Petrochemicals

Tuesday, July 22, 2014



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Better PE spread WoW on lower naphtha price. Ethylene and PE prices were steady WoW due to tight supply in the region but spread rose 0.5-0.6% WoW, thanks to lower naphtha price. According to an industry source, ethylene supply was limited by maintenance turnarounds and delayed startup of new plants in Asia. The low competitiveness also led some operators to shutter naphtha crackers permanently. Regional demand remained slow despite signs of improvement in the Chinese economy.

- Strong PX price short-lived. PX price continued to move north, up 3.9% WoW to US\$1,480/t against a YTD average of only US\$1,291/t despite the return of regional capacity from maintenance shutdowns. PX-naphtha spread shot up to a 10-month high of US\$612/t. This reflects tight supply in the region from lower operating rate to prepare for capacity additions in 2H14. We do not expect the current high to stay long, as 1.8mtpa from Singapore and South Korea will start up in 3Q14.
- PET/PTA margin almost at 52-week low. Higher feedstock costs, both PX and MEG, squeezed integrated PET/PTA spread to only US\$196/t from a 52-week low at US\$190/t. Regional demand for bottle grade PET was seasonally slow, down 1% WoW to US\$1,390/t while PTA price rose 1% WoW. PET/PTA margin may recover in the near term when new supply of PX enters the market in Sep 2014.

Investment view: The petrochemical sector rose just 0.3% WoW, underperforming the SET rise of 1%. The key driver was PTTGC (+0.7%) but this was largely offset by a fall in IVL share price (-0.9% WoW), reflecting concerns of a weaker PET/PTA spread. Although PTTGC remains our top pick in the sector due to undemanding valuation, it is expected to report lower profit QoQ in 2Q14 which could drag share price performance in the near term.

| Figure | 1: | Petroc | hemical | price | update |
|--------|----|--------|---------|-------|--------|
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| | Current | 52-week | -1W | -1M | -3M | -6M | -12M | 3Q14 | 2Q14 | Q0Q% | YTD | Chg. | % YoY | 2014F |
|---|-----------|--|--------|--------|--------|---------|-----------|-------|-------|--------|-------|------|--------|------------|
| | 18-Jul-14 | High/Low | | | | | | QTD | | | | | | projectior |
| Price | | | | | | | | | | | | | | |
| Naphtha Singapore Spot FOB | 868 | 897/803 | -0.4% | -2.0% | 1.4% | 4.3% | 5.9% | 873 | 863 | 1.2% | 856 | 33 | 4.0% | 842 |
| Ethylene, Far East CFR SE Asia \$/MT | 1,458 | 1,465/1,238 | 0.0% | 2.6% | -0.2% | 0.2% | 15.2% | 1,458 | 1,448 | 0.6% | 1,445 | 121 | 9.1% | 1,440 |
| Propylene (C), Spot CFR F/E U\$/MT | 1,460 | 1,503/1,373 | 0.2% | 1.9% | 2.6% | -2.5% | 4.8% | 1,455 | 1,420 | 2.5% | 1,441 | 90 | 6.7% | 1,430 |
| Polye HDPE Inj, South East Asia U\$/MT | 1,595 | 1,595/1,465 | 0.0% | 0.6% | 3.2% | 2.9% | 10.4% | 1,595 | 1,568 | 1.7% | 1,562 | 109 | 7.5% | 1,570 |
| Polye LDPE-Film, Spot S.E Asia U\$/MT | 1,595 | 1,680/1,550 | 0.0% | 0.0% | -0.9% | -4.5% | 6.3% | 1,595 | 1,605 | -0.6% | 1,620 | 165 | 11.3% | 1,640 |
| Polye LLDPE Film, F/E Spot SE Asia \$/MT | 1,600 | 1,600/1,480 | 0.0% | 0.6% | 2.9% | 1.9% | 10.2% | 1,598 | 1,577 | 1.3% | 1,573 | 117 | 8.1% | 1,580 |
| PP Film, Spot South East Asia U\$/MT | 1,610 | 1,615/1,500 | -0.3% | 1.3% | 2.9% | 2.5% | 8.1% | 1,610 | 1,581 | 1.8% | 1,576 | 74 | 4.9% | 1,570 |
| Related stocks PTTGC (Neutral) IRPC (+) SCC (+) TPIPL (Neutral) | | | | | | | | | | | | | | |
| Para-Xylene CFR Chin M. Por Spot \$/MT | 1,480 | 1,515/1,143 | 3.9% | 7.4% | 21.8% | 10.7% | 0.9% | 1,435 | 1,263 | 13.6% | 1,291 | -236 | -15.5% | 1,190 |
| Benzene, Far East CFR Spot F/E U\$/MT | 1,340 | 1,385/1,220 | -0.4% | -0.6% | 5.3% | -2.0% | 7.8% | 1,346 | 1,293 | 4.1% | 1,303 | -34 | -2.6% | 1,240 |
| Related stocks | | 1,340 1,385/1,220 -0.4% -0.6% 5.3% -2.0% 7.8% 1,346 1,293 4.1% 1,303 -34 -2.6% 1,2 PTTGC (+) TOP (+) ESSO (+) | | | | | | | | | | | | |
| MEG, Far East Spot CFR F/E U\$/MT | 988 | 1,124/889 | 0.2% | -0.9% | 6.6% | -1.4% | -3.8% | 991 | 939 | 5.5% | 957 | -91 | -8.7% | 1,110 |
| PTA CFR South East Asia | 1,015 | 1,125/865 | 1.0% | 3.6% | 13.4% | 5.2% | -5.1% | 1,015 | 920 | 10.3% | 937 | -166 | -15.0% | 900 |
| PET(Fibre Grade)A/P Spot CFR NEA \$/MT | 1,280 | 1,420/1,185 | -0.4% | 1.6% | 5.8% | -0.8% | -4.8% | 1,285 | 1,217 | 5.6% | 1,246 | -179 | -12.6% | n.a |
| Related stocks | | | | | | PTTGC (| +) IVL | (-) | | | | | | |
| ABS Asia Pac. India Spot CFR U\$/MT | 1,915 | 1,955/1,870 | 0.0% | 0.5% | 1.1% | 1.6% | -1.3% | 1,915 | 1,901 | 0.7% | 1,896 | -74 | -3.7% | n.a |
| Polystyrene-GP, Spot Hong Kong U\$/MT | 1,740 | 1,915/1,715 | 0.0% | 1.5% | -0.6% | -3.6% | -7.2% | 1,738 | 1,733 | 0.3% | 1,753 | -82 | -4.5% | n.a |
| Related stocks | | | | | | I RPC | (Neutral |) | | | | | | |
| PVC, Spot South East Asia U\$/MT | 1,065 | 1,070/980 | 0.9% | 1.4% | 3.4% | 2.9% | 3.4% | 1,058 | 1,035 | 2.2% | 1,040 | 26 | 2.5% | 1,070 |
| Related stocks | | | | | | VNT (+ |) TPC (| +) | | | | | | |
| Product spread | | | | | | | | | | | | | | |
| Ethylene - naphtha | 590 | 626/424 | 0.6% | 10.3% | -2.4% | -5.3% | 32.4% | 584 | 586 | -0.2% | 590 | 88 | 17.5% | 598 |
| Propylene - naphtha | 592 | 665/530 | 1.0% | 8.2% | 4.5% | -11.0% | 3.4% | 582 | 557 | 4.5% | 585 | 57 | 10.8% | 588 |
| HDPE - naphtha | 727 | 735/615 | 0.5% | 3.9% | 5.5% | 1.3% | 16.3% | 722 | 705 | 2.4% | 706 | 76 | 12.1% | 728 |
| LDPE - naphtha | 727 | 851/709 | 0.5% | 2.4% | -3.6% | -13.2% | 6.9% | 722 | 742 | -2.7% | 764 | 132 | 20.9% | 798 |
| LDPE - Ethylene | 138 | 323/135 | 0.0% | -21.4% | -8.3% | -36.0% | -41.5% | 138 | 156 | -11.9% | 175 | 44 | 34.0% | 200 |
| LLDPE - naphtha | 732 | 750/640 | 0.5% | 3.9% | 4.7% | -0.8% | 15.7% | 725 | 714 | 1.5% | 717 | 84 | 13.3% | 738 |
| PP - naphtha | 742 | 744/657 | -0.2% | 5.3% | 4.6% | 0.6% | 10.7% | 737 | 718 | 2.6% | 720 | 41 | 6.1% | 728 |
| PX - naphtha | 612 | 697/304 | 10.6% | 24.3% | 70.1% | 21.1% | -5.5% | 562 | 400 | 40.5% | 435 | -269 | -38.2% | 348 |
| BZ - naphtha | 472 | 535/381 | -0.3% | 2.1% | 13.3% | -11.8% | 11.7% | 473 | 430 | 9.9% | 448 | -67 | -13.1% | 398 |
| MEG - Ethylene | 84 | 324/-20 | 1.8% | -27.8% | 293.7% | -16.1% | -65.4% | 87 | 41 | 111.3% | 61 | -166 | -73.2% | 217 |
| PTA - PX | 53 | 155/53 | -32.7% | -37.4% | -49.5% | -44.6% | -54.4% | 82 | 100 | -17.4% | 98 | -12 | -10.8% | 103 |
| PET spread | 143 | 253/128 | -8.5% | -2.8% | -24.0% | -23.5% | -5.6% | 147 | 170 | -13.7% | 180 | -19 | -9.3% | n.a |
| Integrated PET/PTA spread | 196 | 352/190 | -16.6% | -15.5% | -33.1% | -30.7% | -26.8% | 229 | 269 | -15.1% | 278 | -30 | -9.8% | n.a |
| ABS spread | 1,116 | 1,272/1,070 | 0.6% | 2.0% | 2.7% | 3.9% | -11.8% | 1,109 | 1,103 | 0.6% | 1,096 | -46 | -4.0% | n.a |
| PS spread | 259 | 565/214 | 1.6% | 8.4% | -19.5% | -14.5% | -50.9% | 252 | 291 | -13.2% | 305 | -90 | -22.8% | n.a |
| PVC - ethylene | 336 | 391/258 | 3.1% | -1.1% | 12.1% | 9.3% | -15.4% | 330 | 311 | 5.9% | 317 | -35 | -9.8% | 350 |

Note: Impact to related stocks is based on WoW performance

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Petrochemical price monitor

Petrochemicals

Figure 2: Ethylene vs. Naphtha

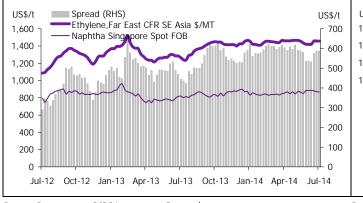
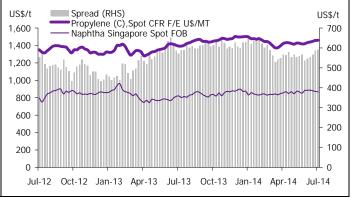
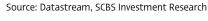


Figure 3: Propylene vs. Naphtha



Source: Datastream, SCBS Investment Research





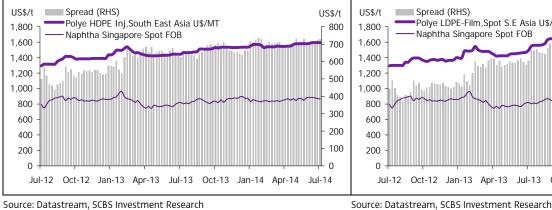


Figure 5: LDPE vs. Naphtha

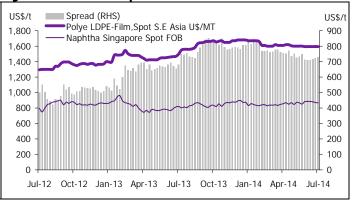


Figure 6: LLDPE vs. Naphtha

Spread (RHS)

US\$/1

1,800

1,600

1,400

1.200

1,000

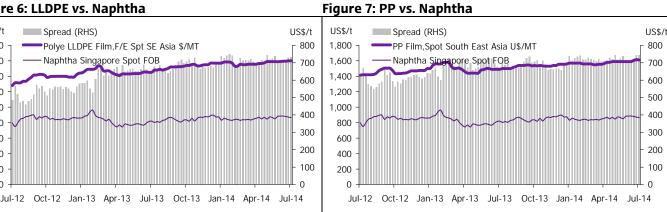
800

600

400

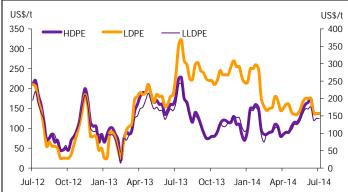
200

0



Source: Datastream, SCBS Investment Research

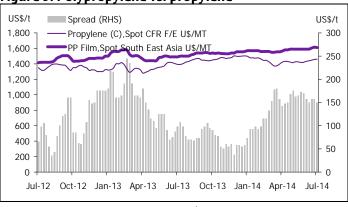
Figure 8: Polyethylene spread over ethylene



Source: Datastream, SCBS Investment Research

Figure 9: Polypropylene vs. propylene

Source: Datastream, SCBS Investment Research



Source: Datastream, SCBS Investment Research



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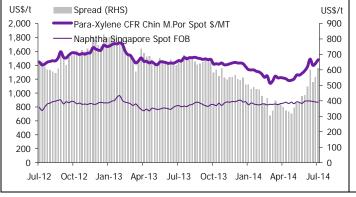
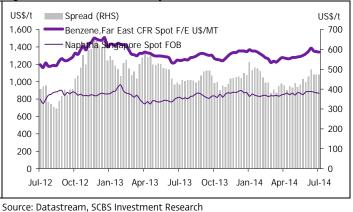
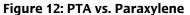


Figure 11: Benzene vs. Naphtha







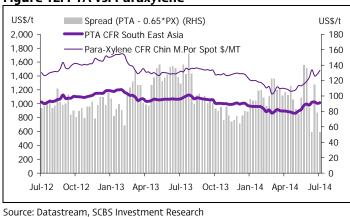
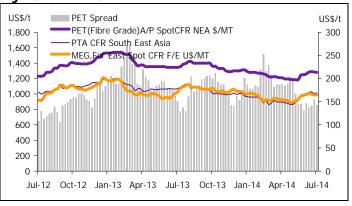


Figure 13: PET vs. PTA





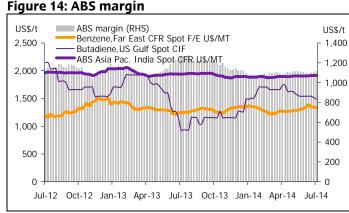
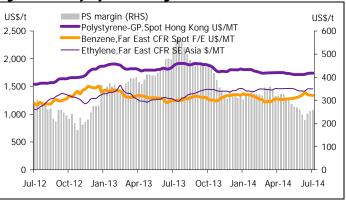
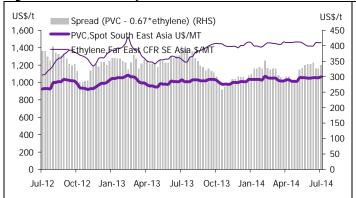


Figure 15: Polystyrene margin



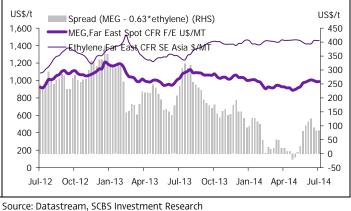
Source: Datastream, SCBS Investment Research

Figure 16: PVC vs. ethylene



Source: Datastream, SCBS Investment Research

Figure 17: MEG vs. ethylene



Source: Datastream, SCBS Investment Research



Figure 18: Selected product price/spread of listed companies

| Company | Key products | % of tota | I Product price/spread | 3Q14 | 2Q14 | QoQ% | YTD | 12MMA | 2014F | Momentum |
|---------|--------------------|-----------|---|-------|-------|------|-------|-------|------------|----------|
| | | | | QTD | | | | | projection | |
| PTTGC | Ethylene/Propylene | 21% | Ethylene,Far East CFR SE Asia \$/MT | 1,458 | 1,448 | 1% | 1,445 | 1,419 | 1,440 | → |
| | | | Propylene (C),Spot CFR F/E U\$/MT | 1,455 | 1,420 | 2% | 1,441 | 1,448 | 1,430 | 7 |
| | HDPE | 19% | Polye HDPE Inj,South East Asia U\$/MT | 1,595 | 1,568 | 2% | 1,562 | 1,539 | 1,570 | 7 |
| | LLDPE | 7% | Polye LLDPE Film, F/E Spt SE Asia \$/MT | 1,598 | 1,577 | 1% | 1,573 | 1,552 | 1,580 | 7 |
| | LDPE | 4% | Polye LDPE-Film, Spot S.E Asia U\$/MT | 1,595 | 1,605 | -1% | 1,620 | 1,626 | 1,640 | → |
| | MEG | 6% | MEG, Far East Spot CFR F/E U\$/MT | 991 | 939 | 5% | 957 | 1,003 | 1,110 | → |
| | PX | 28% | PX - naphtha | 562 | 400 | 41% | 435 | 515 | 348 | 7 |
| | BZ | 15% | BZ - naphtha | 473 | 430 | 10% | 448 | 448 | 398 | 7 |
| IRPC | Ethylene/Propylene | 15% | Ethylene - naphtha | 584 | 586 | 0% | 590 | 568 | 598 | → |
| | | | Propylene - naphtha | 582 | 557 | 4% | 585 | 597 | 588 | 7 |
| | HDPE | 12% | HDPE - naphtha | 722 | 705 | 2% | 706 | 688 | 728 | 7 |
| | PP | 28% | PP - naphtha | 737 | 718 | 3% | 720 | 705 | 728 | 7 |
| | ABS | 7% | ABS spread | 1,109 | 1,103 | 1% | 1,096 | 1,141 | n.a. | 7 |
| | BTX | 23% | BZ - naphtha | 473 | 430 | 10% | 448 | 448 | 398 | 7 |
| | PS | 12% | PS spread | 252 | 291 | -13% | 305 | 361 | n.a. | → |
| SCC | HDPE | 40% | HDPE - naphtha | 722 | 705 | 2% | 706 | 688 | 728 | 7 |
| | LDPE | 3% | LDPE - naphtha | 722 | 742 | -3% | 764 | 775 | 798 | → |
| | LLDPE | 3% | LLDPE - naphtha | 725 | 714 | 2% | 717 | 701 | 738 | 7 |
| | PP | 25% | PP - naphtha | 737 | 718 | 3% | 720 | 705 | 728 | 7 |
| | PVC | 28% | PVC - Ethylene/EDC | 443 | 405 | 9% | 415 | 422 | n.a. | 7 |
| TPIPL | LDPE | 60% | LDPE - Ethylene | 138 | 156 | -12% | 175 | 207 | 200 | R |
| TOP | РХ | 60% | PX - naphtha | 562 | 400 | 41% | 435 | 515 | 348 | Я |
| | BZ | 21% | BZ - naphtha | 473 | 430 | 10% | 448 | 448 | 398 | 7 |
| IVL | PTA | 25% | PTA - PX | 82 | 100 | -17% | 98 | 96 | 103 | Я |
| | PET/Polyester | 67% | PET spread | 147 | 170 | -14% | 180 | 178 | n.a. | Ы |
| | MEG | 8% | • | | | | | | | |
| VNT | PVC | 63% | PVC - ethylene | 330 | 311 | 6% | 317 | 317 | 350 | 7 |
| TPC | PVC | 100% | PVC - Ethylene/EDC | 443 | 405 | 9% | 415 | 422 | n.a. | 7 |

Source: Datastream, SCBS Investment Research

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