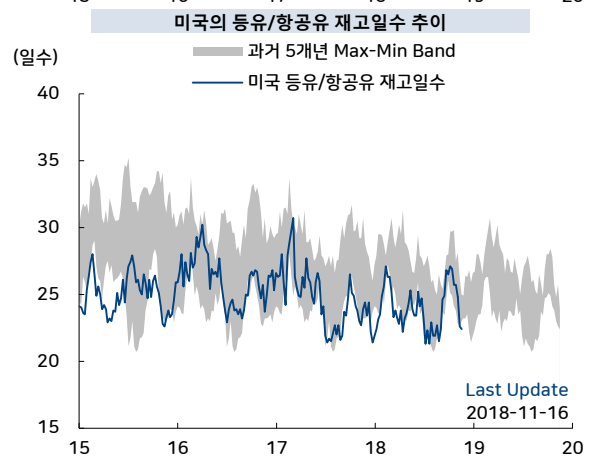
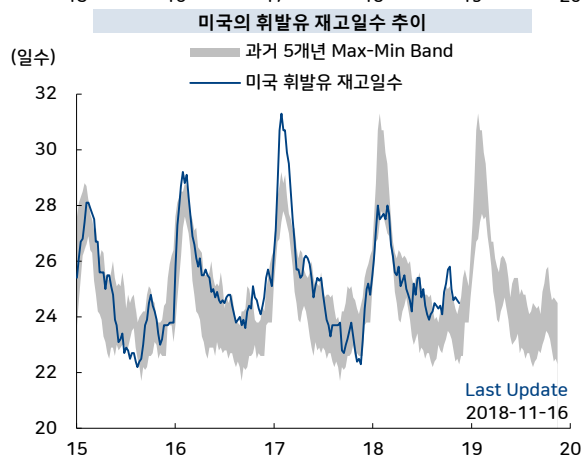
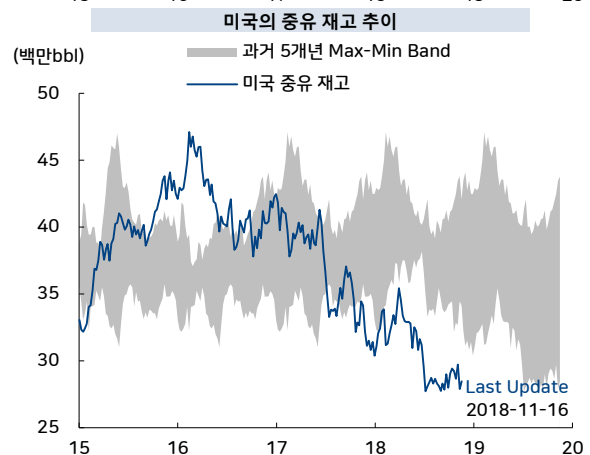
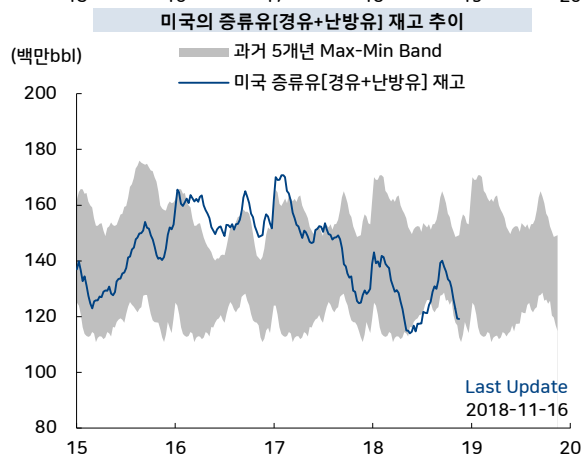
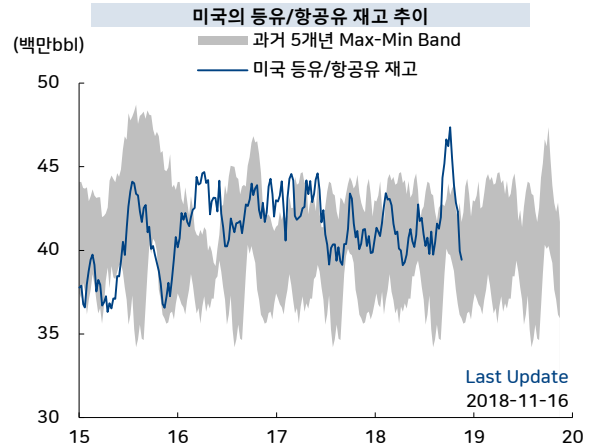
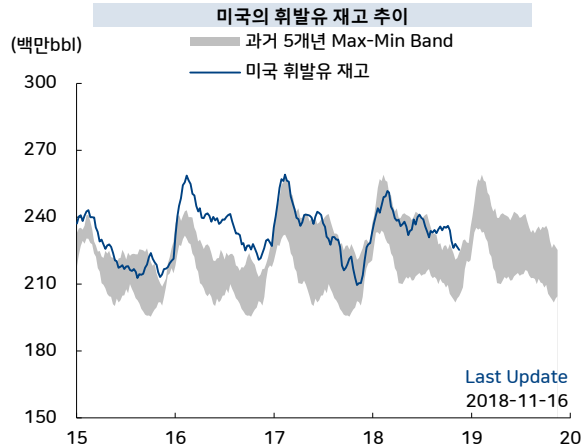


18 [정유] 미국의 석유제품 생산량 및 명목소비량 추이





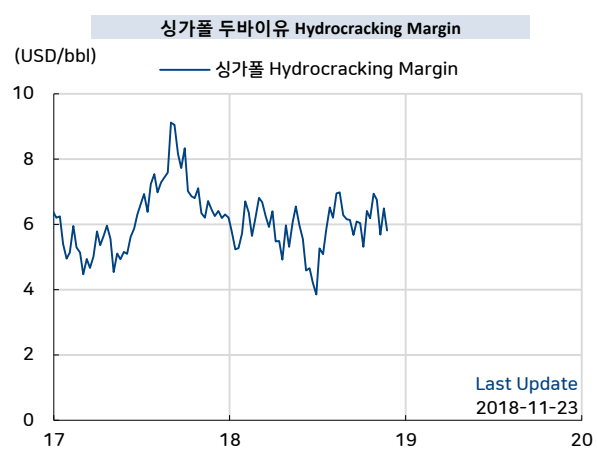
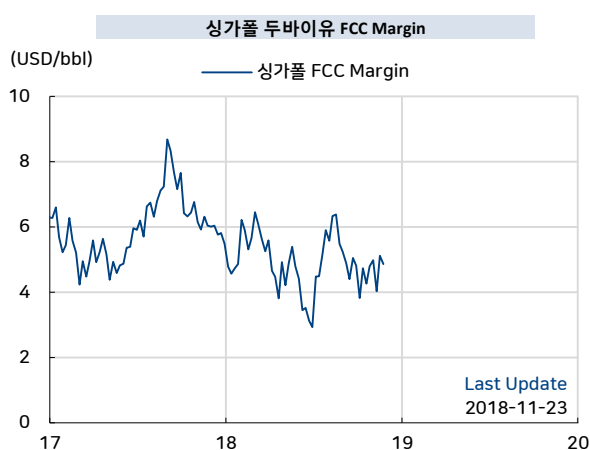
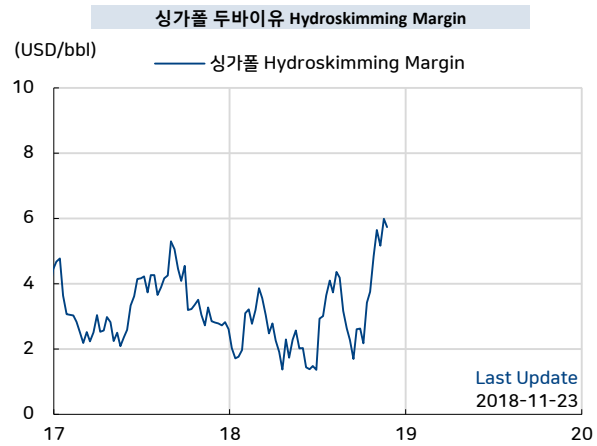
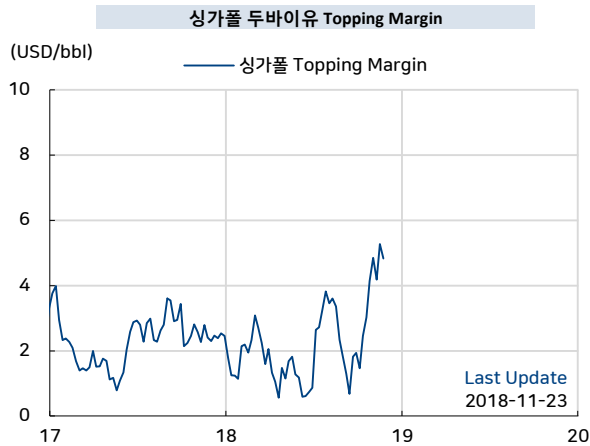
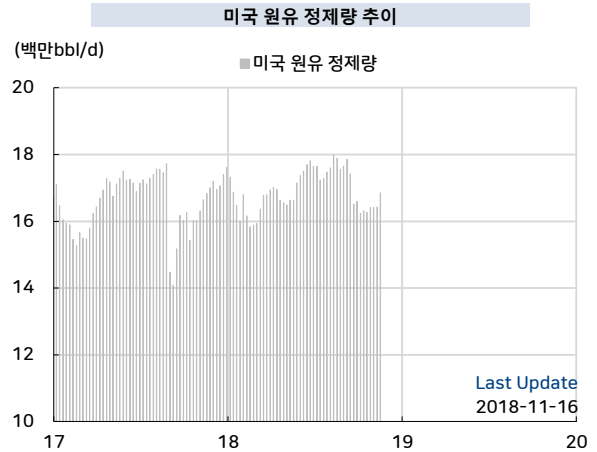
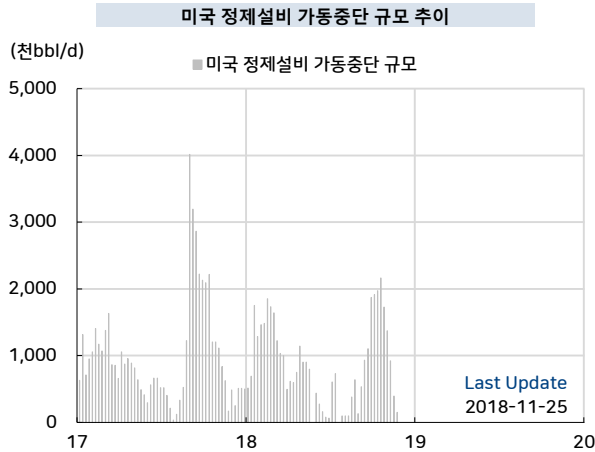
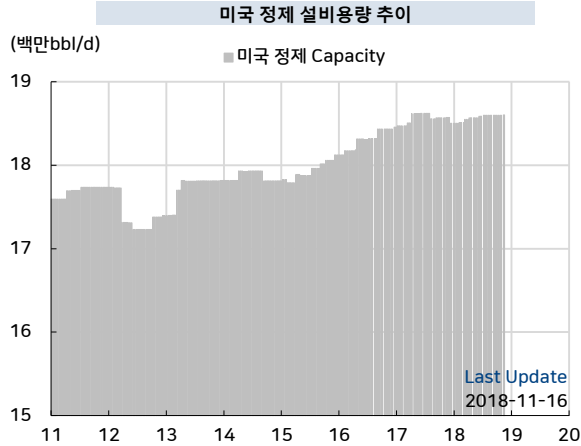
19 [정유] 미국의 석유제품 재고 및 재고일수 추이





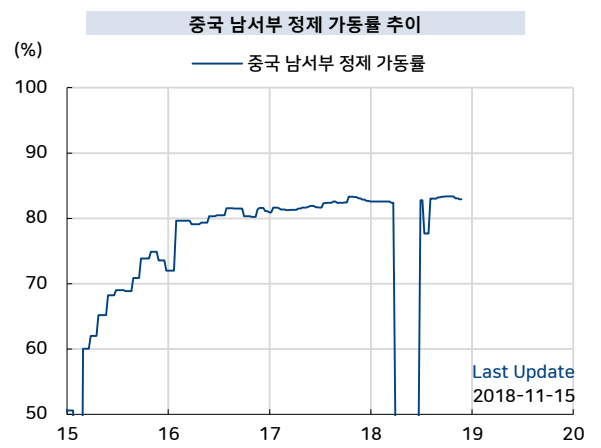
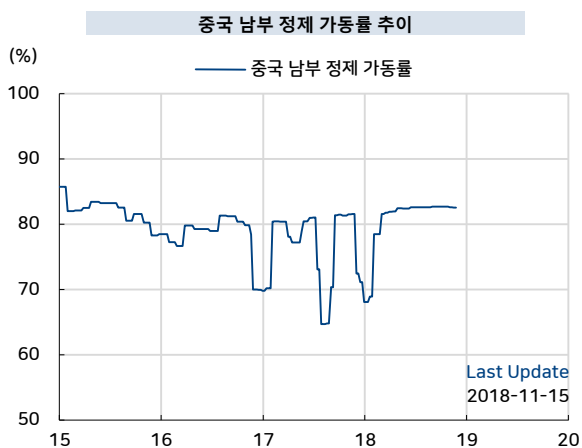
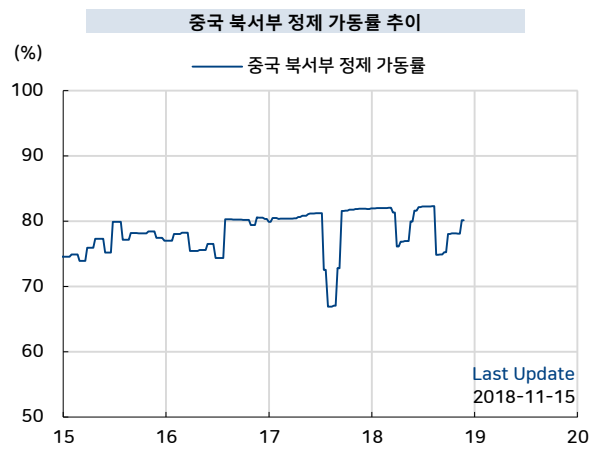
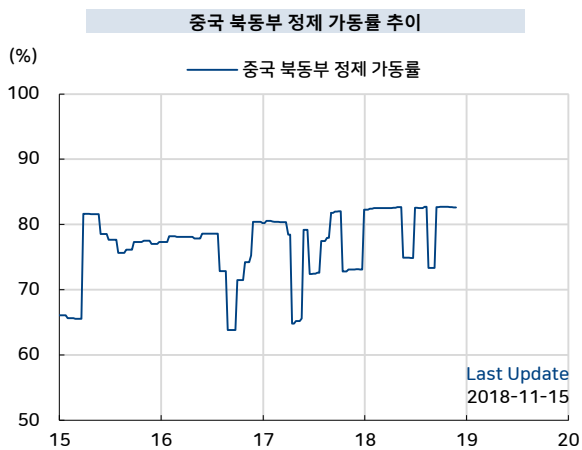
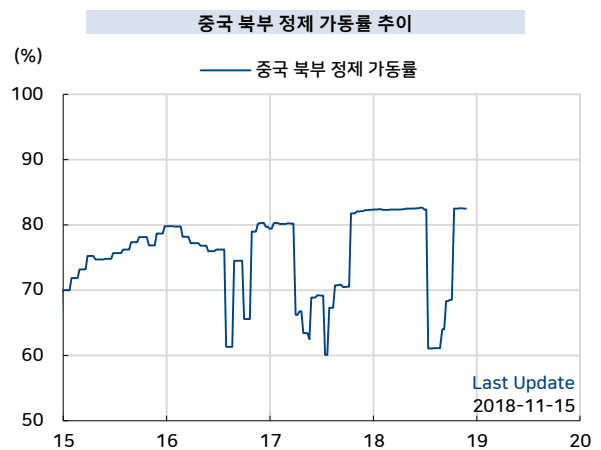
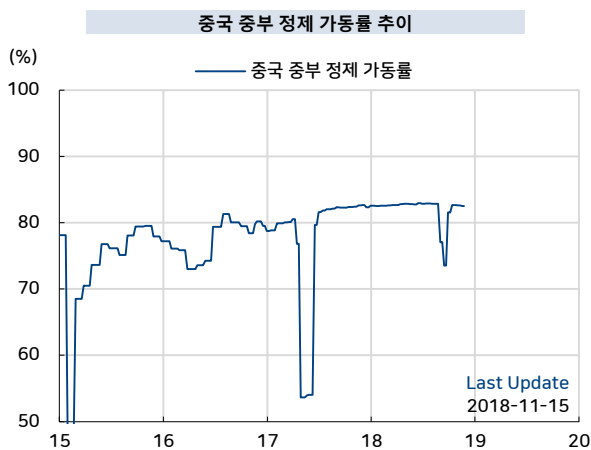


20 [정유] 미국의 정제 설비용량, 가동률, 정제량 및 싱가포르 정제마진



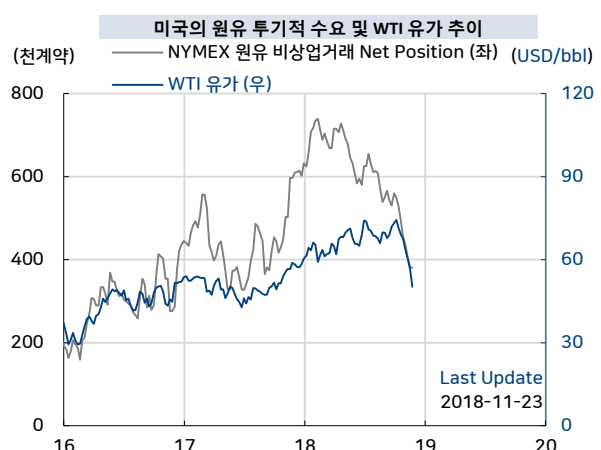
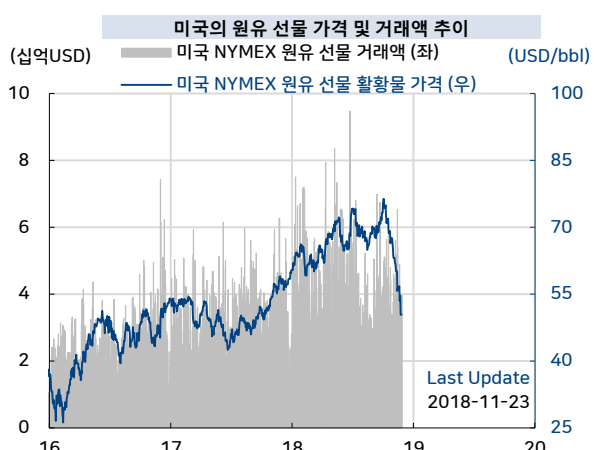
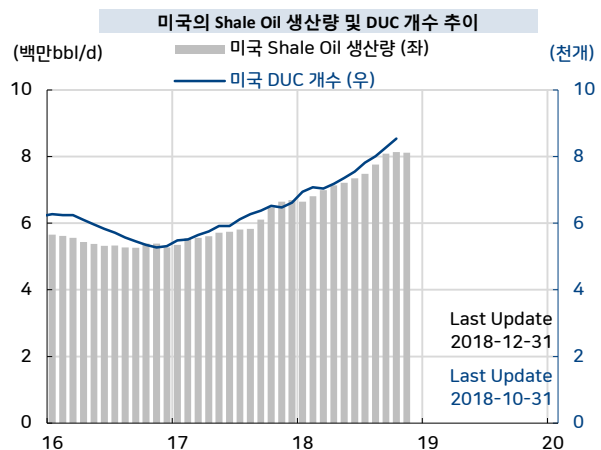
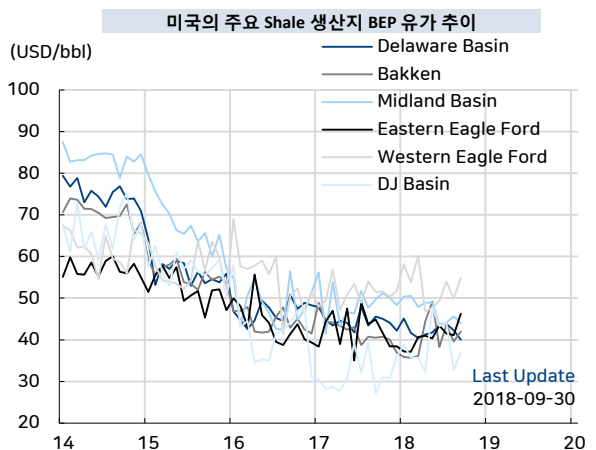
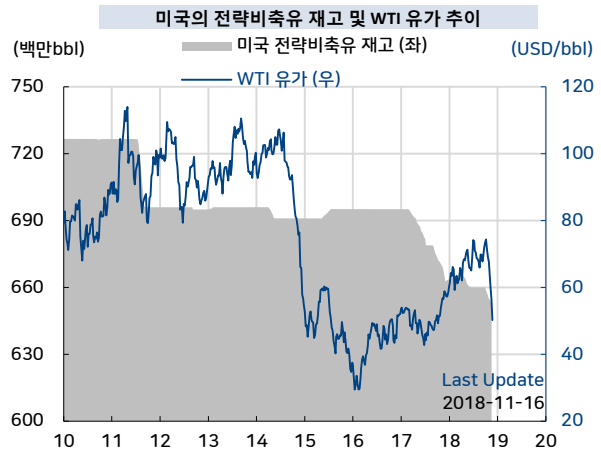
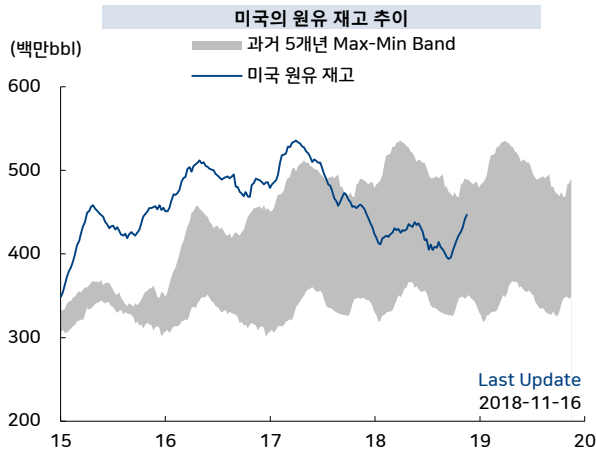
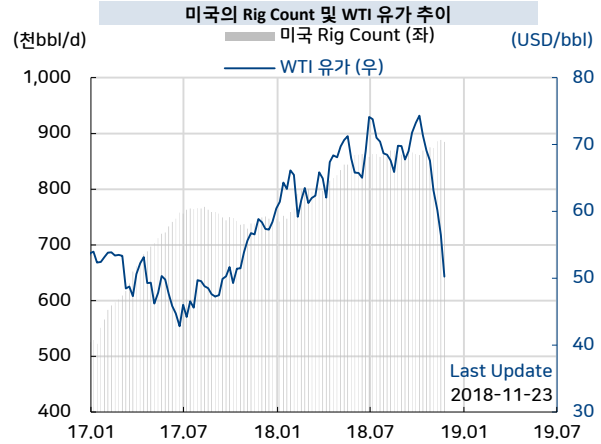
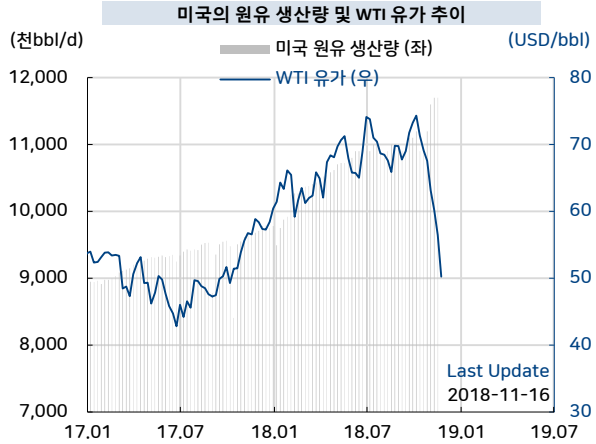


21 [정유] 중국의 Teapot Refineries 가동률 및 지역별 가동률





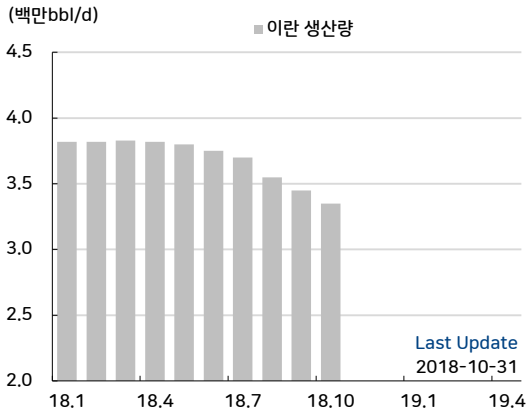
22 [국제유가] 미국의 주요 원유 관련 지표 Charts



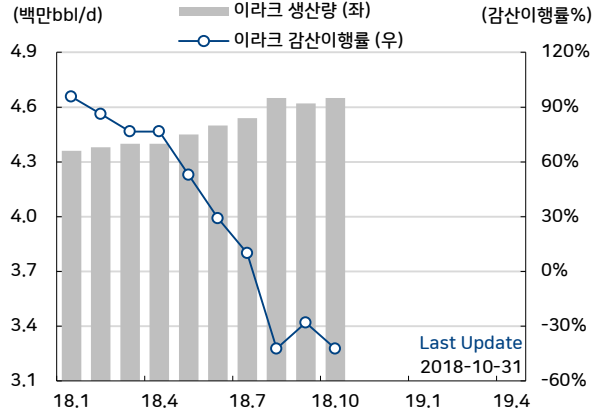


23 [국제유가] OPEC 주요 국가들의 원유 생산량 및 감산이행률

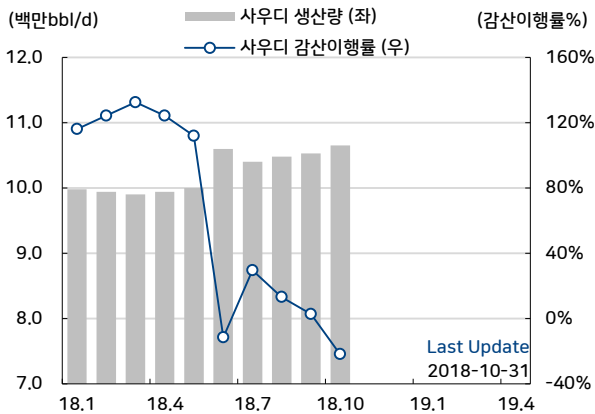
이란의 원유 생산량 추이



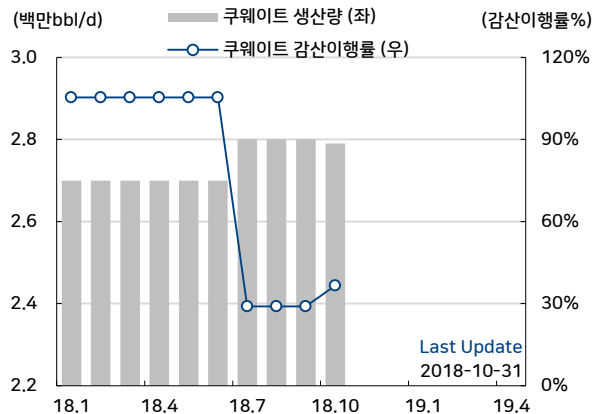
이라크의 원유 생산량 및 감산이행률 추이



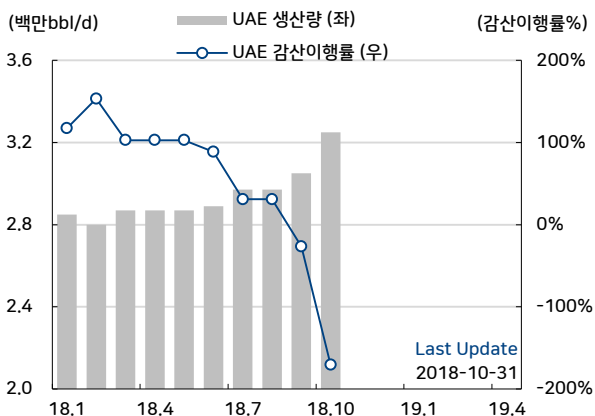
사우디의 원유 생산량 및 감산이행률 추이



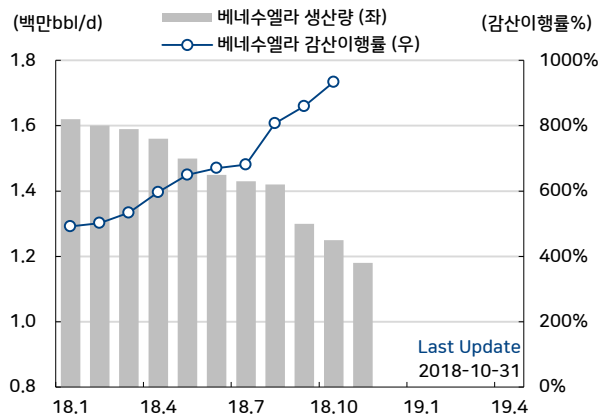
쿠웨이트의 원유 생산량 및 감산이행률 추이



UAE의 원유 생산량 및 감산이행률 추이



베네수엘라의 원유 생산량 및 감산이행률 추이

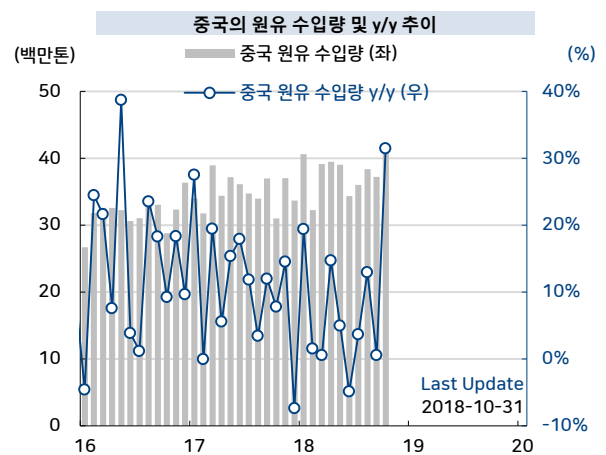
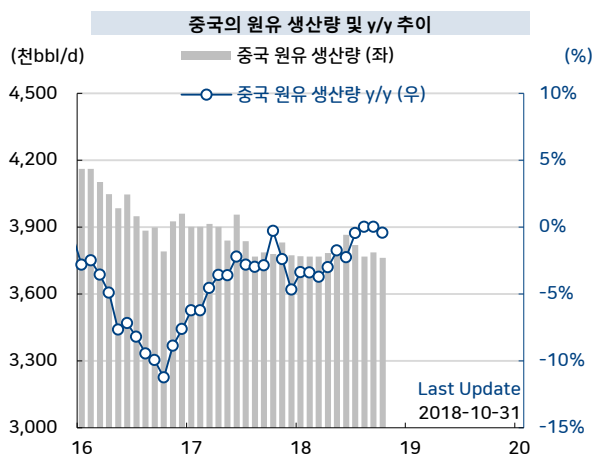
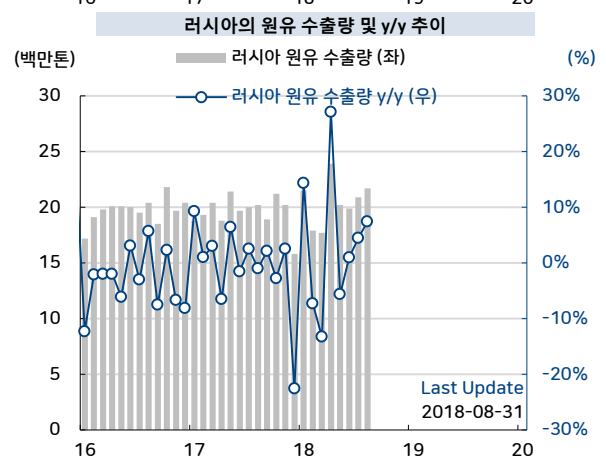
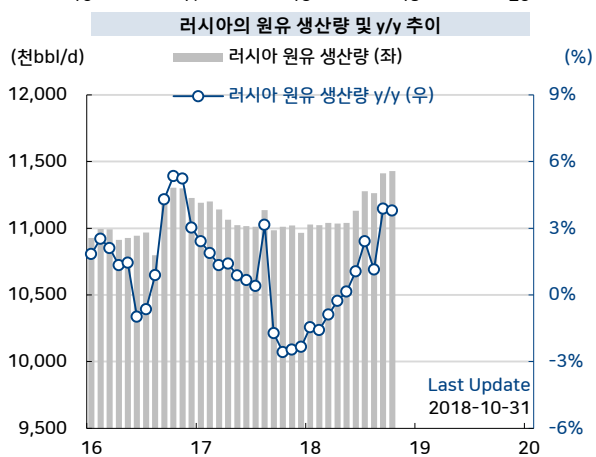
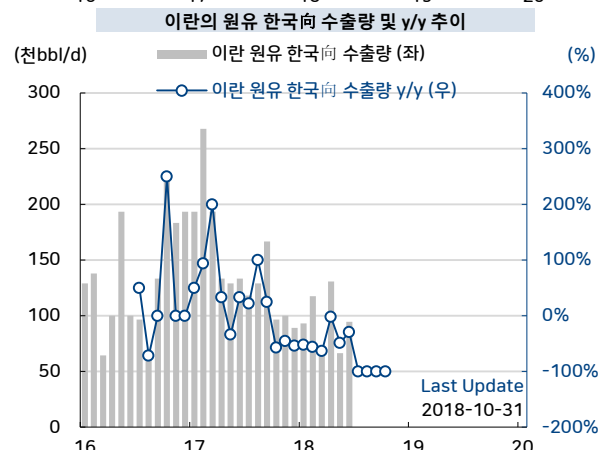
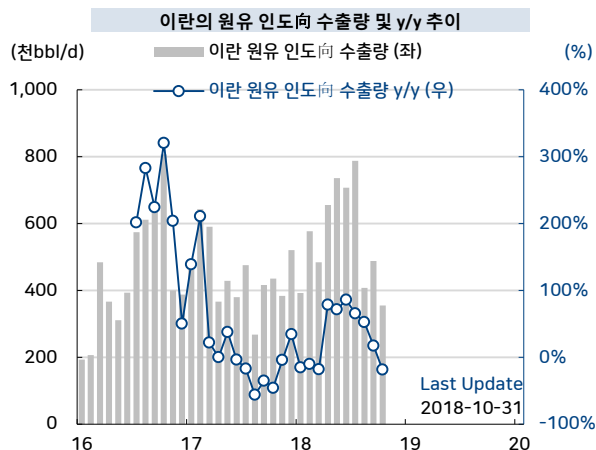
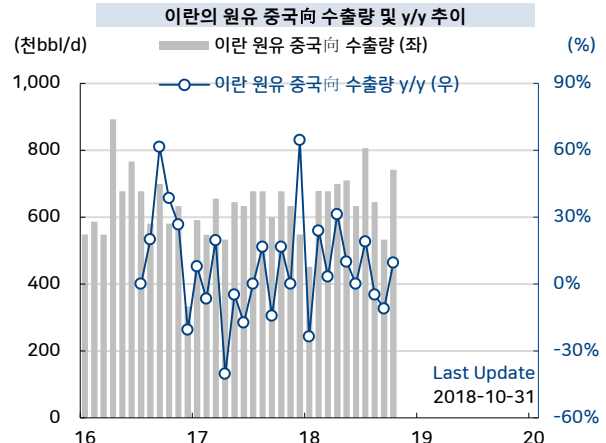
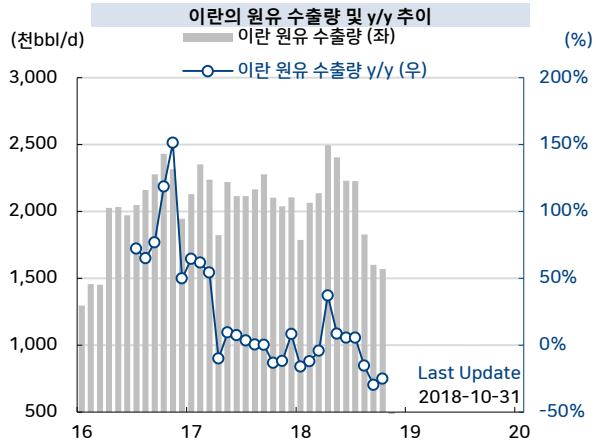


[천bbl/d]	기준생산 (A)	생산쿼터 (B)	감산목표 (B-a)	'18년 4월		'18년 10월	
				원유 생산량	이행률 (%)	원유 생산량	이행률 (%)
알제리	1,089	1,039	-50	980	218.0%	1,060	58.0%
앙골라	1,751	1,673	-78	1,490	334.6%	1,530	283.3%
에콰도르	548	522	-26	520	107.7%	530	69.2%
적도기니	190	178	-12	130	500.0%	120	583.3%
가봉	202	193	-9	200	22.2%	190	133.3%
이란	3,707	3,797	90	3,820	125.6%	3,350	-396.7%
이라크	4,561	4,351	-210	4,400	76.7%	4,650	-42.4%
쿠웨이트	2,838	2,707	-131	2,700	105.3%	2,790	36.6%
카타르	648	618	-30	600	160.0%	600	160.0%
사우디	10,544	10,058	-486	9,940	124.3%	10,650	-21.8%
UAE	3,013	2,874	-139	2,870	102.9%	3,250	-170.5%
베네수엘라	2,067	1,972	-95	1,500	596.8%	1,180	933.7%
<b>OPEC 12 합계</b>	<b>31,108</b>	<b>29,932</b>	<b>-1,176</b>	<b>29,150</b>	<b>166.5%</b>	<b>29,900</b>	<b>102.7%</b>

\* 단위 : 천배럴



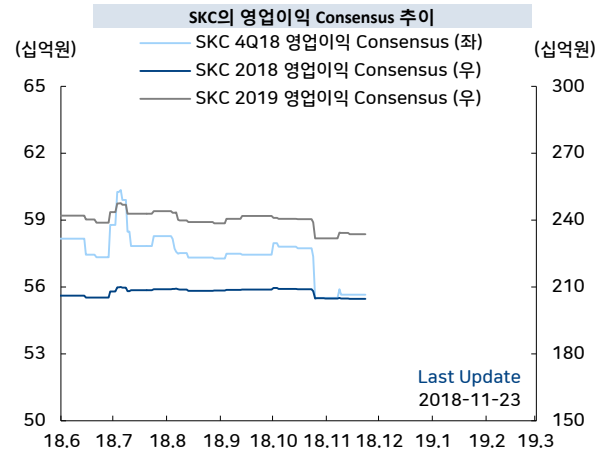
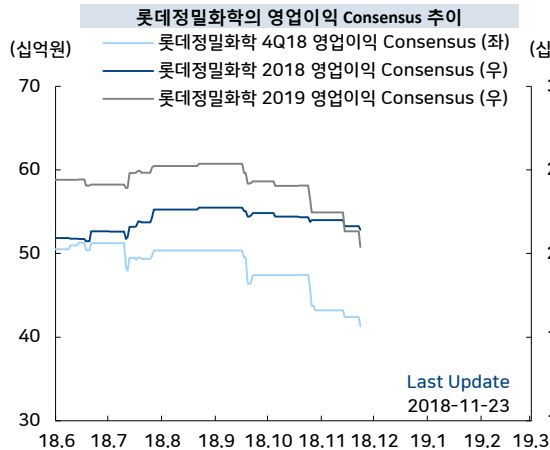
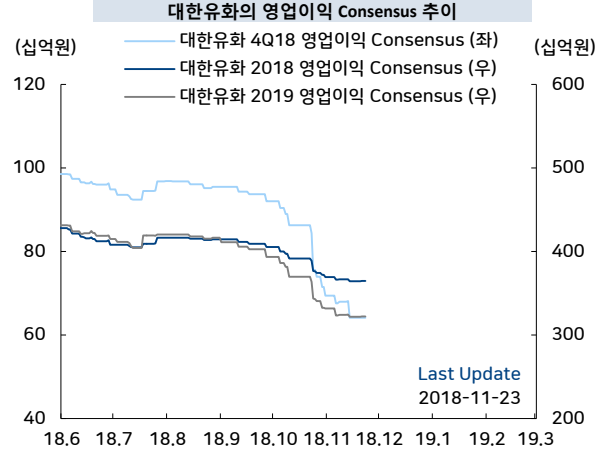
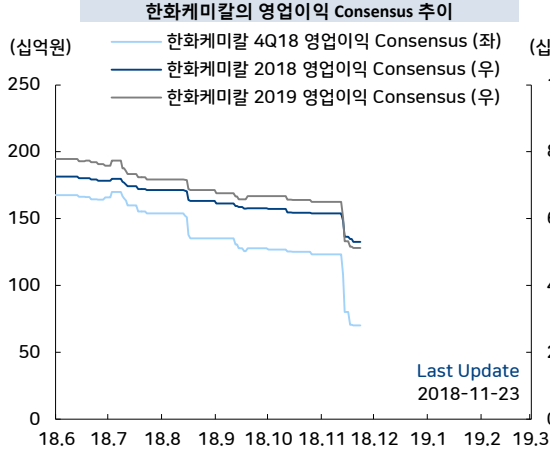
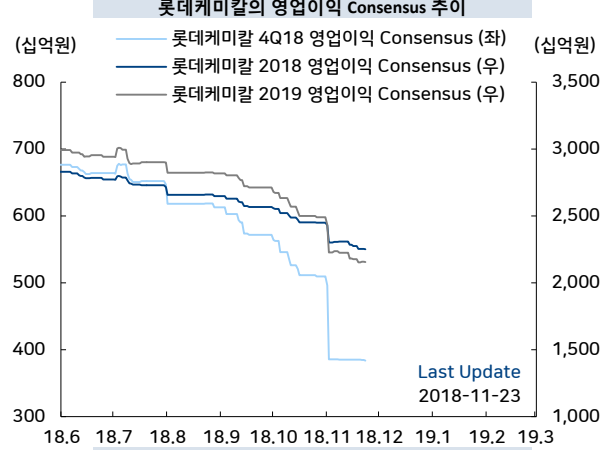
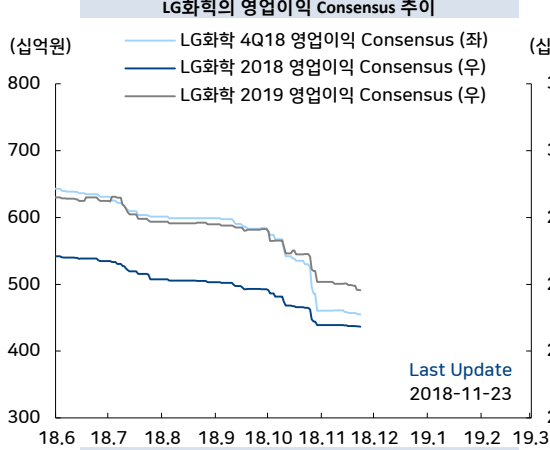
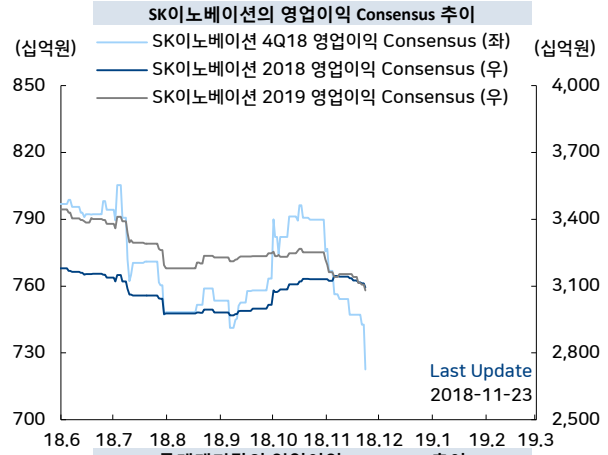
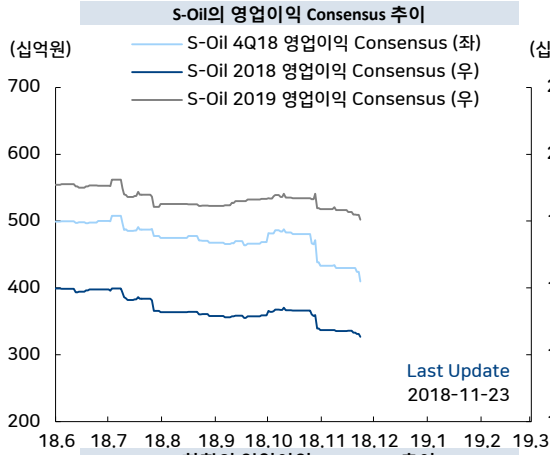
24 [국제유가] 이란/러시아/중국의 주요 원유 관련 지표 Charts





Issue #2 / 4th Week of November / '18.11.26

25 [컨센서스] 정유/화학 주요 종목 영업이익 Consensus 추이 (1/2)

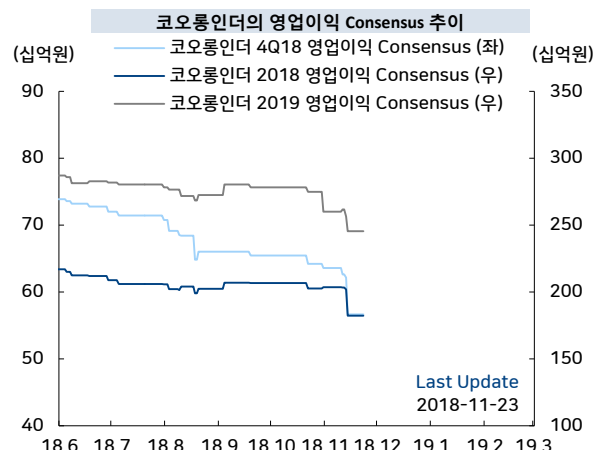
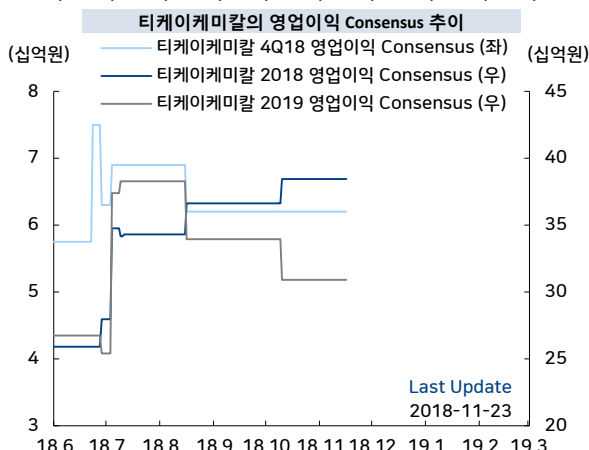
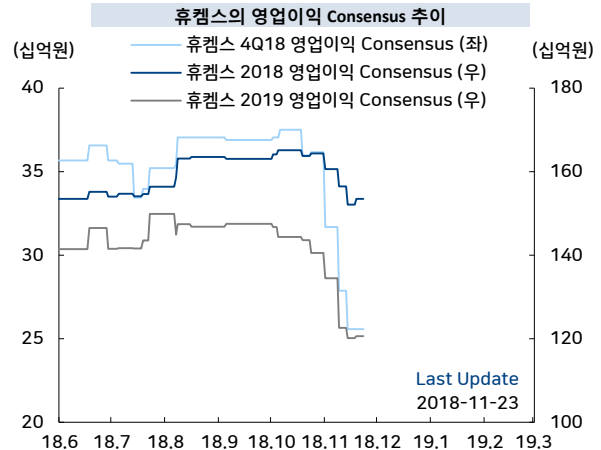
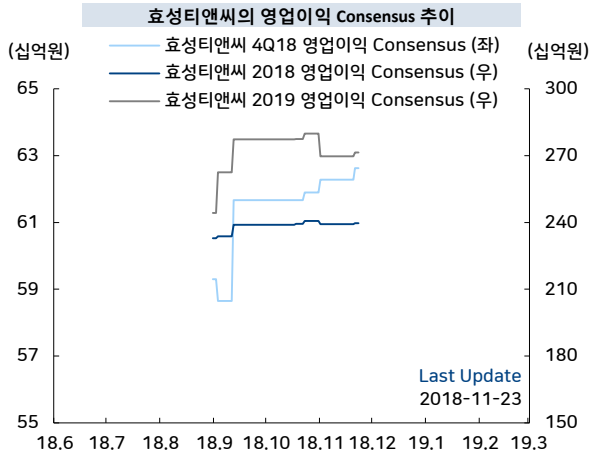
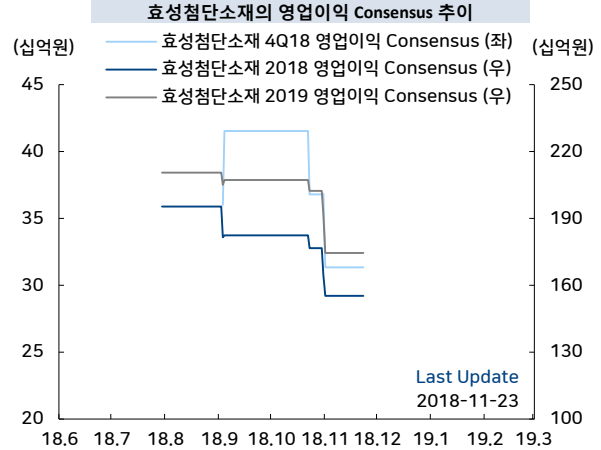
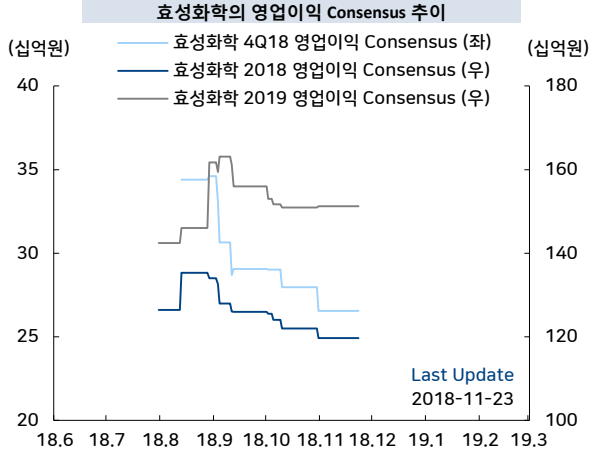
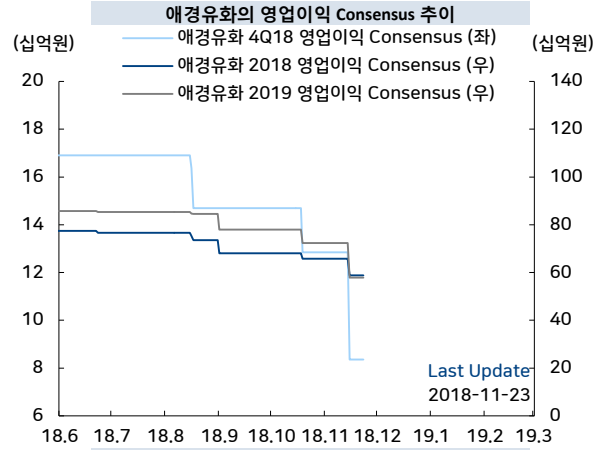
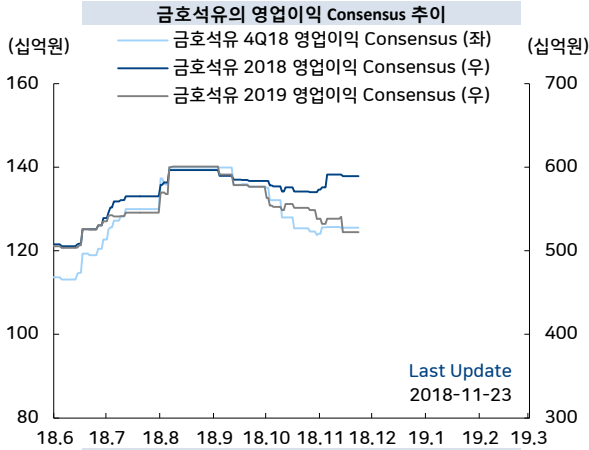






Issue #2 / 4th Week of November / '18.11.26

26 [컨센서스] 정유/화학 주요 종목 영업이익 Consensus 추이 (1/2)





## Compliance notice

당 보고서 공표일 기준으로 해당 기업과 관련하여,

- ▶ 회사는 해당 종목을 1%이상 보유하고 있지 않습니다.
- ▶ 금융투자분석사와 그 배우자는 해당 기업의 주식을 보유하고 있지 않습니다.
- ▶ 당 보고서는 기관투자가 및 제 3자에게 E-mail 등을 통하여 사전에 배포된 사실이 없습니다.
- ▶ 회사는 6개월간 해당 기업의 유가증권 발행과 관련 주관사로 참여하지 않았습니다.
- ▶ 당 보고서에 게재된 내용들은 본인의 의견을 정확하게 반영하고 있으며, 외부의 부당한 압력이나 간섭 없이 작성되었음을 확인합니다.

(작성자 : 원민석)

본 분석자료는 투자자의 증권투자를 돕기 위한 참고자료이며, 따라서, 본 자료에 의한 투자자의 투자결과에 대해 어떠한 목적의 증빙자료로도 사용될 수 없으며, 어떠한 경우에도 작성자 및 당사의 허가 없이 전재, 복사 또는 대여될 수 없습니다. 무단전재 등으로 인한 분쟁발생시 법적 책임이 있음을 주지하시기 바랍니다.

1. 종목추천 투자등급 (추천일 기준 증가대비 3등급) 종목투자자의견은 향후 12개월간 추천일 증가대비 해당종목의 예상 목표수익률을 의미함.

- Buy(매 수): 추천일 증가대비 +15%이상

- Hold(보유): 추천일 증가대비 -15% ~ 15% 내외 등락

- Sell(매도): 추천일 증가대비 -15%이상

2. 산업추천 투자등급 (시가총액기준 산업별 시장비중대비 보유비중의 변화를 추천하는 것임)

- Overweight(비중확대), - Neutral (중립), - Underweight (비중축소)

## 하이투자증권 투자비용 등급 공시 2018-09-30 기준

구분	매수	중립(보유)	매도
투자자의견 비율(%)	90.1%	9.9%	-