

QUANTITATIVE RESEARCH

Turkey | Quantitative Research | 02 March 2018

Pair trade idea

We recommend a new pair trade on March 2 with “long” Petkim Petrokimya Holding (PETKM) financed by “short-selling” Vestel Elektronik (VESTL) following the recent share price movements. The rationale for the trade is that we believe PETKM offers decent room for upside on the backdrop of above-consensus 4Q17 results backed by the contribution of favourable product spreads, especially aromatics and the weakness of TRY supporting operational performance, while the VESTL’s outperformance looks fairly overdone given the current fundamentals and there is no recent catalyst to reload full-blown bull positions for the stake. It should also be noted that VESTL announced a new battery production investment for electric vehicles, which was perceived positive by the market, yet the stock outperformed the market by more than 30% in the 3M, thus we may see some normalization. PETKM’s underperformance over VESTL has reached c.25% over the last three months. Hence, we think, the current relative underperformance of PETKM vs. VESTL should offer a decent positive return opportunity as a market-neutral strategy. It is also worth stating that on a directional trade basis, PETKM looks attractive on the backdrop of its strong fundamentals. Meanwhile, we maintain our Long AEFES-Short FROTO trade.

LONG

PETKM ↑

The rising trend in sustainable EBITDA performance did not falter even a little bit on a both yearly and quarterly basis in 4Q17 with the increase in revenues owing to higher prices. Hence, PETKM achieved another quarter of strong profitability on a year on year basis (+63% YoY). Surely, the recent rise in the oil prices pushes the Naphtha prices up, increasing the main cost item of naphtha-based producers like PETKM. But, the drop in the Ethylene-Naphtha spread is well compensated with the price hikes in aromatics with benzene prices increasing 15% YoY and 10% QoQ. There is also a time lag effect for naphtha prices where an increase in naphtha affects the margins with a lag of 1-2 months due to inventory and cost management. Robust volumes backed by stronger margins with rising spreads made the way to the sturdy operating performance where TRY depreciation compared to last year also helped the company in terms of margins. We maintain our bullish stance for PETKM considering the contribution of favourable overall product spreads, the weakness of TRY supporting operational performance, the completion and commencement of operations in Petlim's 1.5 million TEU capacity container terminal's Phase 1, and the future benefits the company can have with the completion of Star Refinery.

SHORT

VESTL ↓

For VESTL, the company announced a new battery production investment for electric vehicles, which was perceived positive by the market, yet it outperformed the market by more than 30% in the 3M; thus, we may see some normalization.

Methodology

The recommendations of this pair trade report derive from a statistical meta-analysis wielding XU050 Index constituents. The meta-analysis is conducted using conclusive data set including over two thousand stock pairs; ultimately aiming to highlight statistically significant connections among analysed pair sets. The analysis adopts statistical methods such as; standard deviation analysis, regression analysis, co-integration analysis and other various technical and fundamental tools. The conclusion of the statistical study yields securities suitable for pair trade opportunities; thereafter most promising pair candidates are picked based on fundamental aspects and technical dynamics. Such an approach yields a market neutral investment product, which incorporates statistical and fundamental strategy, enabling additional risk buffer in a volatile market environment. This product is set to be issued on a non-periodic, permanent basis. Historical recommendations are consolidated according to issue date and aggregate performance is calculated using an equally weighted trailing portfolio approach.



LONG ↑ PETKM ⇄ SHORT ↓ VESTL

Stock information

| Petkim | Company | Vestel Elektronik |
|-----------------|-------------|-------------------|
| Petro-chemicals | Sector | Cons. Electronics |
| TRY8.11 | Last price* | TRY10.51 |

*Closing session (01.03.2018)

Statistical information

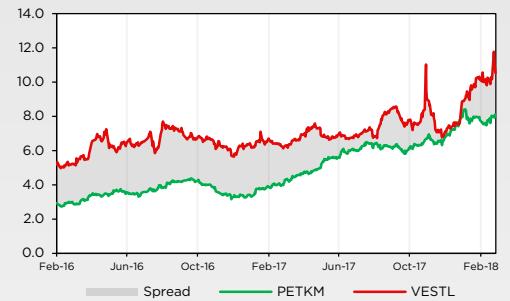
| | | |
|------|-----|------|
| 1.52 | 2Yσ | 1.11 |
| 4.95 | 2Yμ | 7.10 |
| 0.78 | 2Yβ | 1.31 |

Portfolio information

| | | | |
|---------------|---|-----------------|--------|
| Active Pairs | 2 | Performance† | +5.97% |
| Closed Pairs† | 2 | YtD Performance | - |

†Since inception (15.11.2017)

Stock Price Overview



Stock Spread Overview



All share price data as at close on 1-Mar-2018.

Source: Global Securities, FINNET

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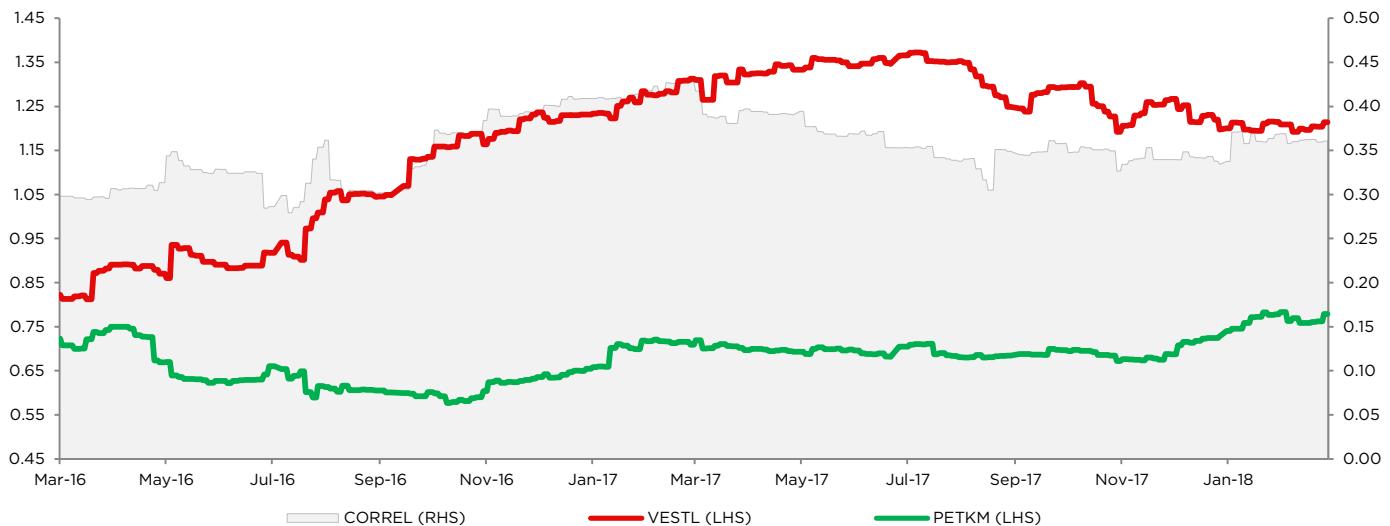
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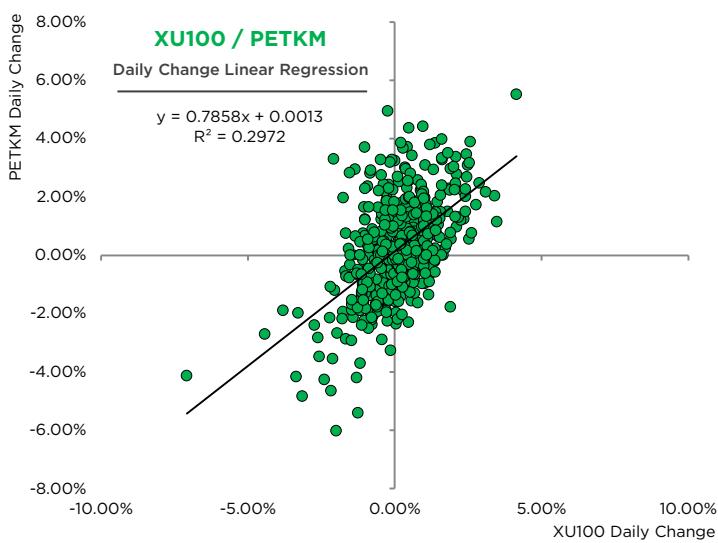


Chart 1: Pair stocks 2Y beta and correlation



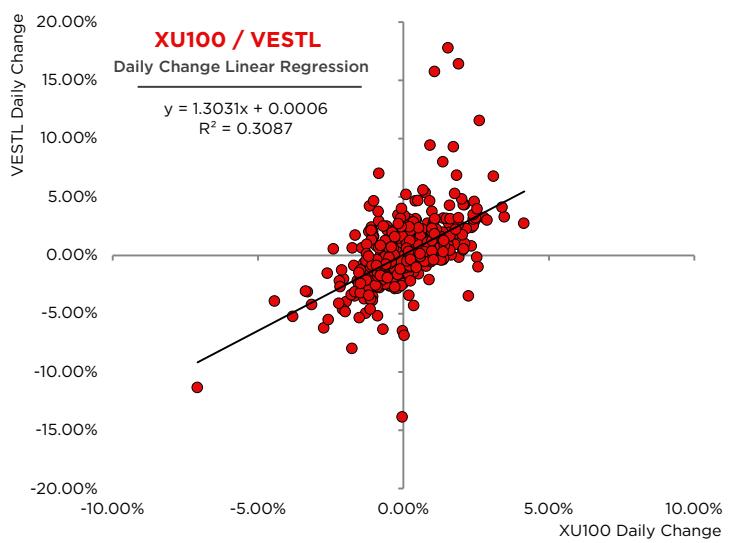
Source: Global Securities

Chart 2: XU100 and AKSEN daily return scatter



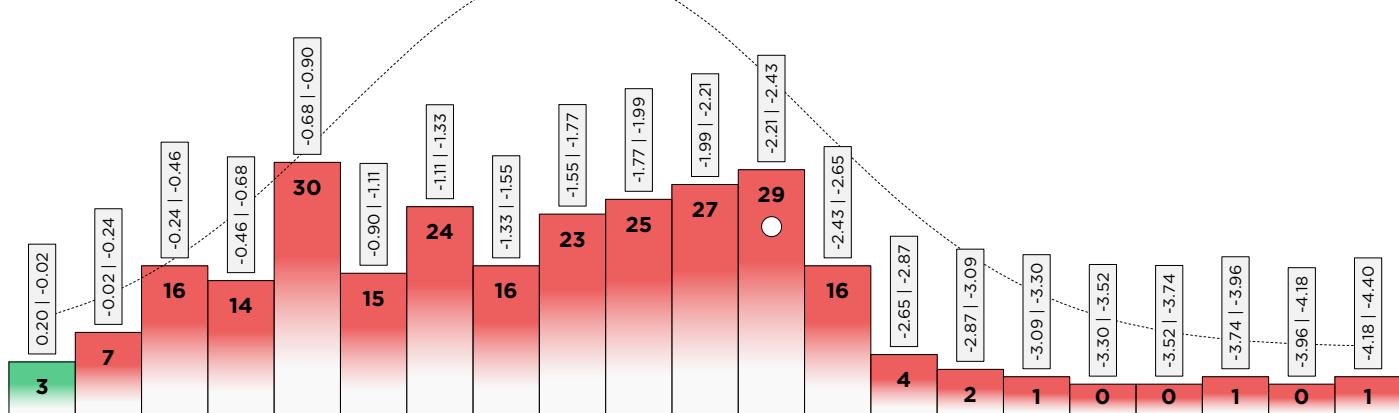
Source: Global Securities

Chart 3: XU100 and AEFES daily return scatter



Source: Global Securities

Chart 4: Spread distribution and normal distribution



Source: Global Securities



Active portfolio

As part of our methodology, multiple pair trade ideas can be issued simultaneously. Pair trades ideas that coincide in terms of trading period are evaluated using an equally weighted trailing portfolio approach. Pair trades that are active in a given day are monitored individually and returns generated by these ideas are equally consolidated on a daily basis yielding the net daily return of the active pair trade portfolio. The list of active pair trades are presented in Exhibit 1. More detailed information regarding the current pair trade ideas can be obtained from related reports published for the subject pairs.

Exhibit 1: Active pair trades

| Long Position | | Short Position | | Pair Trade | |
|---------------|-------------|----------------|-------------|------------|-------------|
| Stock | Performance | Stock | Performance | Duration | Performance |
| AEFES | -1.51% | FROTO | +1.14% | 4 Days | -1.35% |
| PETKM | - | VESTL | - | 0 Days | - |

Source: Global Securities

Completed pair trades

As part of our methodology, this product is set to be issued on a non-periodic, permanent basis. The completed pair trade details are logged and the last completed ten pair trades are presented in Exhibit 2. More detailed information regarding the previous pair trade ideas can be obtained from related reports published for the subject pairs.

Exhibit 2: Closed pair trades*

| Long Position | | Short Position | | Pair Trade | |
|---------------|-------------|----------------|-------------|------------|-------------|
| Stock | Performance | Stock | Performance | Duration | Performance |
| AKSEN | +6.96% | AEFES | +1.67% | 4.5 Days | +4.17% |
| TRKCM | -4.42% | VESTL | -10.06% | 3.0 Days | +3.12% |

*Last ten completed pair trades

Source: Global Securities

Procedural pair trade finalization triggers

The primary objective of this product is to exit pair trade positions following the actualization of statistically predicted price movements. However, active pair trade positions can also be finalized through various procedural triggers such as;

- Consumption of statistical potential through predicted price movement,
- Exhaustion of statistical potential through unpredicted price movement,
- Fundamental developments that would negatively affect pair authenticity,
- Technical price movements which could offer favourable exit opportunities,
- Analyst call through incorporation of any of the above.



Portfolio performance

As intra-day price movements have the possibility to consume the statistical potential of issued pair trades, active trades can be finalized during a session following an e-mail notice. However, pair trade and portfolio performances will be calculated and logged using subject day's closing prices, under this context, actual figures will be provided via the "Wake-up call" report, the following day. The relevant performances of completed pair trade positions will be incorporated with performances of active pair trade positions to constitute the all-inclusive pair trade portfolio performance. Various details regarding the pair trade portfolio performance can be found in Exhibit 3.

Exhibit 3: Portfolio highlights

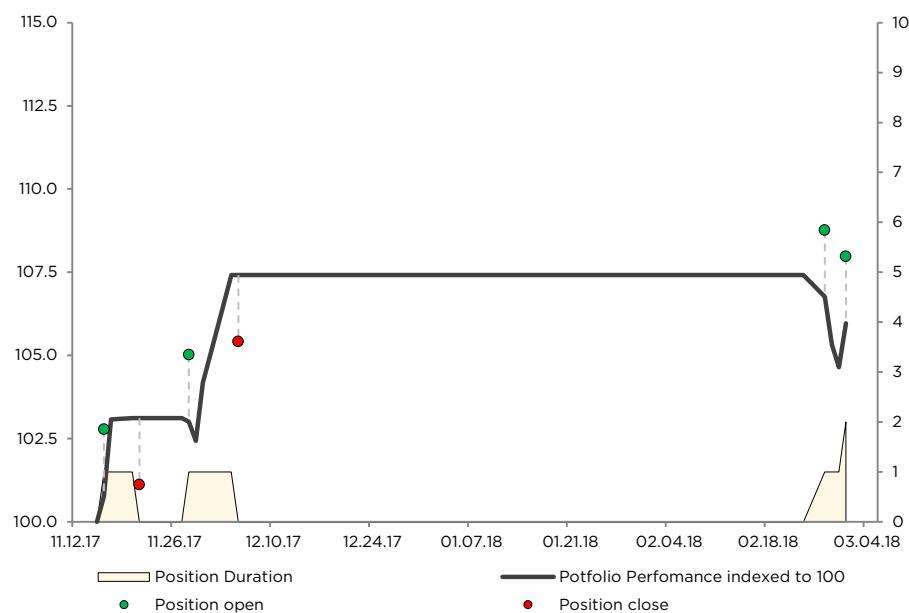
| | |
|---|--------|
| Absolute performance* | +5.97% |
| Absolute performance YtD | -1.35% |
| # of Active pair trades | 2 |
| # of Closed pair trades* | 2 |
| Average return per pair trade* | +1.98% |
| Average duration [†] per pair trade* | 4 Days |

Source: Global Securities

*Since inception (15.11.2017) [†]Trading days only

Detailed information regarding historical performance series of the portfolio, timing and quantity of pair trade initiation/finalization, and number of active pairs at a given time can be found in Graph 5.

Graph 5: Portfolio activity and performance



Source: Global Securities



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