

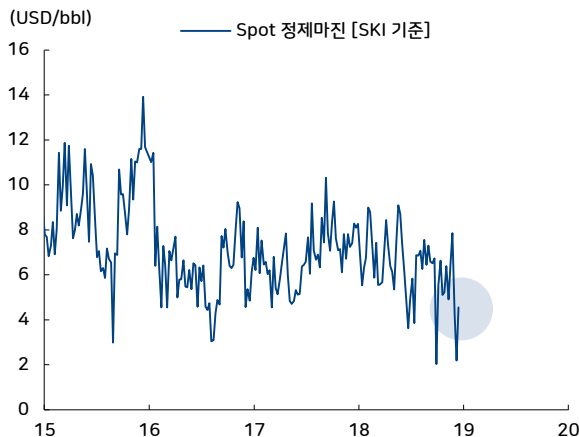


1 Weekly Commentary

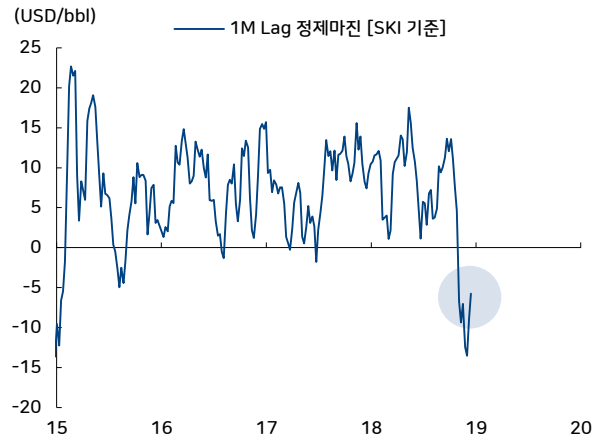
| | |
|-----------------------|--|
| 국제유가 | <p>Dubai \$59.3/bbl [w/w -2.1%], Brent \$60.3/bbl [w/w -2.3%], WTI \$51.2/bbl [w/w -2.7%]</p> <p>- 달러 강세 및 중국의 경제지표 둔화가 국제유가의 약보합세를 유도 [중국 11월 소매판매/산업생산 y/y +8.1%/+5.4%, Cons. +8.8%/+5.9%] Militia forces Libya's NOC to declare force majeure on biggest oilfield http://bit.ly/2UDPDn4</p> <p>- 리비아 국영석유회사(NOC)가 지역 무장단체의 공격을 이유로 리비아 El Sharara 및 El Feel 등 주요 유전 수출 불이행을 선언. El Sharara의 생산량은 31.3만bbl/d, El Feel은 7.3만bbl/d 수준</p> |
| 정제마진 | <p>Spot 정제마진 \$4.6/bbl [w/w +\$2.4/bbl], 1M Lag 정제마진 -\$5.7/bbl [w/w +\$3.3/bbl]</p> <p>Naphtha \$54.7/bbl [w/w +\$5.3%], Gasoline \$60.4/bbl [w/w +\$1.1%], Diesel \$69.9/bbl [w/w +\$1.1%]</p> <p>JetKero \$73.4/bbl [w/w +\$1.7%], FuelOil \$59.5/bbl [w/w -\$0.3%], BunkerC \$61.4/bbl [w/w -\$0.7%]</p> <p>- 국제유가의 급락이 일단락됨에 따라 경질유 위주로 가격이 일부 반등하며 Spot/1M Lag 정제마진 상승</p> |
| Feed stock | <p>Naphtha \$506.9/t [w/w +3.8%] Ethane 27.0ct/gal [w/w -16.3%] Propane \$465.7/t [w/w -7.6%] Butane \$460.2/t [w/w -5.1%]</p> <p>Coal \$100.2/t [w/w -0.2%] Methanol \$465.7/t [w/w -7.6%]</p> <p>- Naphtha 가격은 소폭 상승. 반면 지난주 급등했던 Propane/Butane/Methanol 가격은 상승분을 일부 반납</p> |
| 기초유분 및 중간 원료 | <p>Ethylene \$810.0/t [w/w +3.8%], Propylene \$875.0/t [w/w 0.0%], Butadiene \$1,100.0/t [w/w +0.9%]</p> <p>Benzene \$600.7/t [w/w -2.5%] Toluene \$585.0/t [w/w -1.5%], MX \$613.0/t [w/w +4.8%], SM \$989.0/t [w/w +0.9%]</p> <p>- Ethylene : '19년 계약물량 가격 협상 중임에 따라 Spot 물량이 소멸하였음에도 Ethylene 가격은 지난주 급락 이후 반등 성공. 현재 Bid Premium \$30/t, Offer Premium \$60/t 수준으로 내년초까지 계약 협상 이어질 것으로 전망. 참고로, 일부 Steam Cracker에서 생산 차질이 발생 중인 것으로 파악됨. 롯데케미칼은 지난 12/6(목) 정전사태로 이후 가동률이 100% 이하로 낮아진 것으로 전해지고 있으며, Platts 등의 분석기관은 '19년 1월까지 이러한 사태가 지속될 것으로 전망하고 있음.</p> <p>- Propylene : 중국 길림성/북서지역 PP/PO 공장 가동 중단으로 인해 Propylene 물량이 산동성으로 과잉공급됨에 따라 가격은 보합세 유지 향후 중국내 CTO/MTO 물량 출회가 가격에 부담으로 작용할 것. 중국 Zhejiang Satellite Petrochemical의 Jiaying PDH [Propylene 45만tpa]가 19년 1월, Luxi Chemical의 Liaocheng MTO [Propylene 18만tpa, Ethylene 12만tpa]가 '19년 2월 가동 예정</p> <p>- MX : '19년 1월 인도 물량 수요에 힘입어 가격 반등에 성공. 추가로 방향족 공장들의 정비 소식이 전해지고 있는데, LG화학의 대산 BTX 공장이 '19년 3월 35일간 정비를 위한 가동중단이 계획되어 있고 [35일간, MX 2.4만tpa, BZ 26.4만tpa, Toluene 5.4만tpa], 대한유화도 온산 BTX 공장의 정비를 위해 '19년 4월 한달간 가동중단을 계획하고 있음 [BZ 18만tpa, Toluene 7만tpa, MX 4만tpa].</p> <p>- SM : 가격 변동성 확대에 따른 구매 지연으로 보합세 지속</p> |
| 합성수지 | <p>HDPE \$1,000.0/t [w/w +3.1%], PP \$1,050.0/t [w/w +0.5%], PVC \$870.0/t [w/w +1.2%]</p> <p>PS \$1,230.0/t [w/w -0.8%], ABS \$1,410.0/t [w/w -0.4%], PET \$1,100.0/t [w/w +2.8%]</p> <p>- HDPE : Injection grade는 가격 소폭 상승, film grade는 보합세를 보임. 중국산 플라스틱 완제품의 미국으로 수출이 막힘에 따라 수요는 여전히 부진. 미국산 합성수지 원료가 베트남 등으로 공급되고 있으나, 긴 lead time으로 인해 수요처들이 구매를 보류하고 있음. '19년 미국의 Shale 기반 PE 물량 [2백만tpa], 아시아 지역 신규 PE 물량 출회 [1-1.2백만tpa]가 추가적인 부담으로 작용할 가능성 존재. 말레이시아의 Petronas가 Johor Refinery의 가동을 1Q19로 계획 중인 것으로 전해짐 [LLDPE 35만tpa, HDPE 40만tpa, PP 90만tpa].</p> <p>- PP : 낮은 재고 수준을 기반으로 가격 보합세 유지. 현재 NCC/PDH는 상대적으로 양호한 수익성을 기반으로 80% 이상의 가동률을 보이고 있음. '19년에 신규로 들어오는 Propylene 증설 물량은 대부분 중국의 PDH로, Propane 가격의 중요성이 더욱 높아질 것으로 전망. MTO는 지난 '18년 negative margin을 보임에 따라 저조한 가동률을 보였는데, '19년에도 이러한 상황이 유지될 가능성 높음. 참고로, 한화토탈은 대산 PP 생산능력을 '20년까지 60% 증설해 총 110만tpa까지 확대 계획 중.</p> <p>- PVC : 최근 가성소다 공장 폭발에 따른 중국 정부의 안정성 강화 조치로 인해 PVC 수급이 tight 해지며 가격 강보합세 시현. 다만 시장에서는 중국 정부의 안정성 보장 이후 수급이 다시금 완화될 것으로 전망하고 있음</p> |
| 합성섬유 | <p>PX \$1,052.3/t [w/w +0.4%], TPA \$846.0/t [w/w -0.5%], MEG \$686.0/t [w/w -3.4%]</p> <p>- TPA : 가격 보합세 시현. 인도의 PTA/MEG 수요가 회복세를 보이고 있는 것으로 파악됨. 인도의 폴리에스터 가동률은 55-60% 수준으로, 지난 11월 50% 미만의 가동률 대비 상승</p> <p>- MEG : 지난주 MEG 가격 상승폭 반납. 최근 가격 하락에도 불구하고 중국 내 석탄기반 MEG 가동률이 80% 이상 유지되고 있는 것으로 전해짐. 지난주 DCE 상장 이후 MEG 선물 거래량은 1,000만t으로, 840만USD를 기록</p> |

2 Weekly Key Charts

<그림 1> Spot 정제마진 [SKI 기준]



<그림 2> 1M Lag 정제마진 [SKI 기준]





Issue #5 / 3rd Week of December / '18.12.17

3 Major Chemical Product Prices

| 구분 | | Current | 7D | | 1M | | 3M | | 1Y | | YTD | |
|-------------|---------------|------------|---------|--------|---------|---------|---------|---------|---------|---------|---------|---------|
| | | | Price | Chg% | Price | Chg% | Price | Chg% | Price | Chg% | Price | Chg% |
| 원료 | Naphtha | 506.9 | 488.5 | 3.8% | 543.4 | -6.7% | 682.8 | -25.8% | 590.9 | -14.2% | 615.3 | -17.6% |
| | Ethane | 27.0 | 32.3 | -16.3% | 30.5 | -11.5% | 55.5 | -51.4% | 19.5 | 38.5% | 23.1 | 16.7% |
| | Propane | 465.7 | 503.8 | -7.6% | 463.9 | 0.4% | 652.9 | -28.7% | 600.4 | -22.4% | 609.4 | -23.6% |
| | Butane | 460.2 | 484.8 | -5.1% | 442.4 | 4.0% | 672.9 | -31.6% | 568.2 | -19.0% | 589.5 | -21.9% |
| | Coal(호주) | 99.5 | 97.6 | 1.9% | 100.5 | -1.0% | 113.4 | -12.2% | 93.9 | 5.9% | 100.3 | -0.8% |
| | Coal(중국) | 100.2 | 100.4 | -0.2% | 103.8 | -3.4% | 102.1 | -1.9% | 108.9 | -8.0% | 114.4 | -12.4% |
| 기초유분 | Methanol | 435.0 | 435.0 | 0.0% | 435.0 | 0.0% | 427.0 | 1.9% | 404.0 | 7.7% | 439.0 | -0.9% |
| | Ethylene | 810.0 | 780.0 | 3.8% | 890.0 | -9.0% | 1,265.0 | -36.0% | 1,259.0 | -35.7% | 1,329.0 | -39.1% |
| | Propylene | 875.0 | 875.0 | 0.0% | 1,000.0 | -12.5% | 1,120.0 | -21.9% | 903.0 | -3.1% | 937.0 | -6.6% |
| | Butadiene | 1,100.0 | 1,090.0 | 0.9% | 1,050.0 | 4.8% | 1,570.0 | -29.9% | 1,010.0 | 8.9% | 1,100.0 | 0.0% |
| | Benzene | 600.7 | 616.0 | -2.5% | 689.3 | -12.9% | 847.3 | -29.1% | 910.0 | -34.0% | 877.5 | -31.5% |
| | Toluene | 585.0 | 594.0 | -1.5% | 719.0 | -18.6% | 826.0 | -29.2% | 695.0 | -15.8% | 697.0 | -16.1% |
| 중간원료 | Xylene (Solv) | 613.0 | 585.0 | 4.8% | 765.0 | -19.9% | 800.0 | -23.4% | 638.0 | -3.9% | 659.0 | -7.0% |
| | Xylene (Iso) | 653.0 | 684.0 | -4.5% | 836.0 | -21.9% | 918.0 | -28.9% | 703.0 | -7.1% | 719.0 | -9.2% |
| | SM | 989.0 | 980.0 | 0.9% | 1,081.0 | -8.5% | 1,382.0 | -28.4% | 1,280.5 | -22.8% | 1,239.0 | -20.2% |
| | PX | 1,052.3 | 1,048.0 | 0.4% | 1,112.8 | -5.4% | 1,343.7 | -21.7% | 882.0 | 19.3% | 907.0 | 16.0% |
| | OX | 830.0 | 850.0 | -2.4% | 990.0 | -16.2% | 1,020.0 | -18.6% | 764.0 | 8.6% | 767.0 | 8.2% |
| | 합성수지 | HDPE (Inj) | 1,000.0 | 970.0 | 3.1% | 1,130.0 | -11.5% | 1,180.0 | -15.3% | 1,189.0 | -15.9% | 1,154.0 |
| HDPE (Film) | | 1,070.0 | 1,070.0 | 0.0% | 1,210.0 | -11.6% | 1,270.0 | -15.7% | 1,290.0 | -17.1% | 1,280.0 | -16.4% |
| LDPE | | 1,030.0 | 1,020.0 | 1.0% | 1,040.0 | -1.0% | 1,110.0 | -7.2% | 1,240.0 | -16.9% | 1,190.0 | -13.4% |
| LLDPE | | 1,020.0 | 990.0 | 3.0% | 1,040.0 | -1.9% | 1,090.0 | -6.4% | 1,170.0 | -12.8% | 1,155.0 | -11.7% |
| PP (Homo) | | 1,050.0 | 1,045.0 | 0.5% | 1,200.0 | -12.5% | 1,220.0 | -13.9% | 1,130.0 | -7.1% | 1,150.0 | -8.7% |
| PP (Film) | | 1,070.0 | 1,065.0 | 0.5% | 1,240.0 | -13.7% | 1,240.0 | -13.7% | 1,139.0 | -6.1% | 1,159.0 | -7.7% |
| PVC | | 870.0 | 860.0 | 1.2% | 850.0 | 2.4% | 930.0 | -6.5% | 850.0 | 2.4% | 875.0 | -0.6% |
| GPPS | | 1,230.0 | 1,240.0 | -0.8% | 1,350.0 | -8.9% | 1,480.0 | -16.9% | 1,450.0 | -15.2% | 1,450.0 | -15.2% |
| HIPS | | 1,290.0 | 1,300.0 | -0.8% | 1,390.0 | -7.2% | 1,555.0 | -17.0% | 1,509.0 | -14.5% | 1,529.0 | -15.6% |
| EPS (GP) | | 1,250.0 | 1,250.0 | 0.0% | 1,350.0 | -7.4% | 1,570.0 | -20.4% | 1,454.0 | -14.0% | 1,489.0 | -16.1% |
| 합성섬유 | EPS (FR) | 1,305.0 | 1,305.0 | 0.0% | 1,405.0 | -7.1% | 1,610.0 | -18.9% | 1,489.0 | -12.4% | 1,529.0 | -14.7% |
| | ABS | 1,410.0 | 1,415.0 | -0.4% | 1,550.0 | -9.0% | 1,840.0 | -23.4% | 1,979.0 | -28.8% | 2,029.0 | -30.5% |
| | PET | 1,100.0 | 1,070.0 | 2.8% | 1,165.0 | -5.6% | 1,360.0 | -19.1% | 1,036.0 | 6.2% | 1,069.0 | 2.9% |
| | MEG | 686.0 | 710.0 | -3.4% | 723.0 | -5.1% | 890.0 | -22.9% | 914.0 | -24.9% | 919.0 | -25.4% |
| | TPA | 846.0 | 850.0 | -0.5% | 920.0 | -8.0% | 1,075.0 | -21.3% | 714.0 | 18.5% | 714.0 | 18.5% |

자료 : Platts, 하이투자증권

※ 붉은색 : 상승 / 파란색 : 하락 / 검은색 : 변동 없음

4 Major Petroleum Product Prices

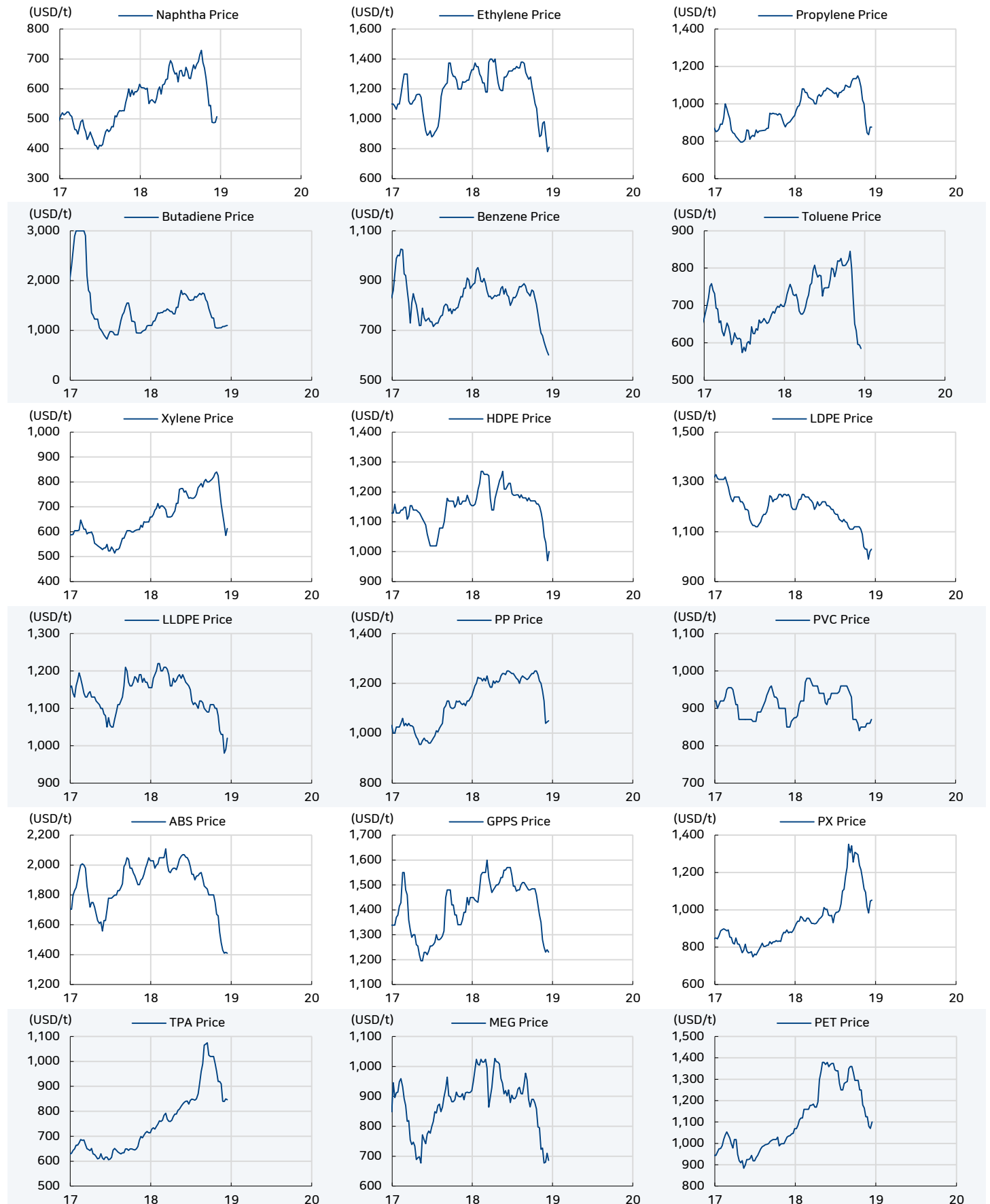
| 구분 | | Current | 7D | | 1M | | 3M | | 1Y | | YTD | |
|---------------|-----------|---------|-------|-------|-------|--------|-------|--------|-------|--------|-------|--------|
| | | | Price | Chg% | Price | Chg% | Price | Chg% | Price | Chg% | Price | Chg% |
| 원료 | Dubai | 59.3 | 60.6 | -2.1% | 69.6 | -14.8% | 76.5 | -22.5% | 61.1 | -2.9% | 64.0 | -7.3% |
| | Brent | 60.3 | 61.7 | -2.3% | 70.2 | -14.1% | 78.1 | -22.8% | 63.4 | -4.9% | 66.9 | -9.9% |
| | WTI | 51.2 | 52.6 | -2.7% | 60.2 | -14.9% | 69.0 | -25.8% | 57.4 | -10.7% | 60.4 | -15.3% |
| | Naphtha | 54.7 | 51.9 | 5.3% | 58.2 | -6.0% | 74.0 | -26.2% | 64.7 | -15.6% | 67.6 | -19.1% |
| | 휘발유92 | 60.4 | 59.8 | 1.1% | 69.9 | -13.6% | 87.1 | -30.6% | 72.5 | -16.7% | 74.6 | -19.0% |
| | 휘발유95 | 63.0 | 61.6 | 2.3% | 71.5 | -11.9% | 88.8 | -29.1% | 74.7 | -15.7% | 76.5 | -17.6% |
| | 휘발유97 | 64.6 | 63.1 | 2.2% | 73.0 | -11.6% | 90.4 | -28.6% | 75.8 | -14.8% | 77.6 | -16.8% |
| 석유제품 (싱가폴) | 경유0.5% | 69.9 | 69.1 | 1.1% | 84.5 | -17.3% | 89.4 | -21.9% | 73.0 | -4.3% | 77.8 | -10.2% |
| | 경유0.25% | 70.8 | 70.2 | 0.8% | 85.5 | -17.2% | 89.4 | -20.8% | 73.4 | -3.6% | 78.0 | -9.3% |
| | 경유0.05% | 71.5 | 70.9 | 0.9% | 86.1 | -16.9% | 91.4 | -21.8% | 74.3 | -3.7% | 78.7 | -9.1% |
| | 등유/항공유 | 73.4 | 72.2 | 1.7% | 86.7 | -15.3% | 90.5 | -18.9% | 74.0 | -0.8% | 79.4 | -7.5% |
| | 연료유180 | 59.5 | 59.6 | -0.3% | 73.1 | -18.7% | 71.2 | -16.5% | 55.6 | 6.9% | 59.4 | 0.1% |
| | 연료유380 | 59.5 | 59.3 | 0.3% | 72.5 | -17.9% | 70.5 | -15.7% | 55.1 | 7.8% | 59.1 | 0.7% |
| | 병커C180 | 61.4 | 61.9 | -0.7% | 76.9 | -20.1% | 73.0 | -15.8% | 56.5 | 8.7% | 60.4 | 1.8% |
| | 병커C380 | 61.2 | 60.9 | 0.4% | 76.0 | -19.5% | 72.0 | -15.1% | 55.9 | 9.5% | 59.8 | 2.2% |
| | 병커C카고180 | 59.8 | 60.0 | -0.3% | 73.5 | -18.7% | 71.6 | -16.5% | 55.9 | 6.9% | 59.7 | 0.1% |
| | 병커C카고380 | 59.8 | 59.6 | 0.3% | 72.8 | -17.9% | 70.9 | -15.7% | 55.4 | 7.8% | 59.4 | 0.7% |
| 석유제품 (일본) | Naphtha1H | 56.6 | 53.8 | 5.3% | 60.0 | -5.6% | 75.5 | -25.0% | 66.6 | -15.0% | 69.3 | -18.3% |
| | Naphtha2H | 56.2 | 54.0 | 4.2% | 60.5 | -7.0% | 75.9 | -26.0% | 65.2 | -13.8% | 68.1 | -17.4% |
| | 경유 | 73.0 | 71.4 | 2.2% | 86.3 | -15.4% | 91.3 | -20.0% | 74.9 | -2.5% | 78.0 | -6.4% |
| | 등유/항공유 | 75.7 | 74.5 | 1.6% | 88.2 | -14.2% | 91.7 | -17.4% | 75.4 | 0.5% | 78.4 | -3.4% |
| 선박연료 | MDO(한국) | 92.8 | 92.8 | 0.0% | 92.8 | 0.0% | 92.8 | 0.0% | 77.8 | 19.3% | 79.1 | 17.2% |
| | MDO(싱가폴) | 75.4 | 74.6 | 1.0% | 89.0 | -15.3% | 95.0 | -20.6% | 75.3 | 0.2% | 81.6 | -7.6% |
| | MDO(일본) | 68.1 | 70.9 | -4.0% | 83.5 | -18.5% | 81.6 | -16.6% | 61.9 | 9.9% | 66.4 | 2.5% |
| | MGO(한국) | 81.2 | 83.2 | -2.4% | 98.3 | -17.3% | 97.9 | -17.0% | 77.9 | 4.3% | 81.7 | -0.7% |
| | MGO(홍콩) | 74.0 | 77.2 | -4.2% | 102.1 | -27.6% | 94.5 | -21.7% | 75.3 | -1.8% | 78.3 | -5.5% |

자료 : Platts, 하이투자증권

※ 붉은색 : 상승 / 파란색 : 하락 / 검은색 : 변동 없음

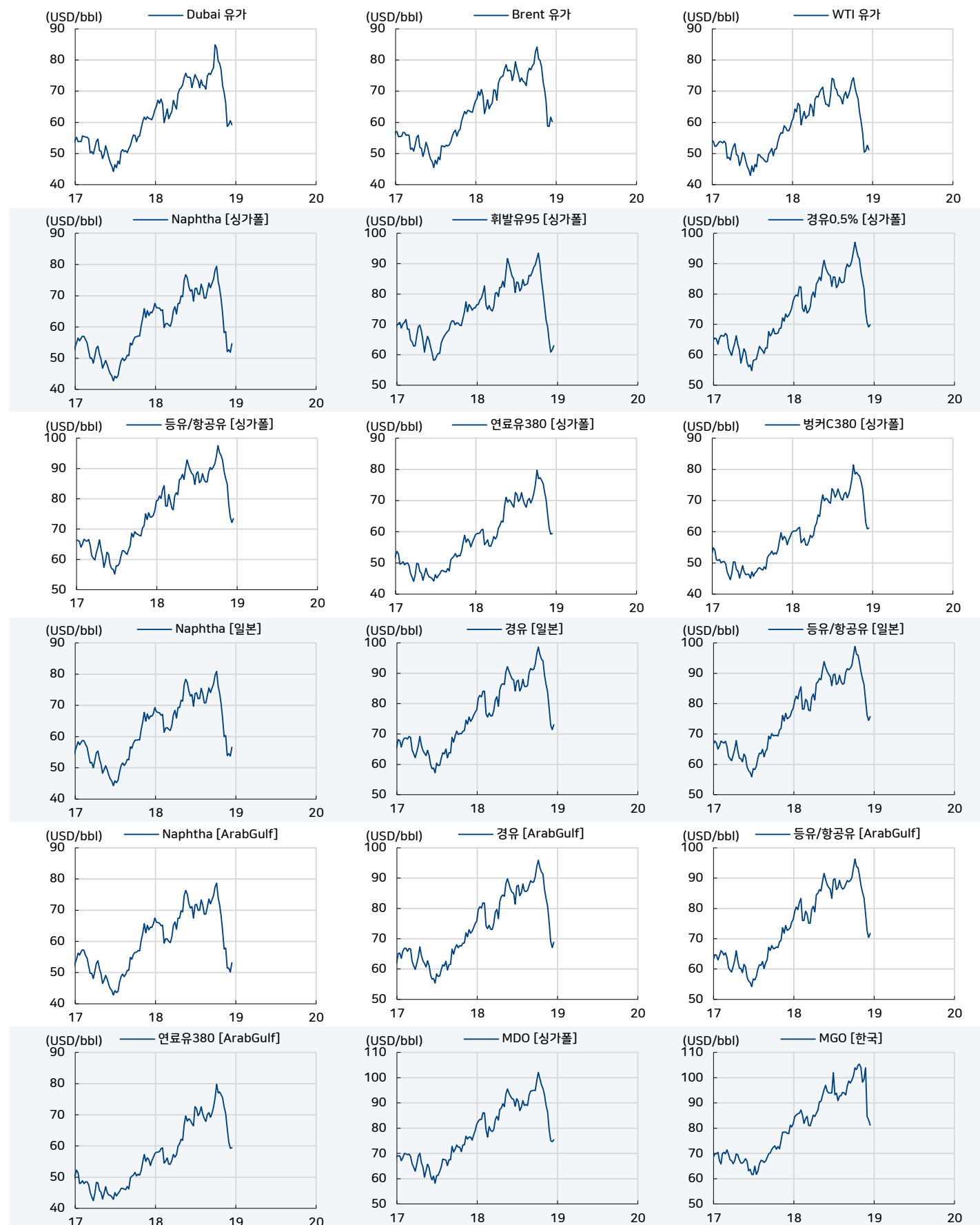


5 Major Chemical Product Prices Charts





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 | 303.1 | | 291.5 | 4.0% | 346.6 | -12.5% | 411.6 | -26.4% | 668.1 | -54.6% |
| | Propylene | 368.1 | | 386.5 | -4.8% | 456.6 | -19.4% | 461.6 | -20.3% | 312.1 | 17.9% |
| | Butadiene | 593.1 | | 601.5 | -1.4% | 506.6 | 17.1% | 556.6 | 6.6% | 419.1 | 41.5% |
| | Benzene | 93.8 | | 127.5 | -26.4% | 146.0 | -35.7% | 141.3 | -33.6% | 319.1 | -70.6% |
| | Toluene | 78.1 | | 105.5 | -25.9% | 175.6 | -55.5% | 126.6 | -38.3% | 104.1 | -25.0% |
| | Xylene (Solv) | 106.1 | | 96.5 | 10.0% | 221.6 | -52.1% | 131.6 | -19.4% | 47.1 | 125.2% |
| | Xylene (Iso) | 146.1 | | 195.5 | -25.3% | 292.6 | -50.1% | 232.6 | -37.2% | 112.1 | 30.3% |
| 중간원료 | SM | 482.1 | | 491.5 | -1.9% | 537.6 | -10.3% | 651.6 | -26.0% | 689.6 | -30.1% |
| | PX | 545.5 | | 559.5 | -2.5% | 569.5 | -4.2% | 607.0 | -10.1% | 291.1 | 87.4% |
| | OX | 323.1 | | 361.5 | -10.6% | 446.6 | -27.7% | 331.6 | -2.6% | 173.1 | 86.6% |
| 합성수지 | HDPE (Inj) | 493.1 | | 481.5 | 2.4% | 586.6 | -15.9% | 481.6 | 2.4% | 598.1 | -17.6% |
| | HDPE (Film) | 563.1 | | 581.5 | -3.2% | 666.6 | -15.5% | 591.6 | -4.8% | 699.1 | -19.5% |
| | LDPE | 523.1 | | 531.5 | -1.6% | 496.6 | 5.3% | 431.6 | 21.2% | 649.1 | -19.4% |
| | LLDPE | 513.1 | | 501.5 | 2.3% | 496.6 | 3.3% | 421.6 | 21.7% | 579.1 | -11.4% |
| | PP (Homo) | 543.1 | | 556.5 | -2.4% | 656.6 | -17.3% | 561.6 | -3.3% | 539.1 | 0.7% |
| | PP (Film) | 563.1 | | 576.5 | -2.3% | 696.6 | -19.2% | 566.6 | -0.6% | 548.1 | 2.7% |
| | PVC | 363.1 | | 371.5 | -2.3% | 306.6 | 18.4% | 171.6 | 111.6% | 259.1 | 40.1% |
| | GPSS | 723.1 | | 751.5 | -3.8% | 806.6 | -10.4% | 796.6 | -9.2% | 859.1 | -15.8% |
| | HIPS | 783.1 | | 811.5 | -3.5% | 846.6 | -7.5% | 856.6 | -8.6% | 918.1 | -14.7% |
| | EPS (GP) | 743.1 | | 761.5 | -2.4% | 806.6 | -7.9% | 866.6 | -14.3% | 863.1 | -13.9% |
| | EPS (FR) | 798.1 | | 816.5 | -2.3% | 861.6 | -7.4% | 911.6 | -12.5% | 898.1 | -11.1% |
| | ABS | 903.1 | | 926.5 | -2.5% | 1,006.6 | -10.3% | 1,111.6 | -18.8% | 1,388.1 | -34.9% |
| | PET | 593.1 | | 581.5 | 2.0% | 621.6 | -4.6% | 606.6 | -2.2% | 445.1 | 33.3% |
| 합성섬유 | MEG | 179.1 | | 221.5 | -19.1% | 179.6 | -0.3% | 189.6 | -5.5% | 323.1 | -44.6% |
| | TPA | 339.1 | | 361.5 | -6.2% | 376.6 | -10.0% | 331.6 | 2.3% | 123.1 | 175.4% |

자료 : Platts, 하이투자증권

※ 붉은색 : 상승 / 파란색 : 하락 / 검은색 : 변동 없음

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

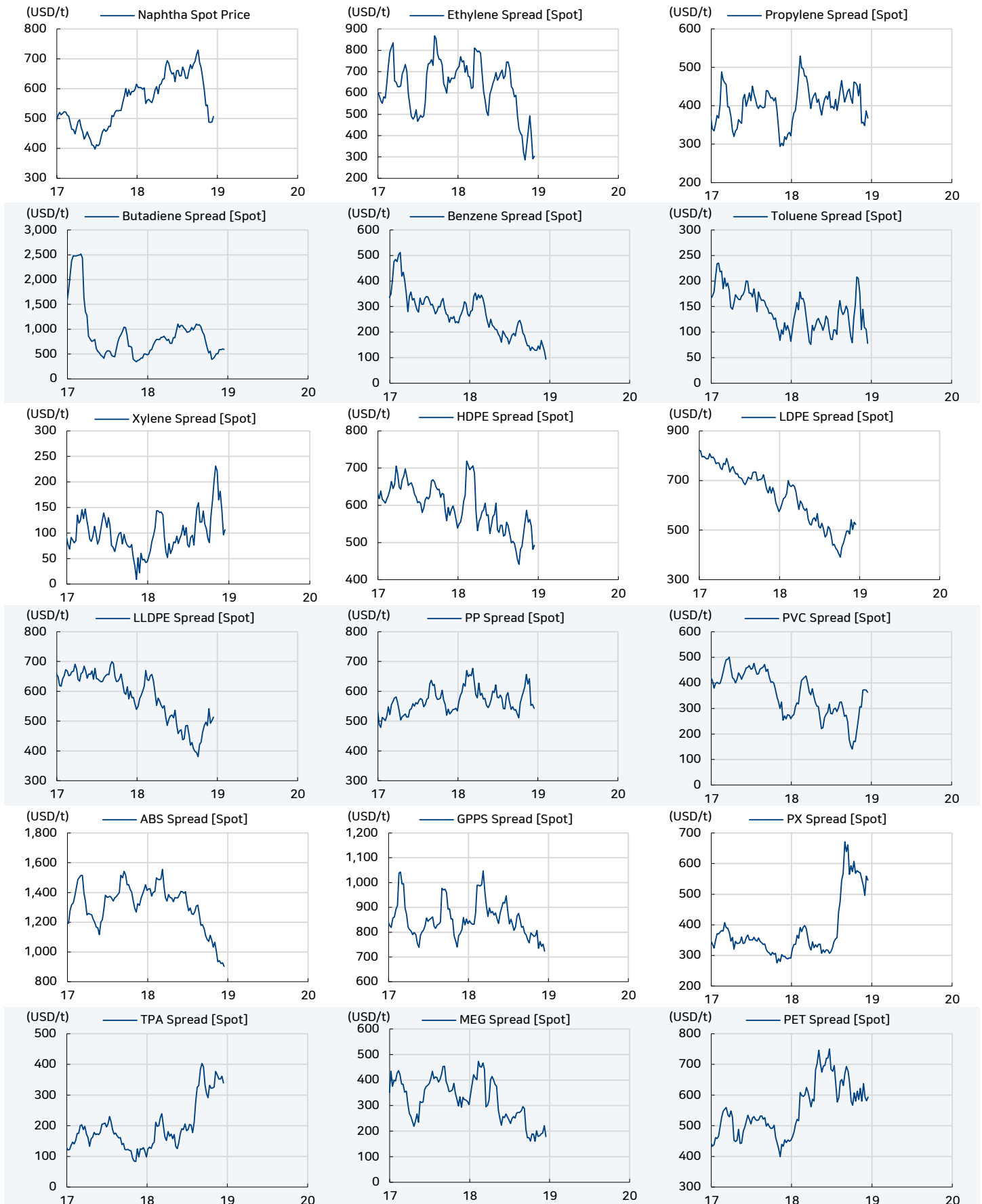
| 구분 | Current | 7D | | 1M | | 3M | | 1Y | | YTD | |
|------|---------------|-------|------|-------|-----------|-------|---------|---------|--------|---------|--------|
| | | Price | Chg% | Price | Chg% | Price | Chg% | Price | Chg% | Price | Chg% |
| 기초유분 | Ethylene | 266.6 | | 185.9 | 43.4% | 201.6 | 32.2% | 417.3 | -36.1% | 658.9 | -59.5% |
| | Propylene | 331.6 | | 280.9 | 18.1% | 311.6 | 6.4% | 467.3 | -29.0% | 302.9 | 9.5% |
| | Butadiene | 556.6 | | 495.9 | 12.3% | 361.6 | 53.9% | 562.3 | -1.0% | 409.9 | 35.8% |
| | Benzene | 57.3 | | 21.9 | 161.9% | 1.0 | 5899.5% | 146.9 | -61.0% | 309.9 | -81.5% |
| | Toluene | 41.6 | | -0.1 | -33400.0% | 30.6 | 35.9% | 132.3 | -68.5% | 94.9 | -56.1% |
| | Xylene (Solv) | 69.6 | | -9.1 | -863.0% | 76.6 | -9.1% | 137.3 | -49.3% | 37.9 | 83.9% |
| | Xylene (Iso) | 109.6 | | 89.9 | 22.0% | 147.6 | -25.7% | 238.3 | -54.0% | 102.9 | 6.6% |
| 중간원료 | SM | 445.6 | | 385.9 | 15.5% | 392.6 | 13.5% | 657.3 | -32.2% | 680.4 | -34.5% |
| | PX | 509.0 | | 453.9 | 12.1% | 424.5 | 19.9% | 612.7 | -16.9% | 281.9 | 80.6% |
| | OX | 286.6 | | 255.9 | 12.0% | 301.6 | -5.0% | 337.3 | -15.0% | 163.9 | 74.9% |
| 합성수지 | HDPE (Inj) | 456.6 | | 375.9 | 21.5% | 441.6 | 3.4% | 487.3 | -6.3% | 588.9 | -22.5% |
| | HDPE (Film) | 526.6 | | 475.9 | 10.7% | 521.6 | 1.0% | 597.3 | -11.8% | 689.9 | -23.7% |
| | LDPE | 486.6 | | 425.9 | 14.3% | 351.6 | 38.4% | 437.3 | 11.3% | 639.9 | -23.9% |
| | LLDPE | 476.6 | | 395.9 | 20.4% | 351.6 | 35.5% | 427.3 | 11.6% | 569.9 | -16.4% |
| | PP (Homo) | 506.6 | | 450.9 | 12.4% | 511.6 | -1.0% | 567.3 | -10.7% | 529.9 | -4.4% |
| | PP (Film) | 526.6 | | 470.9 | 11.8% | 551.6 | -4.5% | 572.3 | -8.0% | 538.9 | -2.3% |
| | PVC | 326.6 | | 265.9 | 22.8% | 161.6 | 102.1% | 177.3 | 84.3% | 249.9 | 30.7% |
| | GPSS | 686.6 | | 645.9 | 6.3% | 661.6 | 3.8% | 802.3 | -14.4% | 849.9 | -19.2% |
| | HIPS | 746.6 | | 705.9 | 5.8% | 701.6 | 6.4% | 862.3 | -13.4% | 908.9 | -17.9% |
| | EPS (GP) | 706.6 | | 655.9 | 7.7% | 661.6 | 6.8% | 872.3 | -19.0% | 853.9 | -17.2% |
| | EPS (FR) | 761.6 | | 710.9 | 7.1% | 716.6 | 6.3% | 917.3 | -17.0% | 888.9 | -14.3% |
| | ABS | 866.6 | | 820.9 | 5.6% | 861.6 | 0.6% | 1,117.3 | -22.4% | 1,378.9 | -37.1% |
| | PET | 556.6 | | 475.9 | 17.0% | 476.6 | 16.8% | 612.3 | -9.1% | 435.9 | 27.7% |
| 합성섬유 | MEG | 142.6 | | 115.9 | 23.1% | 34.6 | 311.9% | 195.3 | -27.0% | 313.9 | -54.6% |
| | TPA | 302.6 | | 255.9 | 18.3% | 231.6 | 30.7% | 337.3 | -10.3% | 113.9 | 165.8% |

자료 : Platts, 하이투자증권

※ 붉은색 : 상승 / 파란색 : 하락 / 검은색 : 변동 없음

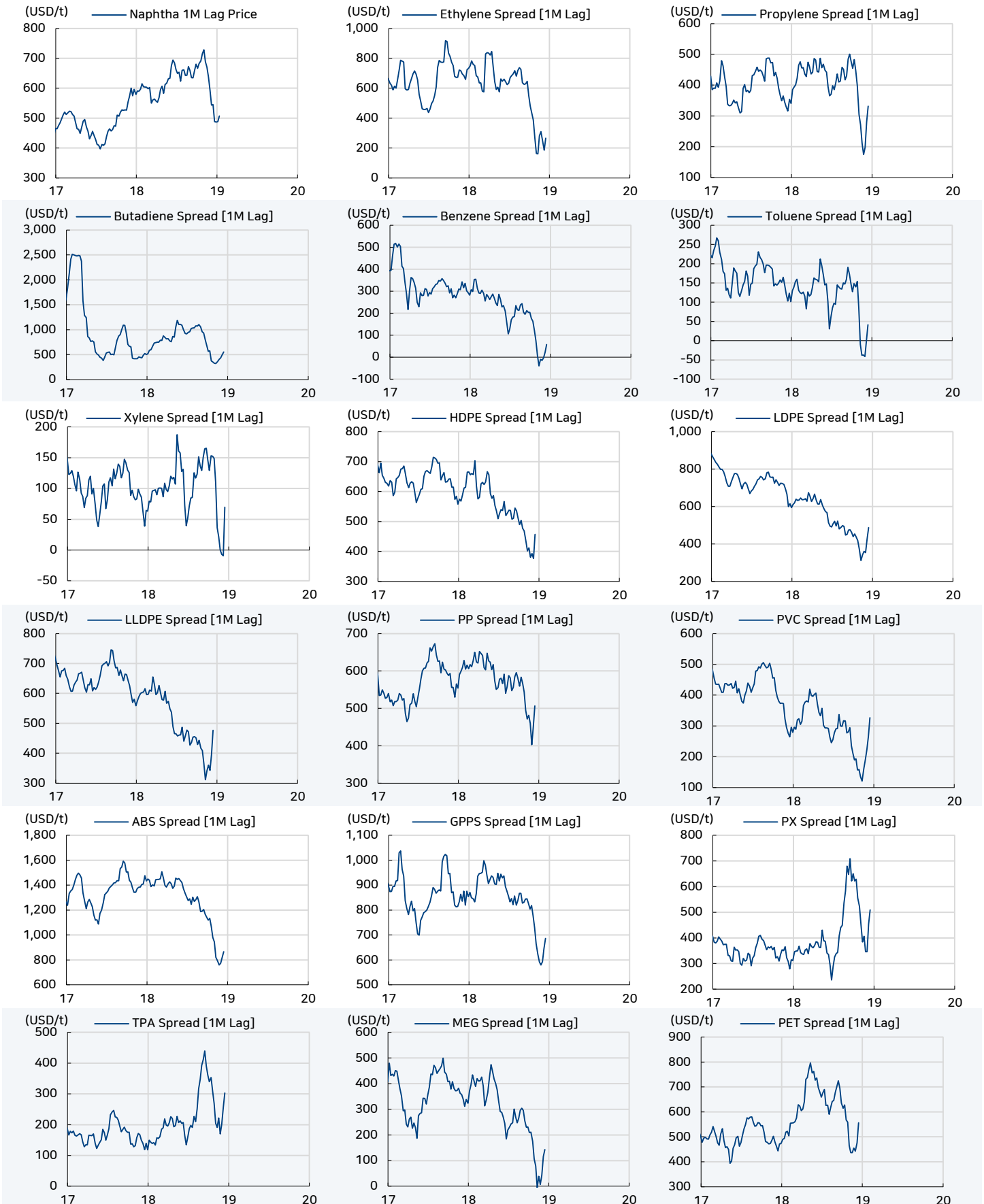


9 Major Chemical Products - Naphtha Spread Charts [Spot]





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 | 4.6 | | 2.2 | 2.4 | 4.9 | -0.4 | 6.5 | -2.0 | 7.4 | -2.9 |
| | Naphtha | -4.6 | | -8.7 | 4.0 | -11.4 | 6.8 | -2.5 | -2.1 | 3.6 | -8.3 |
| | 휘발유92 | 1.1 | | -0.8 | 1.9 | 0.3 | 0.8 | 10.5 | -9.4 | 11.4 | -10.3 |
| | 휘발유95 | 3.7 | | 1.0 | 2.7 | 1.9 | 1.8 | 12.3 | -8.6 | 13.6 | -9.9 |
| | 휘발유97 | 5.3 | | 2.6 | 2.7 | 3.4 | 1.8 | 13.8 | -8.6 | 14.7 | -9.4 |
| | 경유0.5% | 10.6 | | 8.6 | 2.0 | 14.9 | -4.4 | 12.9 | -2.3 | 11.9 | -1.3 |
| | 경유0.25% | 11.5 | | 9.7 | 1.8 | 15.9 | -4.4 | 12.9 | -1.4 | 12.3 | -0.8 |
| | 경유0.05% | 12.2 | | 10.3 | 1.9 | 16.5 | -4.3 | 14.9 | -2.7 | 13.2 | -0.9 |
| | 등유/항공유 | 14.1 | | 11.7 | 2.5 | 17.1 | -3.0 | 14.0 | 0.1 | 12.9 | 1.2 |
| | 연료유180 | 0.2 | | -0.9 | 1.1 | 3.6 | -3.4 | -5.3 | 5.5 | -5.5 | 5.6 |
| | 연료유380 | 0.2 | | -1.3 | 1.5 | 2.9 | -2.7 | -6.0 | 6.2 | -6.0 | 6.1 |
| | 벙커C180 | 2.1 | | 1.3 | 0.8 | 7.4 | -5.2 | -3.5 | 5.7 | -4.6 | 6.7 |
| 석유제품 (싱가폴) | 벙커C380 | 1.9 | | 0.4 | 1.5 | 6.4 | -4.5 | -4.5 | 6.4 | -5.2 | 7.1 |
| | 벙커C카고180 | 0.5 | | -0.6 | 1.1 | 3.9 | -3.5 | -5.0 | 5.4 | -5.2 | 5.6 |
| | 벙커C카고380 | 0.5 | | -1.0 | 1.5 | 3.3 | -2.8 | -5.6 | 6.1 | -5.7 | 6.1 |
| | Naphtha1H | -2.7 | | -6.8 | 4.1 | -9.6 | 6.9 | -1.0 | -1.7 | 5.5 | -8.2 |
| | Naphtha2H | -3.1 | | -6.6 | 3.5 | -9.1 | 6.0 | -0.6 | -2.5 | 4.1 | -7.2 |
| | 경유 | 13.7 | | 10.9 | 2.9 | 16.7 | -3.0 | 14.8 | -1.1 | 13.8 | -0.1 |
| | 등유/항공유 | 16.4 | | 14.0 | 2.5 | 18.7 | -2.2 | 15.2 | 1.3 | 14.3 | 2.2 |
| | Naphtha | -6.1 | | -10.4 | 4.3 | -12.1 | 6.0 | -3.2 | -3.0 | 3.5 | -9.7 |
| | 경유 | 9.5 | | 6.5 | 3.0 | 13.7 | -4.2 | 12.2 | -2.7 | 11.4 | -1.9 |
| | 등유/항공유 | 12.5 | | 9.9 | 2.6 | 15.8 | -3.3 | 12.7 | -0.3 | 12.0 | 0.5 |
| | 연료유180 | 0.2 | | -0.9 | 1.1 | 3.6 | -3.4 | -5.3 | 5.5 | -6.9 | 7.0 |
| | 연료유380 | 0.2 | | -1.3 | 1.5 | 2.9 | -2.7 | -6.0 | 6.2 | -7.4 | 7.5 |
| 석유제품 (ArabGulf) | MDO(한국) | 33.5 | | 32.2 | 1.3 | 23.2 | 10.3 | 16.3 | 17.2 | 16.7 | 16.8 |
| | MDO(싱가폴) | 16.1 | | 14.1 | 2.0 | 19.4 | -3.3 | 18.5 | -2.4 | 14.2 | 1.9 |
| | MDO(일본) | 8.8 | | 10.4 | -1.6 | 13.9 | -5.1 | 5.1 | 3.7 | 0.8 | 7.9 |
| | MGO(한국) | 21.9 | | 22.7 | -0.7 | 28.7 | -6.8 | 21.3 | 0.6 | 16.8 | 5.2 |
| | MGO(홍콩) | 14.7 | | 16.6 | -2.0 | 32.6 | -17.9 | 18.0 | -3.3 | 14.2 | 0.5 |
| 선박연료 | | | | | | | | | | | |
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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 | -5.7 | | -9.0 | 3.3 | -9.4 | 3.6 | 11.3 | -17.0 | 8.2 | -13.9 |
| | Naphtha | -14.9 | | -19.9 | 5.0 | -21.5 | 6.6 | 2.3 | -17.2 | 3.1 | -18.0 |
| | 휘발유92 | -9.2 | | -12.0 | 2.9 | -9.8 | 0.6 | 15.3 | -24.5 | 10.9 | -20.0 |
| | 휘발유95 | -6.6 | | -10.2 | 3.6 | -8.2 | 1.7 | 17.1 | -23.7 | 13.1 | -19.6 |
| | 휘발유97 | -5.0 | | -8.6 | 3.6 | -6.7 | 1.7 | 18.6 | -23.7 | 14.1 | -19.1 |
| | 경유0.5% | 0.3 | | -2.7 | 2.9 | 4.8 | -4.5 | 17.7 | -17.4 | 11.4 | -11.1 |
| | 경유0.25% | 1.2 | | -1.6 | 2.8 | 5.8 | -4.6 | 17.7 | -16.5 | 11.8 | -10.5 |
| | 경유0.05% | 1.9 | | -0.9 | 2.8 | 6.4 | -4.4 | 19.7 | -17.8 | 12.6 | -10.7 |
| | 등유/항공유 | 3.9 | | 0.5 | 3.4 | 7.0 | -3.1 | 18.8 | -15.0 | 12.4 | -8.5 |
| | 연료유180 | -10.1 | | -12.1 | 2.0 | -6.6 | -3.5 | -0.5 | -9.6 | -6.0 | -4.1 |
| | 연료유380 | -10.1 | | -12.5 | 2.4 | -7.3 | -2.9 | -1.2 | -8.9 | -6.5 | -3.6 |
| | 벙커C180 | -8.1 | | -9.9 | 1.7 | -2.8 | -5.3 | 1.2 | -9.4 | -5.1 | -3.0 |
| 석유제품 (싱가폴) | 벙커C380 | -8.4 | | -10.8 | 2.4 | -3.7 | -4.7 | 0.3 | -8.7 | -5.8 | -2.6 |
| | 벙커C카고180 | -9.8 | | -11.8 | 2.0 | -6.2 | -3.6 | -0.2 | -9.6 | -5.7 | -4.1 |
| | 벙커C카고380 | -9.8 | | -12.2 | 2.4 | -6.9 | -2.9 | -0.9 | -9.0 | -6.2 | -3.6 |
| | Naphtha1H | -13.0 | | -18.0 | 5.1 | -19.7 | 6.8 | 3.8 | -16.8 | 5.0 | -17.9 |
| | Naphtha2H | -13.3 | | -17.8 | 4.4 | -19.2 | 5.9 | 4.2 | -17.6 | 3.6 | -16.9 |
| | 경유 | 3.4 | | -0.3 | 3.8 | 6.6 | -3.2 | 19.6 | -16.1 | 13.3 | -9.8 |
| | 등유/항공유 | 6.2 | | 2.8 | 3.4 | 8.5 | -2.4 | 20.0 | -13.8 | 13.7 | -7.5 |
| | Naphtha | -16.4 | | -21.6 | 5.2 | -22.2 | 5.8 | 1.6 | -18.0 | 3.0 | -19.4 |
| | 경유 | -0.8 | | -4.7 | 3.9 | 3.5 | -4.3 | 17.0 | -17.8 | 10.8 | -11.6 |
| | 등유/항공유 | 2.2 | | -1.4 | 3.6 | 5.6 | -3.4 | 17.5 | -15.3 | 11.4 | -9.2 |
| | 연료유180 | -10.1 | | -12.1 | 2.0 | -6.6 | -3.5 | -0.5 | -9.6 | -7.4 | -2.7 |
| | 연료유380 | -10.1 | | -12.5 | 2.4 | -7.3 | -2.9 | -1.2 | -8.9 | -7.9 | -2.2 |
| 석유제품 (ArabGulf) | MDO(한국) | 23.2 | | 21.0 | 2.2 | 13.0 | 10.1 | 21.0 | 2.2 | 16.1 | 7.1 |
| | MDO(싱가폴) | 5.8 | | 2.9 | 3.0 | 9.3 | -3.5 | 23.3 | -17.5 | 13.6 | -7.8 |
| | MDO(일본) | -1.5 | | -0.8 | -0.7 | 3.8 | -5.3 | 9.9 | -11.4 | 0.3 | -1.8 |
| | MGO(한국) | 11.6 | | 11.4 | 0.2 | 18.5 | -6.9 | 26.1 | -14.5 | 16.2 | -4.6 |
| | MGO(홍콩) | 4.4 | | 5.4 | -1.0 | 22.4 | -18.0 | 22.8 | -18.4 | 13.7 | -9.3 |
| 선박연료 | | | | | | | | | | | |
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자료 : Platts, 하이투자증권

※ 붉은색 : 상승 / 파란색 : 하락 / 검은색 : 변동 없음



Issue #5 / 3rd Week of December / '18.12.17

13 Petroleum Product Crack Margins [Spot]

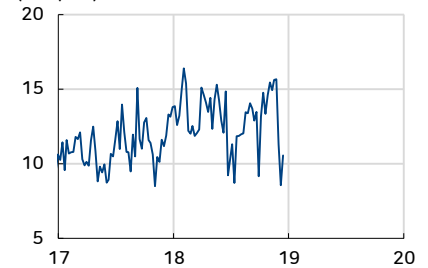
(USD/bbl) — Naphtha [싱가폴]



(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]

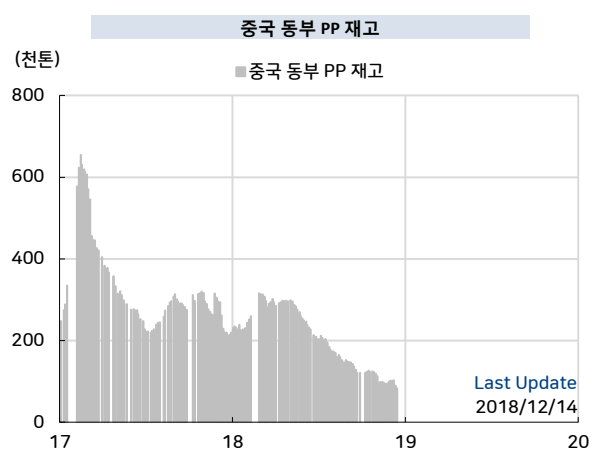
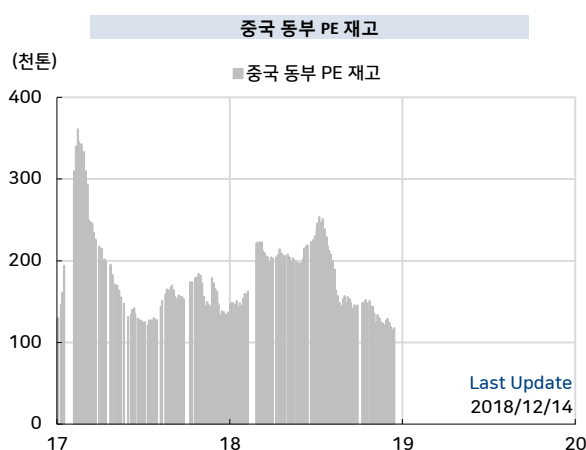
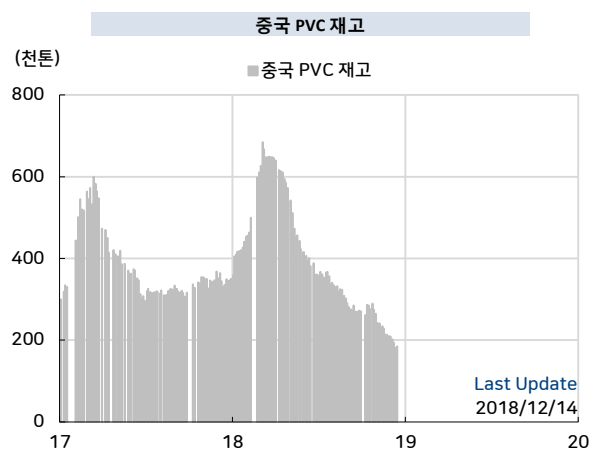
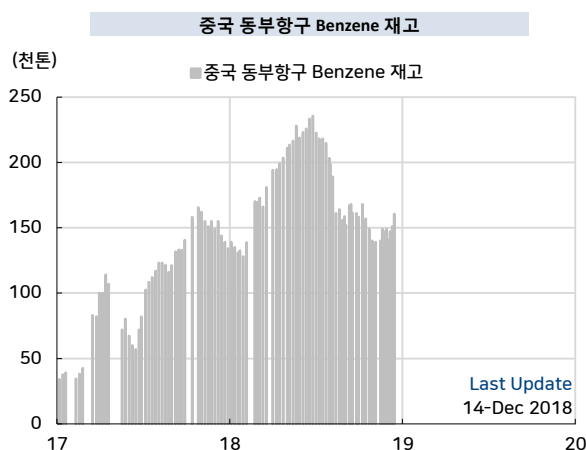
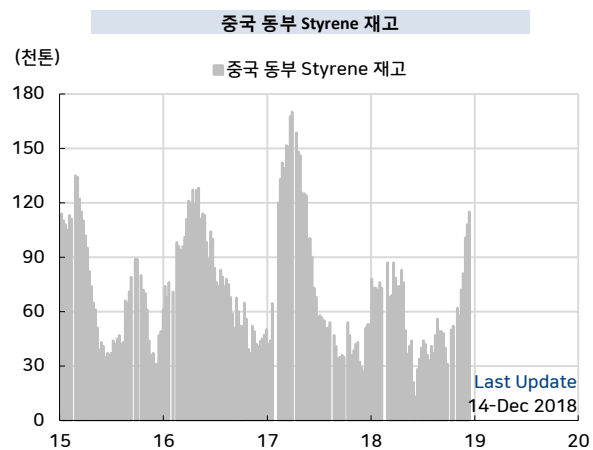


(USD/bbl) — 병커C380 [싱가폴]



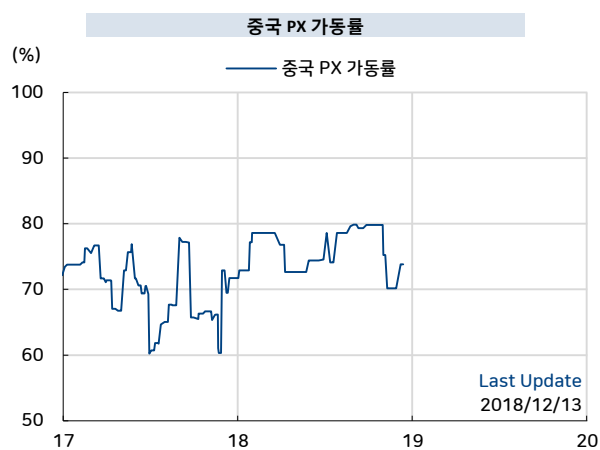
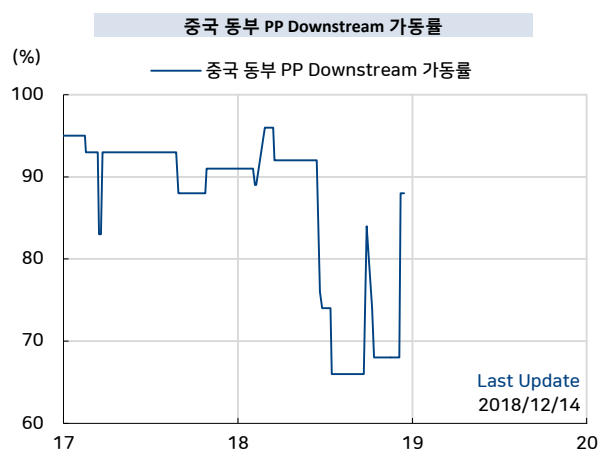
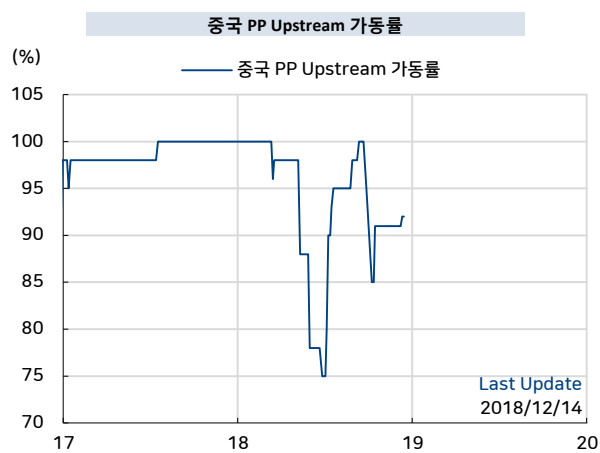
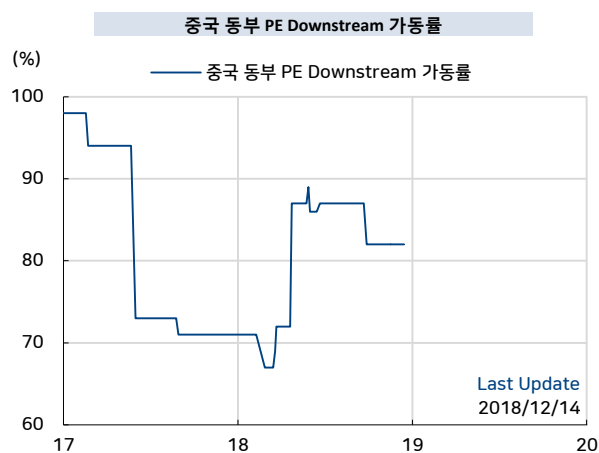
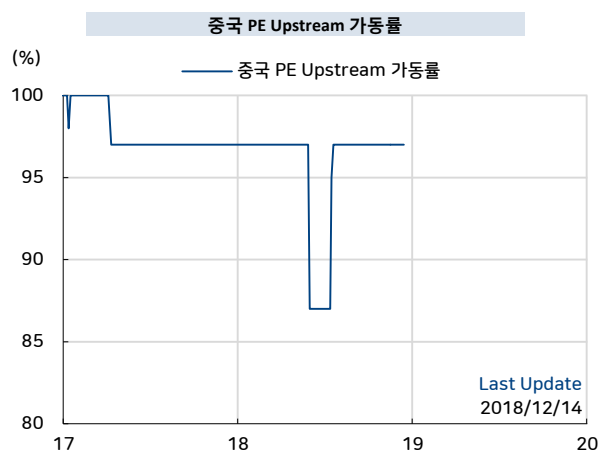
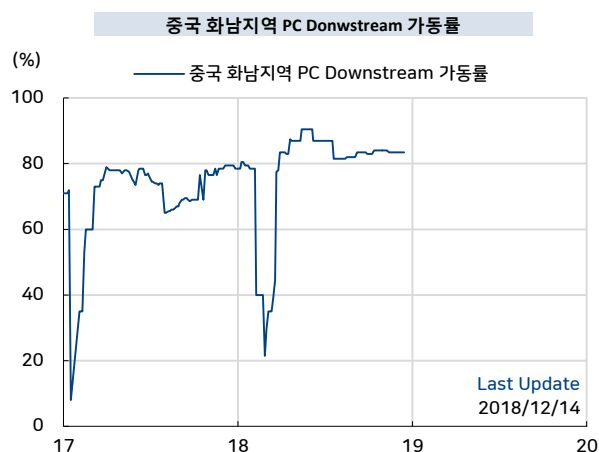
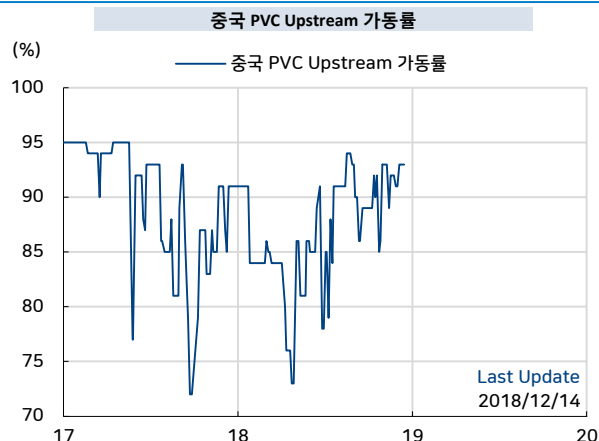


15 [화학] 중국의 화학제품별 재고 및 재고일수



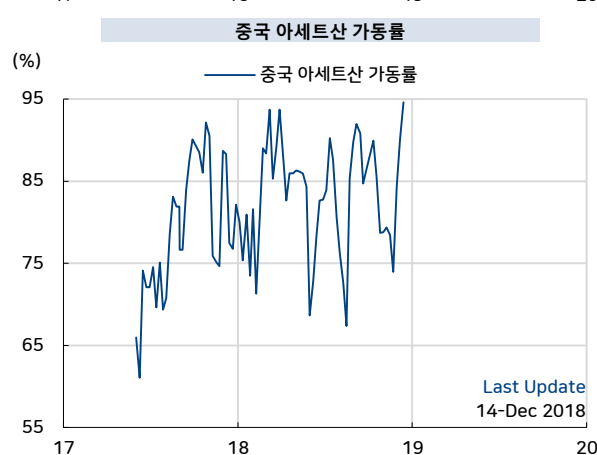
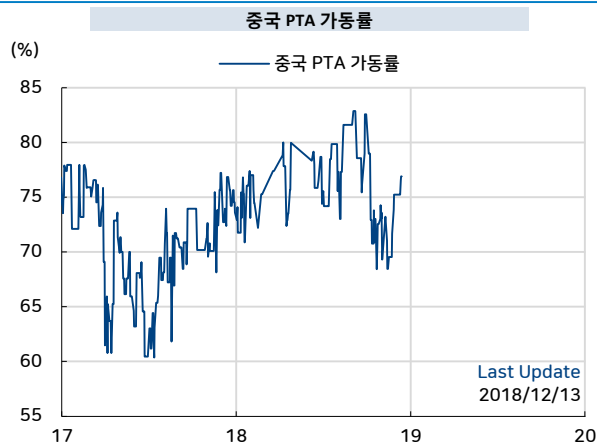


16 [화학] 중국의 화학제품 가동률 (1/2)



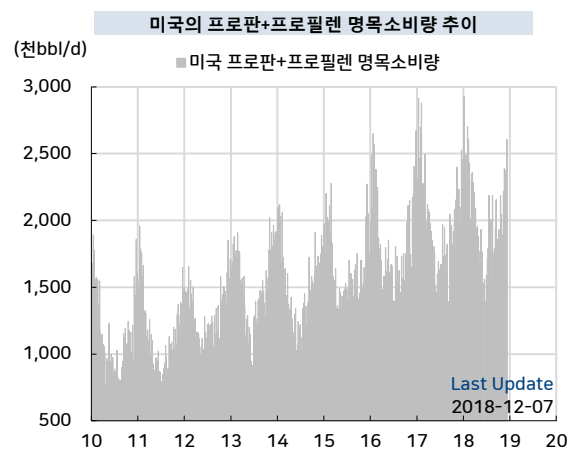
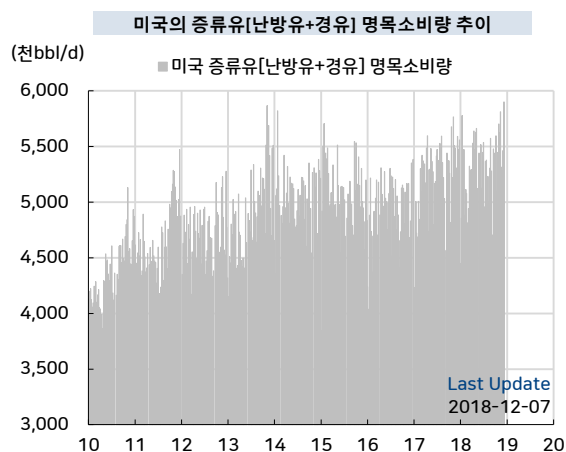
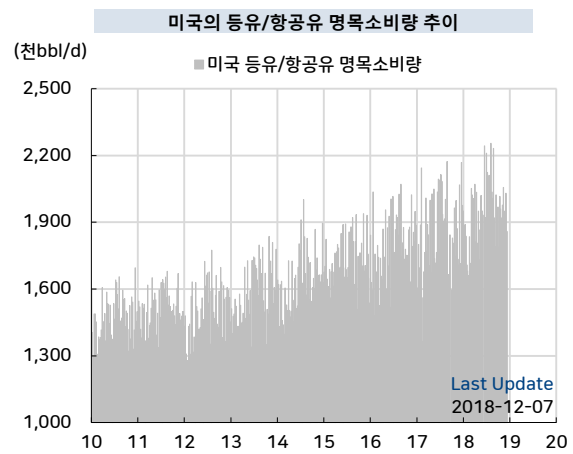
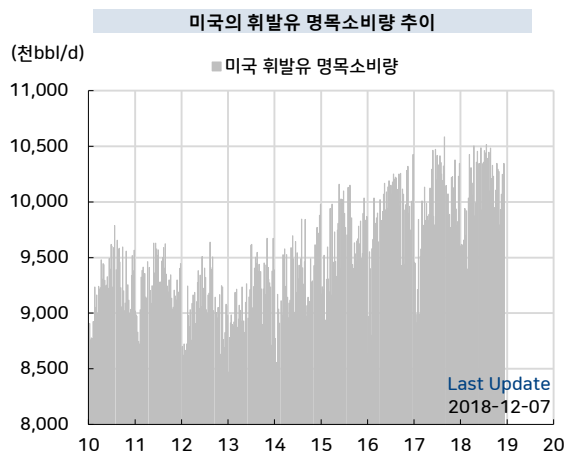
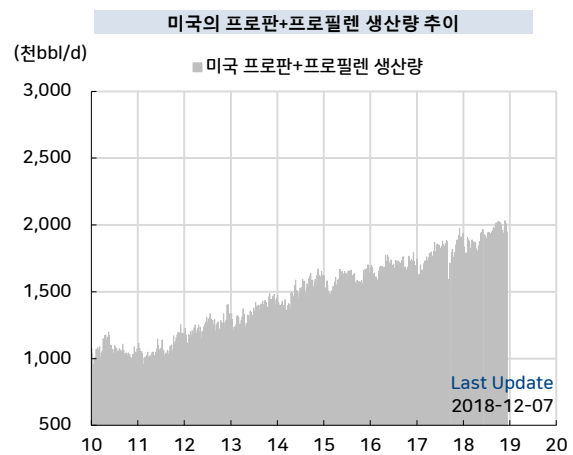
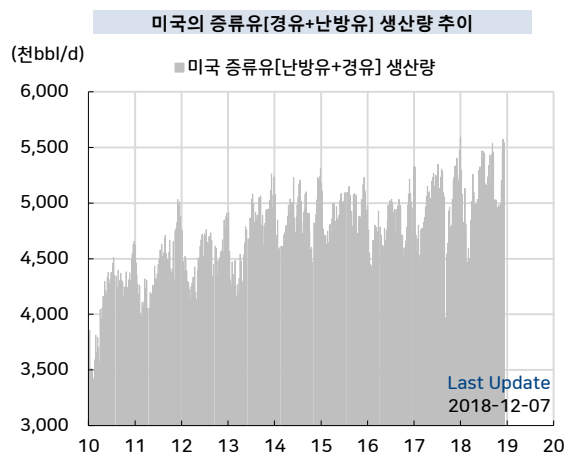
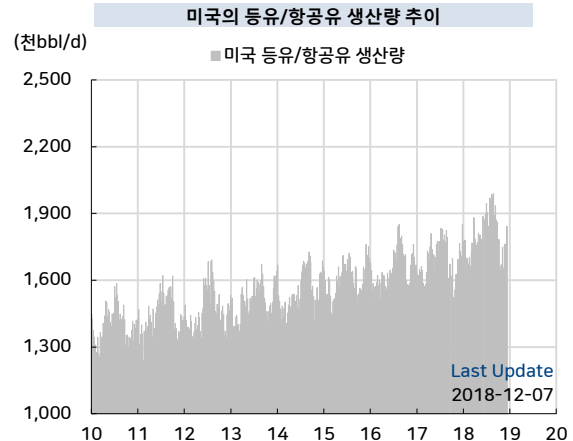
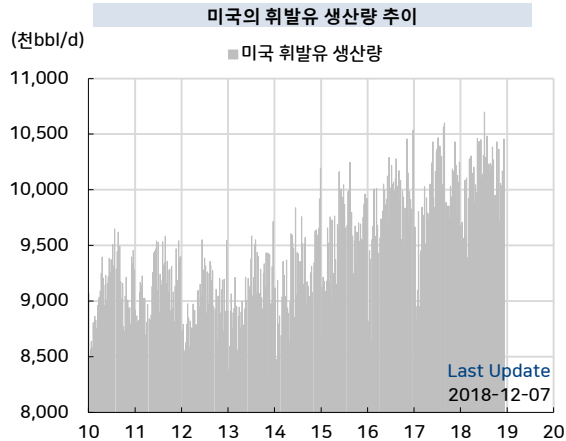


17 [화학] 중국의 화학제품 가동률 (2/2)



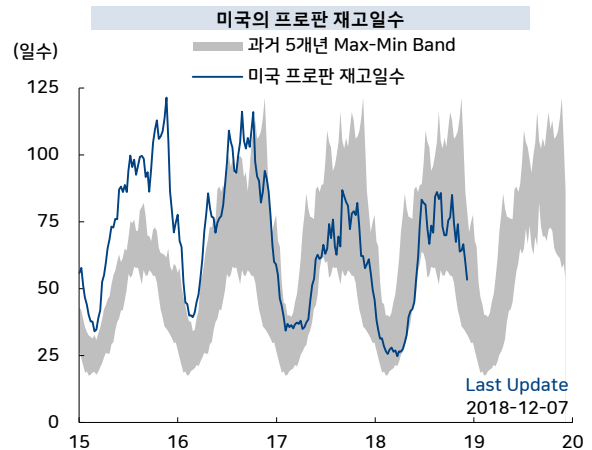
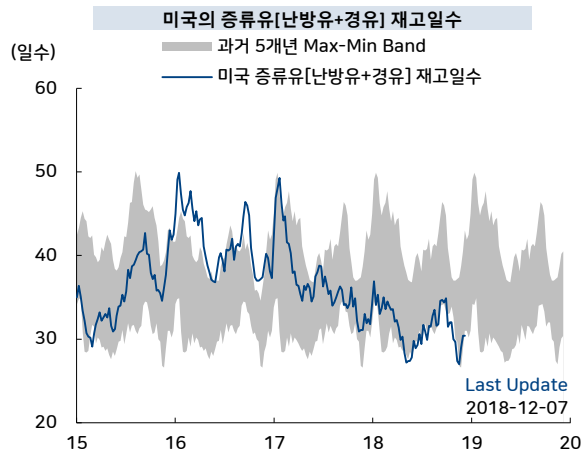
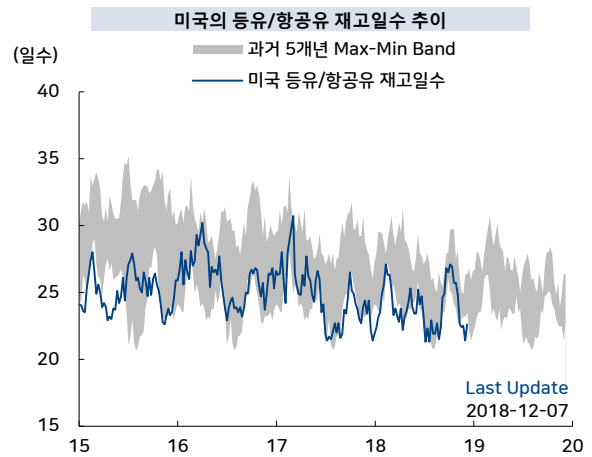
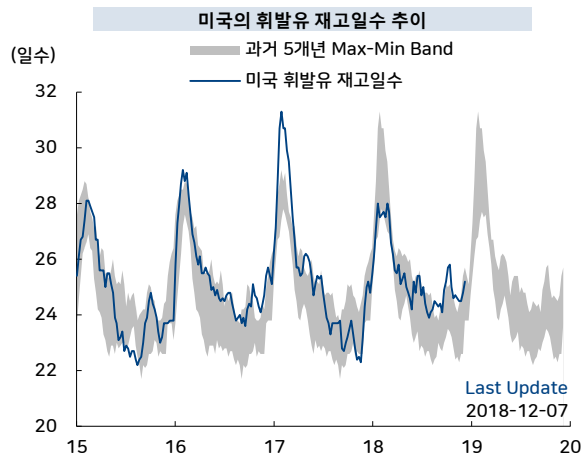
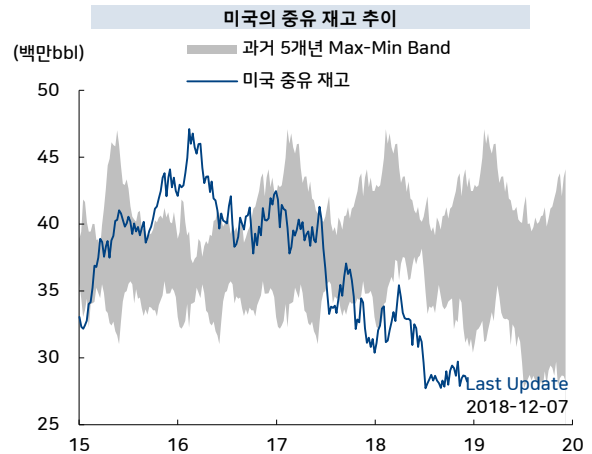
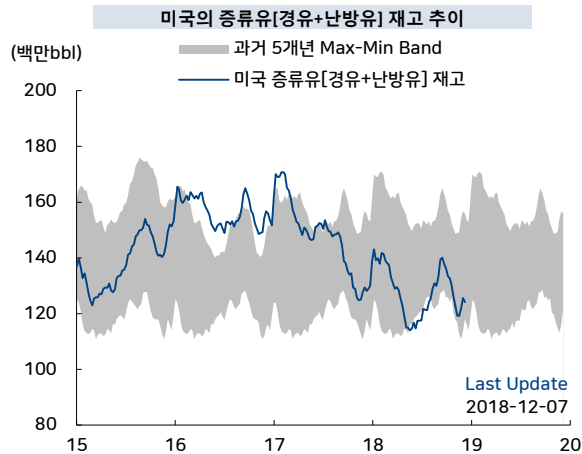
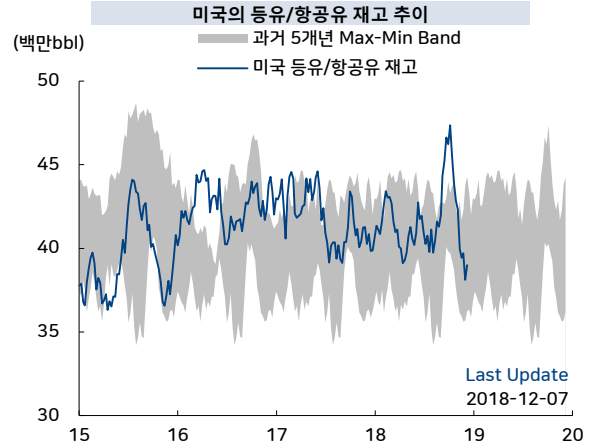
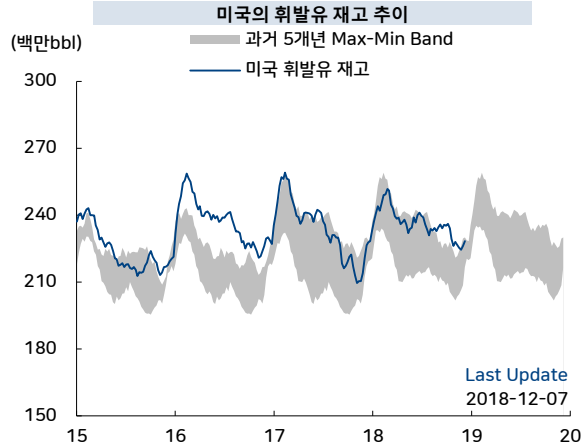


18 [정유] 미국의 석유제품 생산량 및 명목소비량 추이



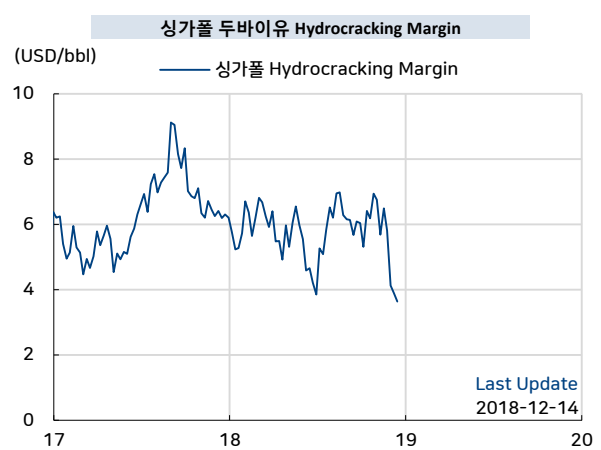
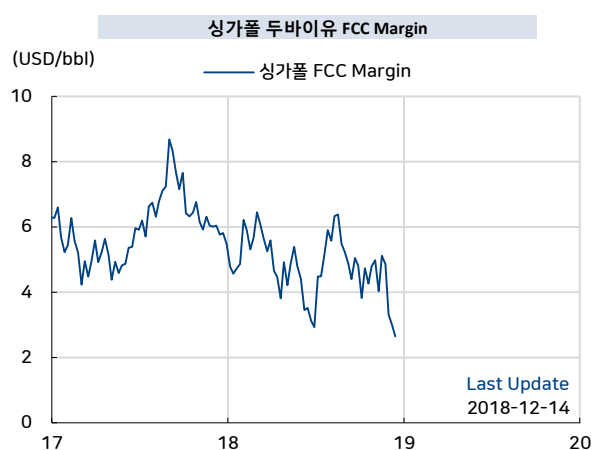
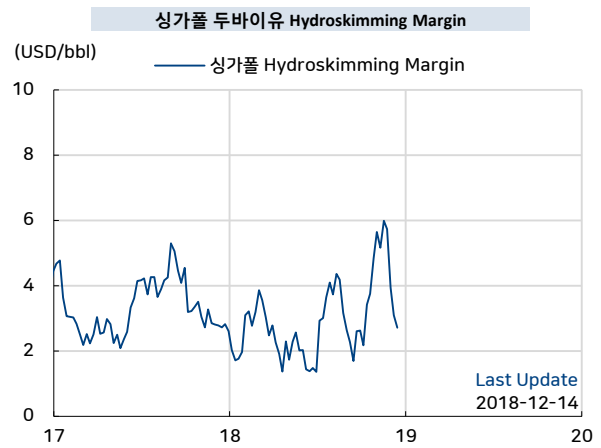
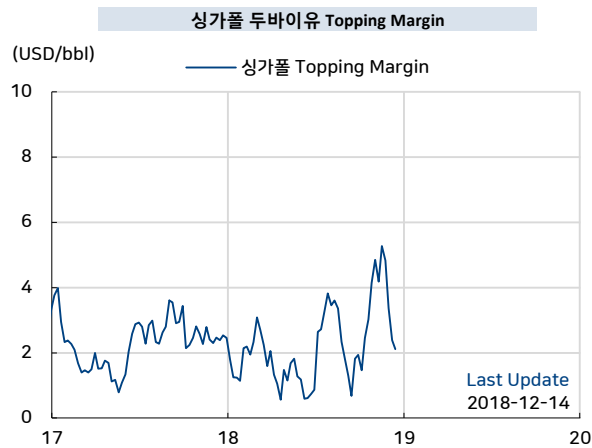
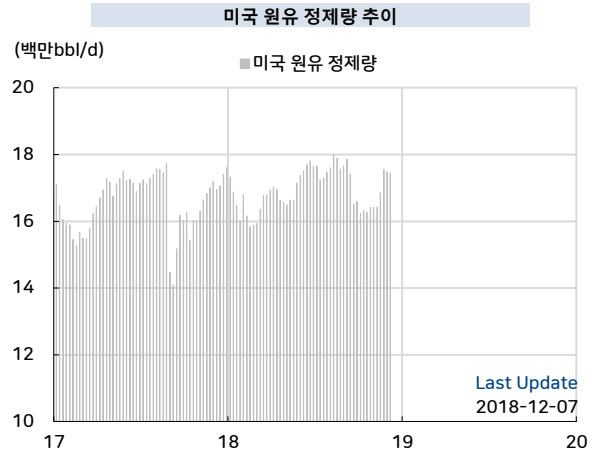
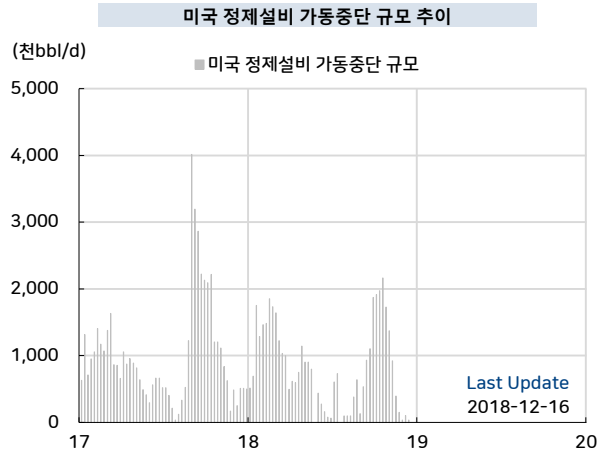
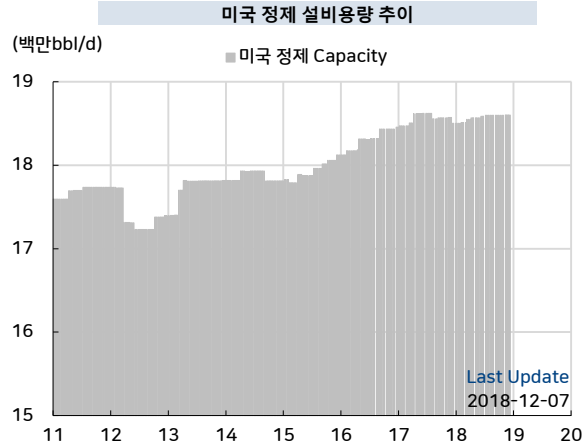


19 [정유] 미국의 석유제품 재고 및 재고일수 추이



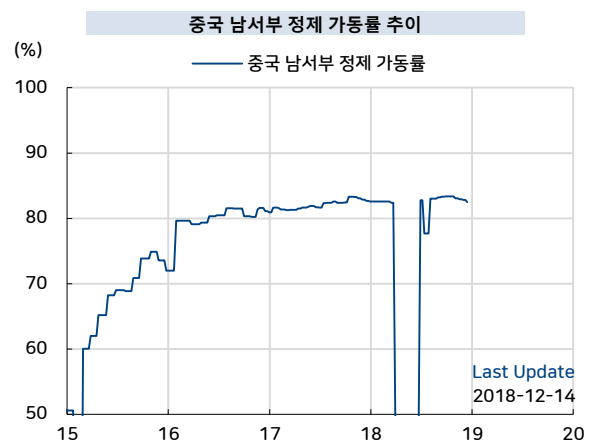
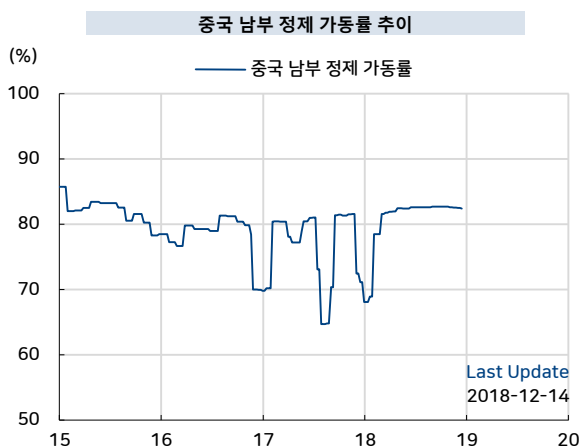
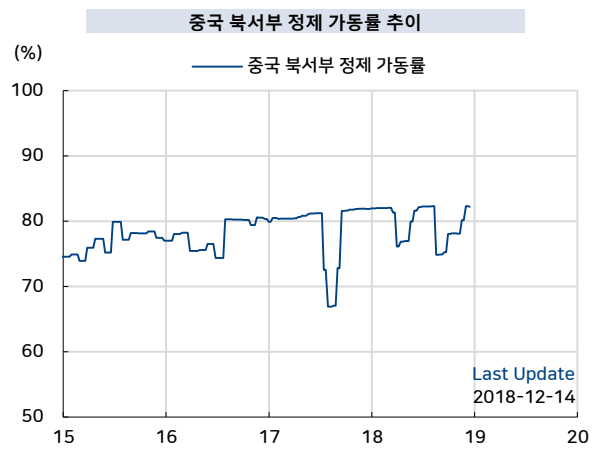
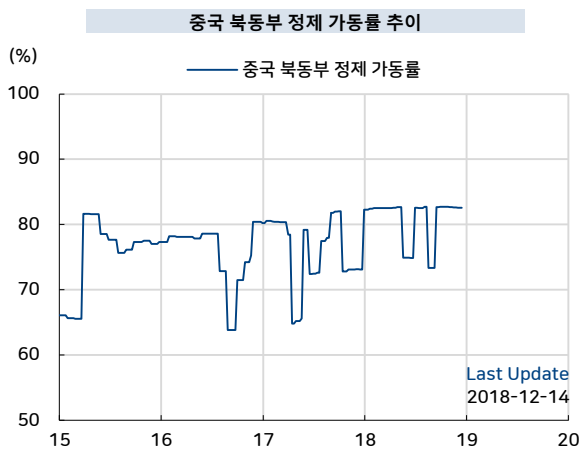
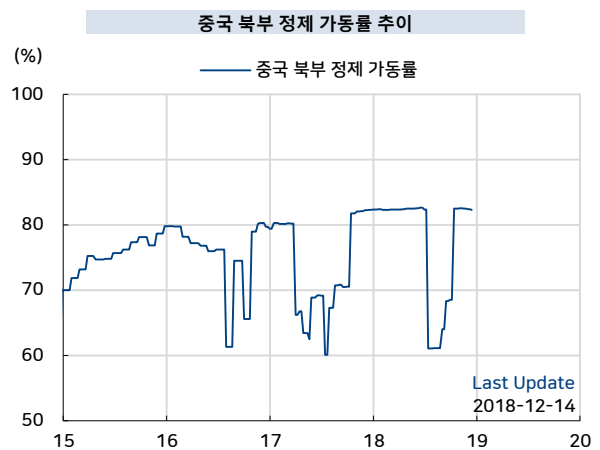
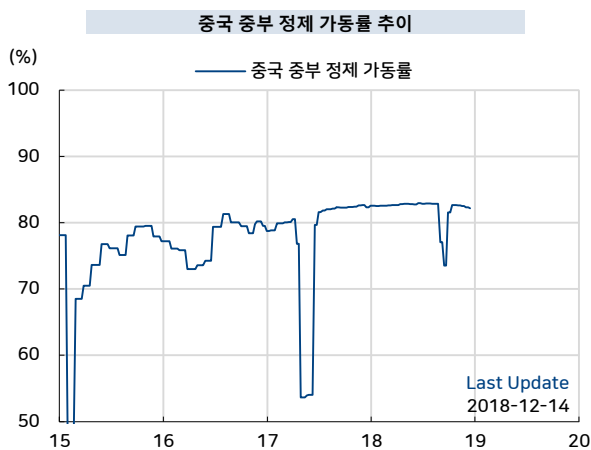


20 [정유] 미국의 정제 설비용량, 가동률, 정제량 및 싱가포르 정제마진



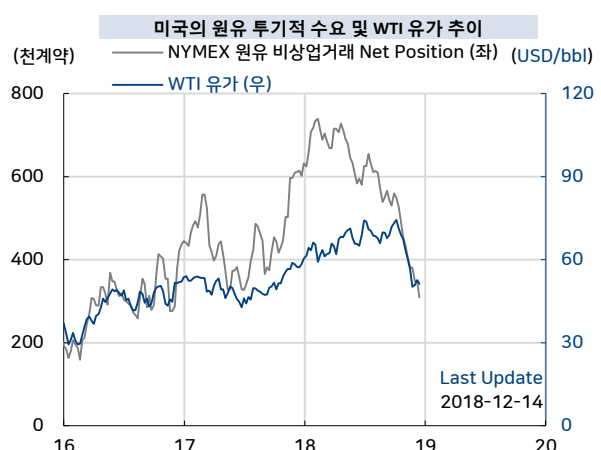
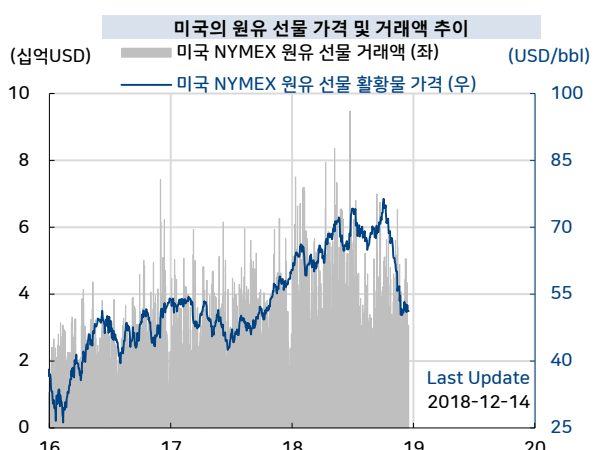
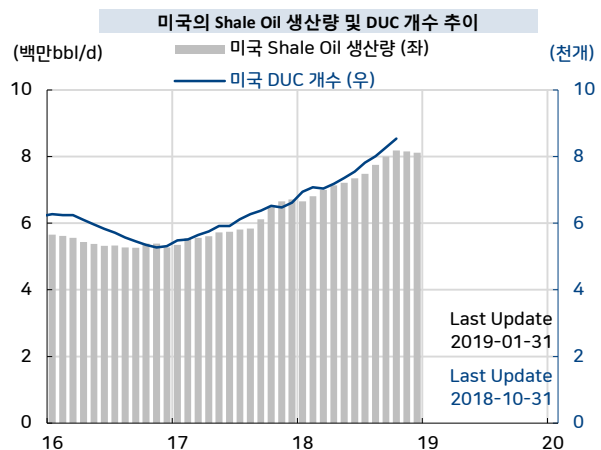
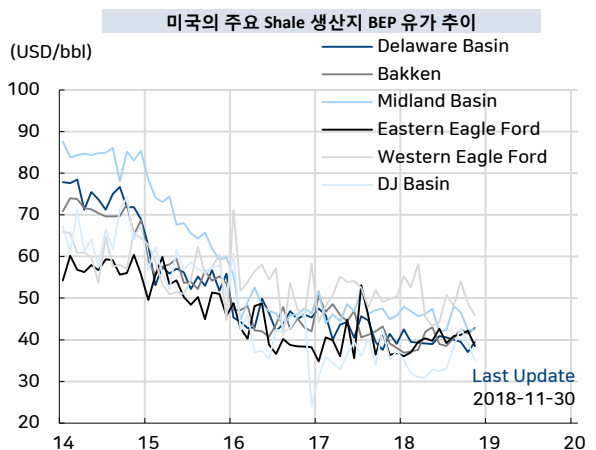
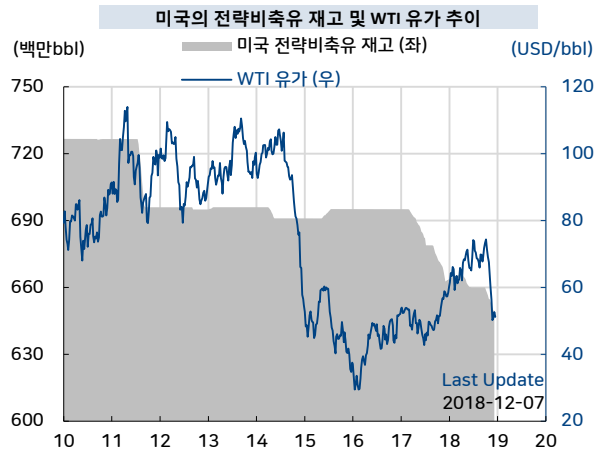
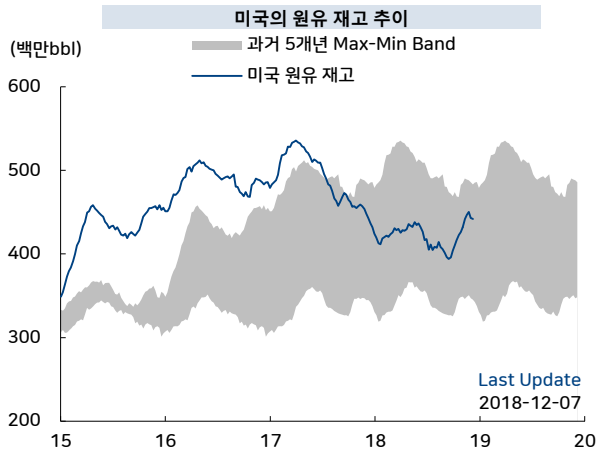
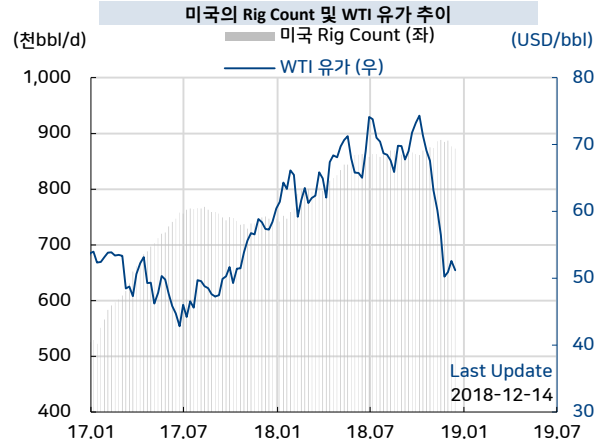
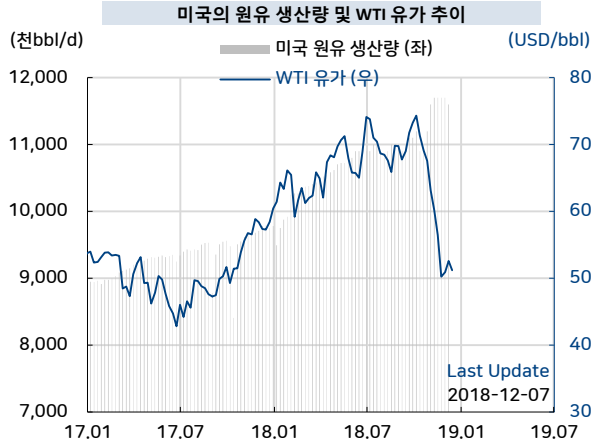


21 [정유] 중국의 Teapot Refineries 가동률 및 지역별 가동률





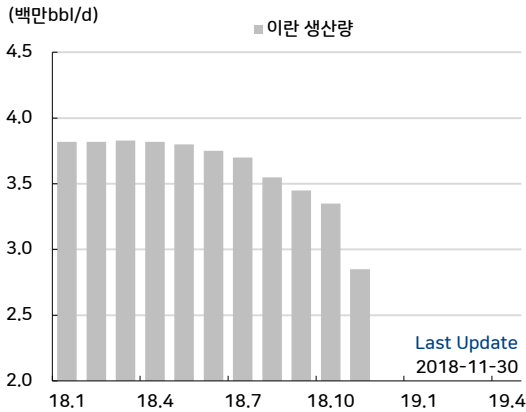
22 [국제유가] 미국의 주요 원유 관련 지표 Charts



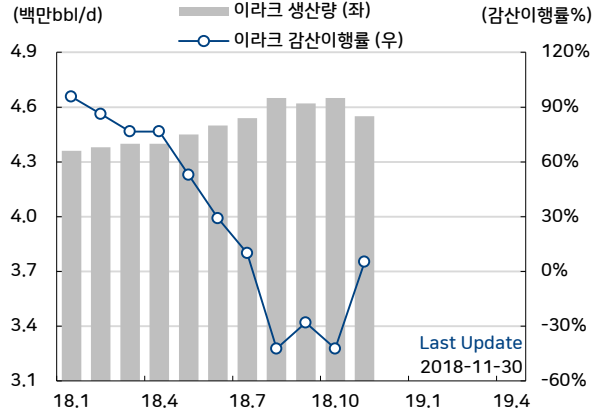


23 [국제유가] OPEC 주요 국가들의 원유 생산량 및 감산이행률

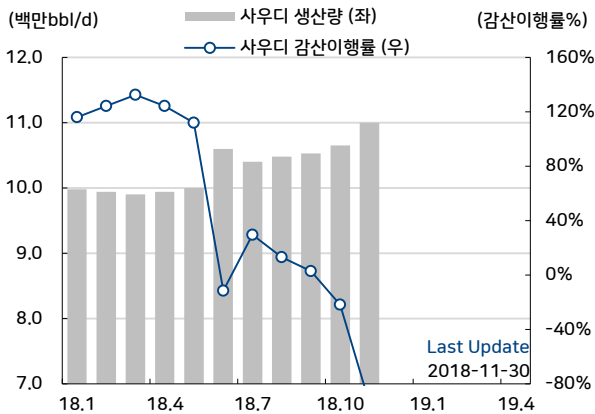
이란의 원유 생산량 추이



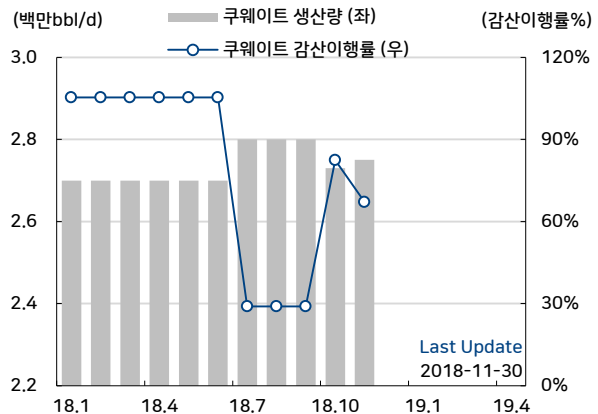
이라크의 원유 생산량 및 감산이행률 추이



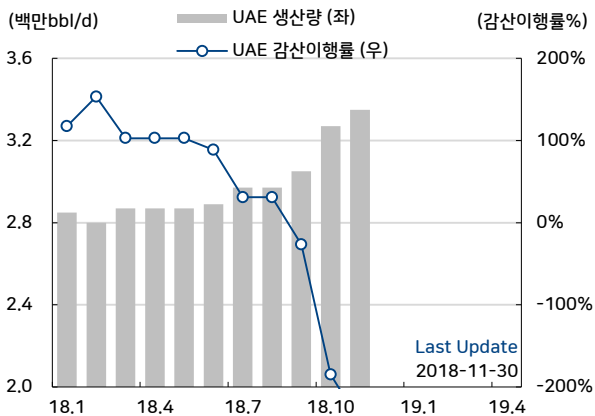
사우디의 원유 생산량 및 감산이행률 추이



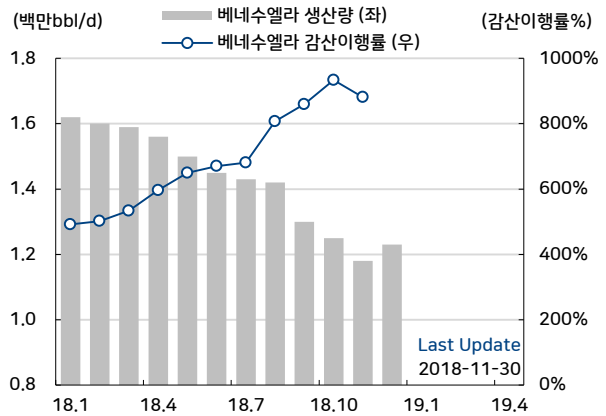
쿠웨이트의 원유 생산량 및 감산이행률 추이



UAE의 원유 생산량 및 감산이행률 추이



베네수엘라의 원유 생산량 및 감산이행률 추이

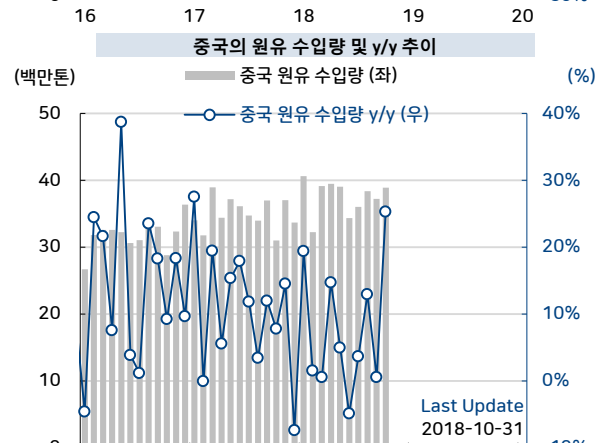
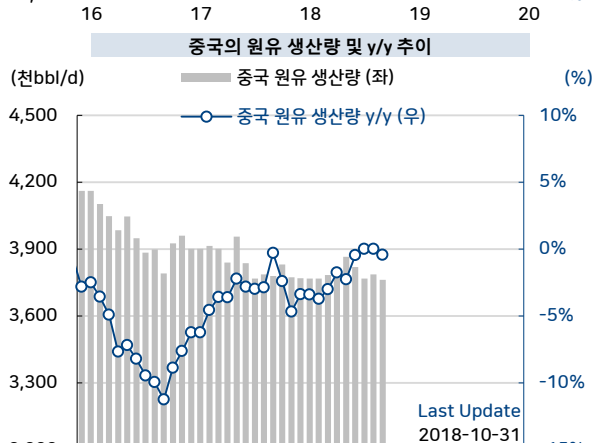
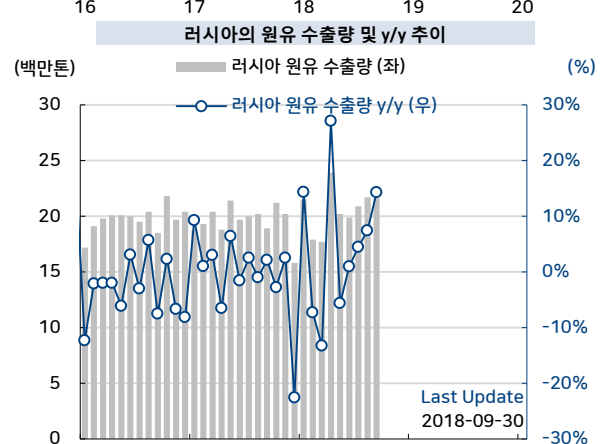
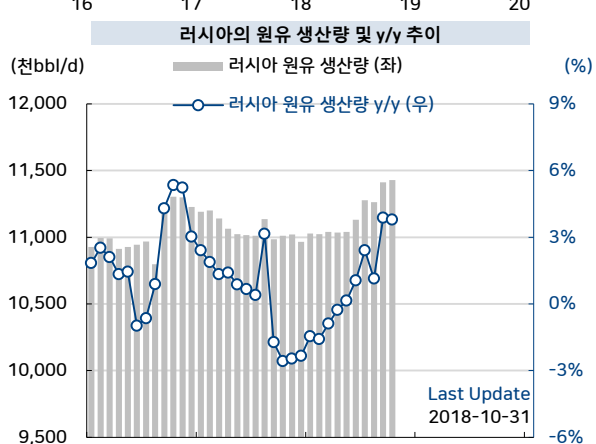
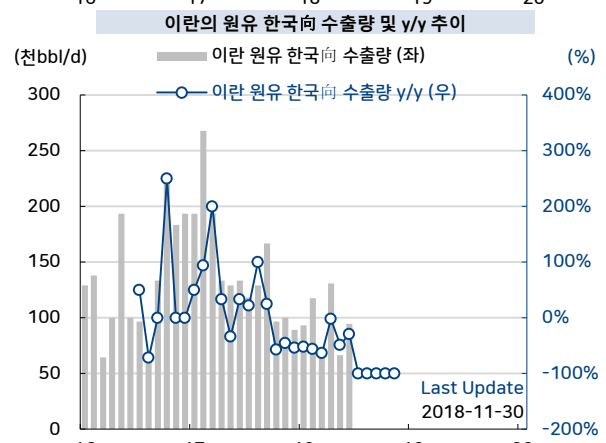
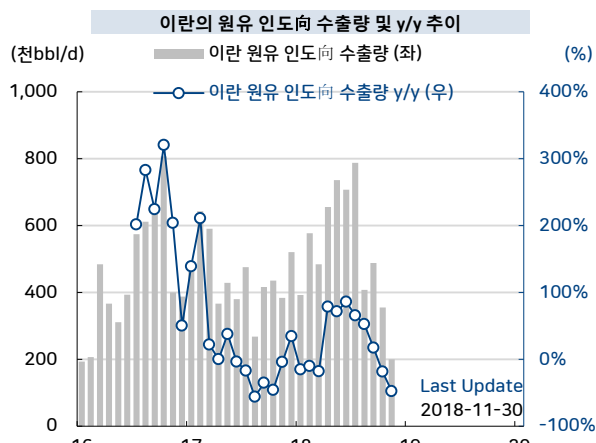
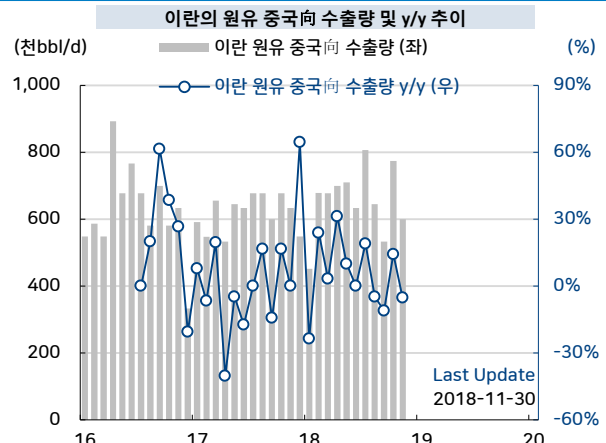
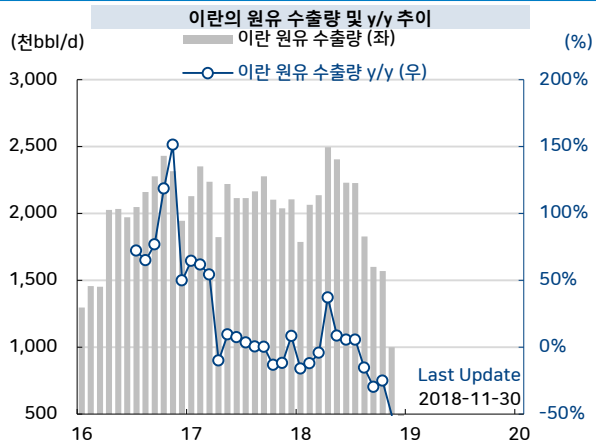


| [천bbl/d] | 기준생산 (A) | 생산쿼터 (B) | 감산목표 (B-a) | '18년 4월 | | '18년 11월 | |
|-------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | | | | 원유 생산량 | 이행률 (%) | 원유 생산량 | 이행률 (%) |
| 알제리 | 1,089 | 1,039 | -50 | 980 | 218.0% | 1,060 | 58.0% |
| 앙골라 | 1,751 | 1,673 | -78 | 1,490 | 334.6% | 1,510 | 309.0% |
| 에콰도르 | 548 | 522 | -26 | 520 | 107.7% | 520 | 107.7% |
| 적도기니 | 190 | 178 | -12 | 130 | 500.0% | 120 | 583.3% |
| 가봉 | 202 | 193 | -9 | 200 | 22.2% | 200 | 22.2% |
| 이란 | 3,707 | 3,797 | 90 | 3,820 | 125.6% | 2,850 | -952.2% |
| 이라크 | 4,561 | 4,351 | -210 | 4,400 | 76.7% | 4,550 | 5.2% |
| 쿠웨이트 | 2,838 | 2,707 | -131 | 2,700 | 105.3% | 2,750 | 67.2% |
| 카타르 | 648 | 618 | -30 | 600 | 160.0% | 610 | 126.7% |
| 사우디 | 10,544 | 10,058 | -486 | 9,940 | 124.3% | 11,000 | -93.8% |
| UAE | 3,013 | 2,874 | -139 | 2,870 | 102.9% | 3,350 | -242.4% |
| 베네수엘라 | 2,067 | 1,972 | -95 | 1,500 | 596.8% | 1,230 | 881.1% |
| OPEC 12 합계 | 31,108 | 29,932 | -1,176 | 29,150 | 166.5% | 29,750 | 115.5% |

* 단위 : 천배럴



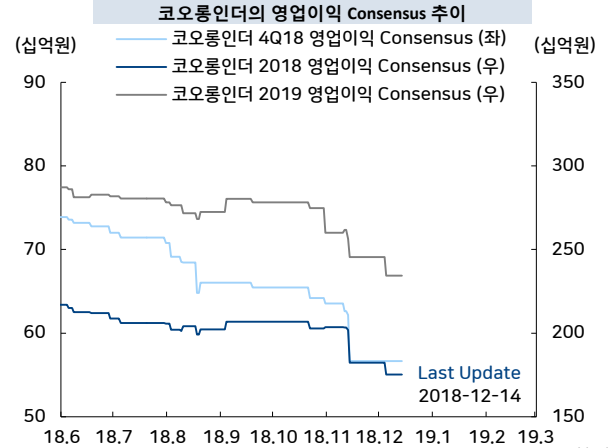
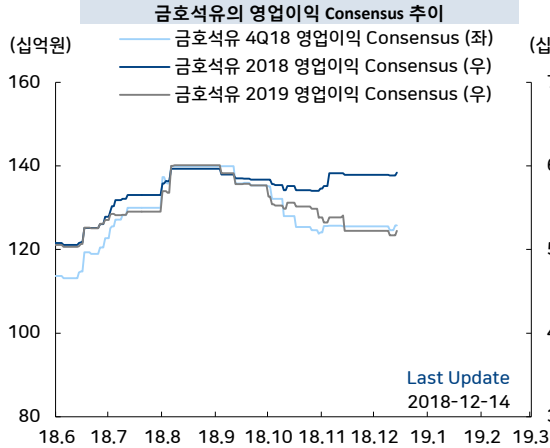
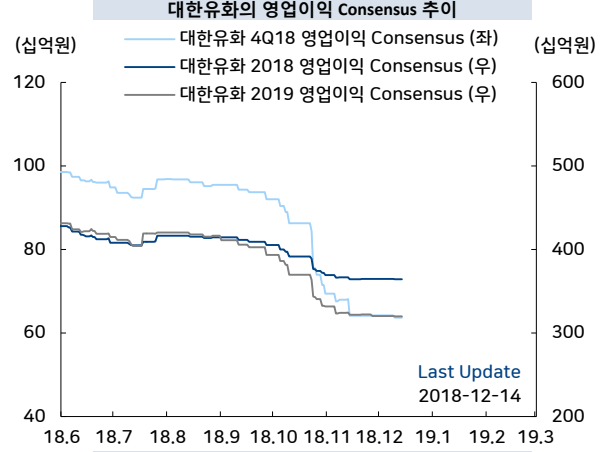
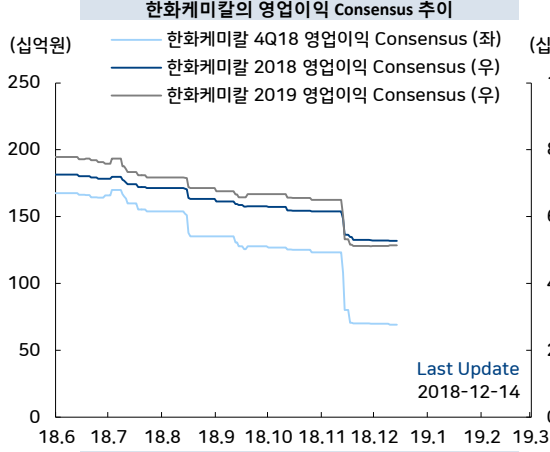
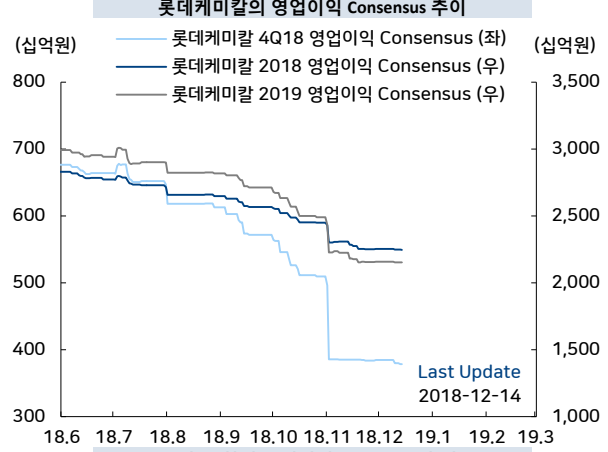
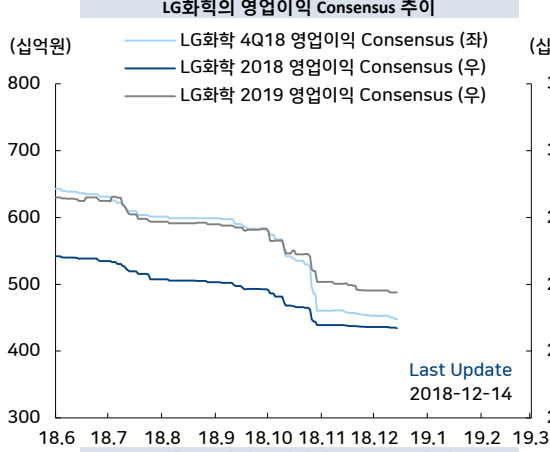
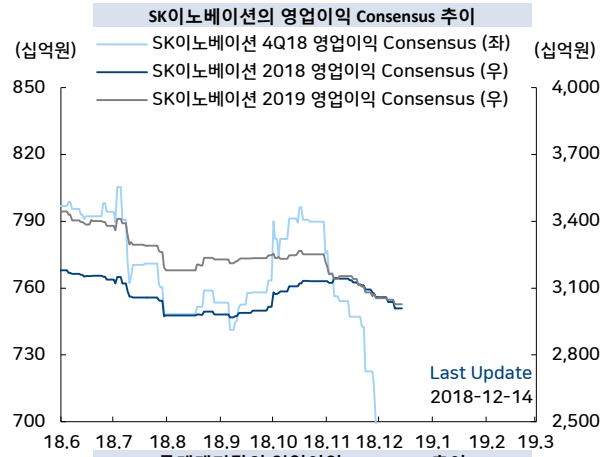
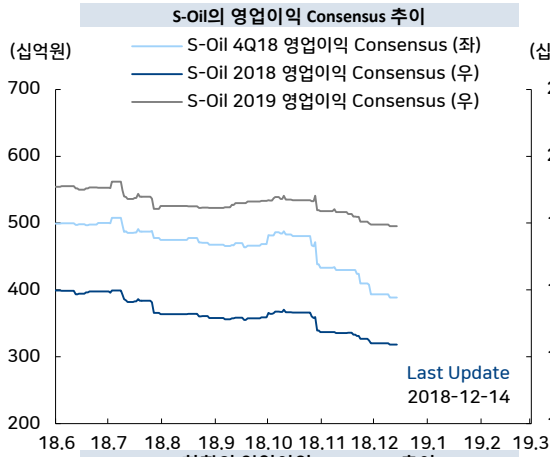
24 [국제유가] 이란/러시아/중국의 주요 원유 관련 지표 Charts





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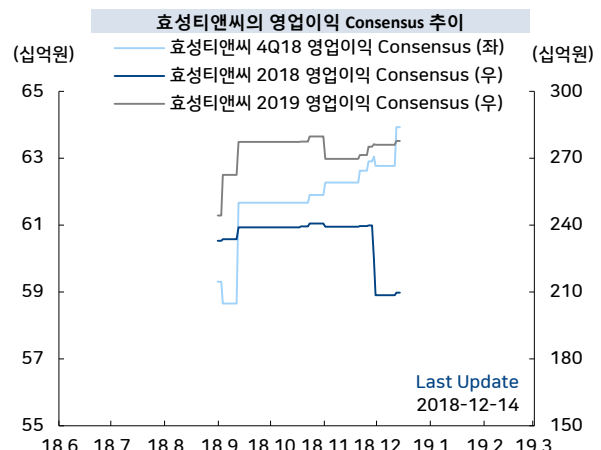
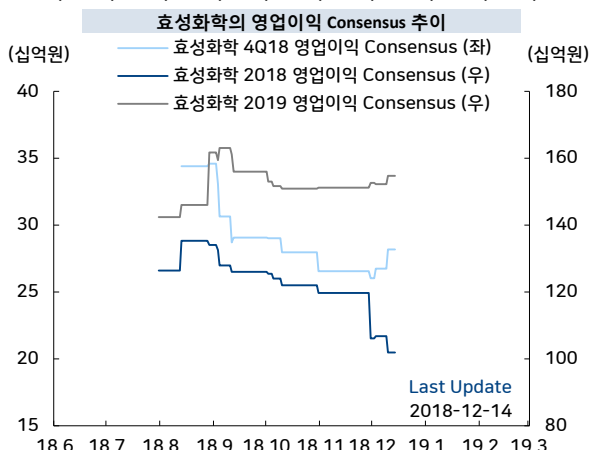
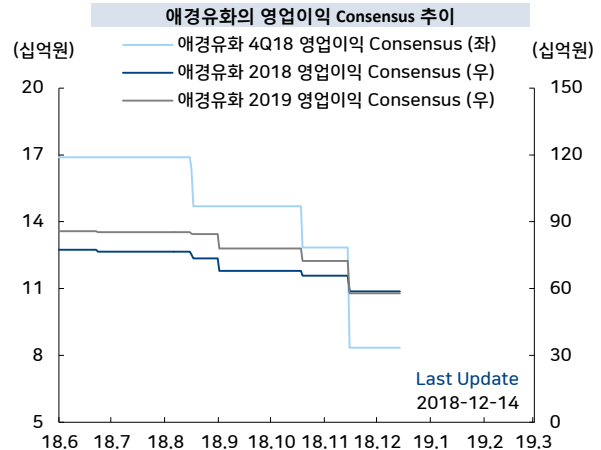
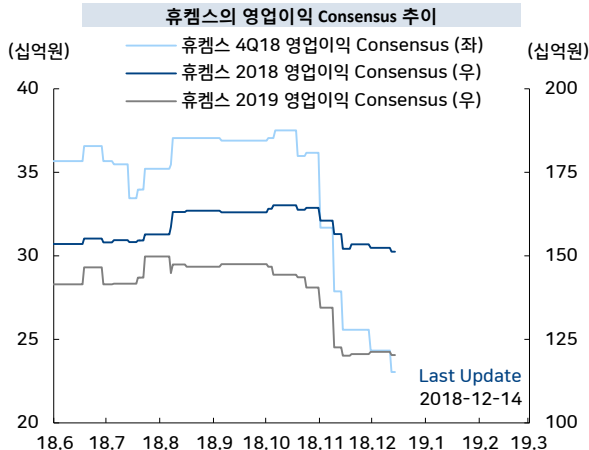
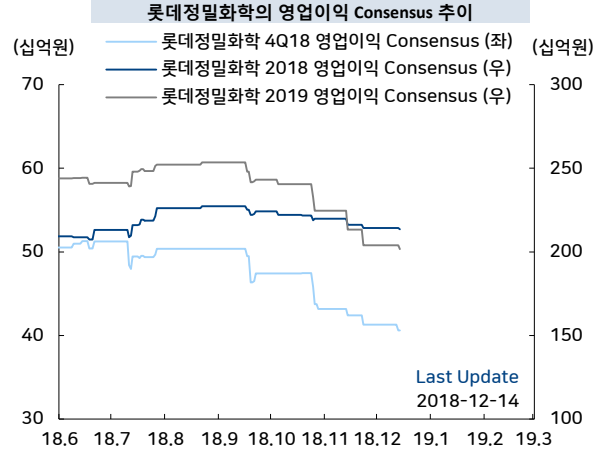
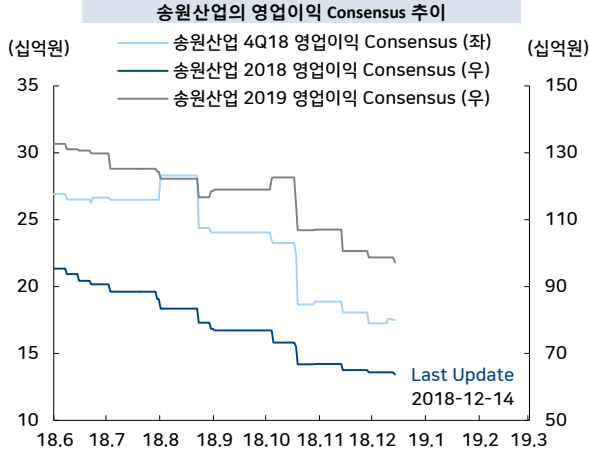
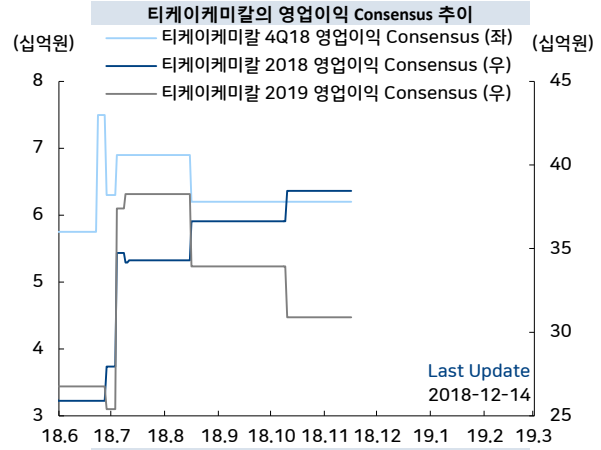
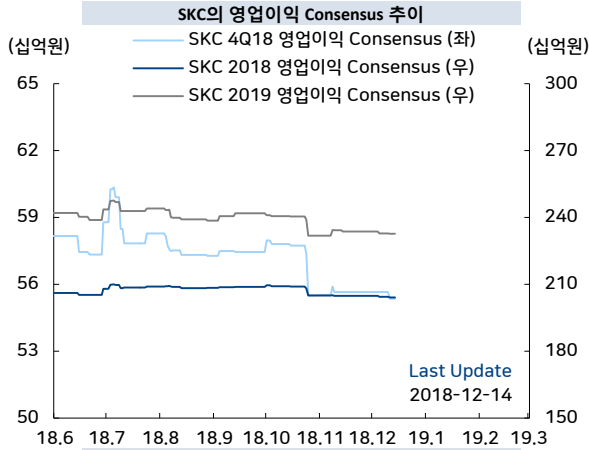
25 [컨센서스] 정유/화학 주요 종목 영업이익 Consensus 추이 (1/2)





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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% | - |