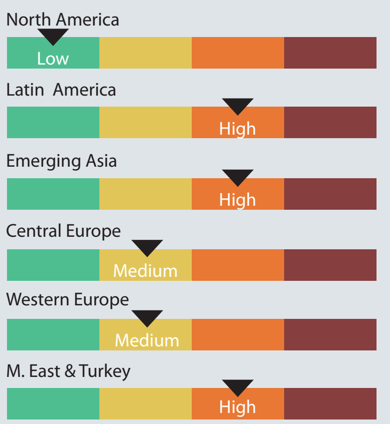
CHEMICALS

COFACE REGIONAL SECTOR RISK ASSESSMENT



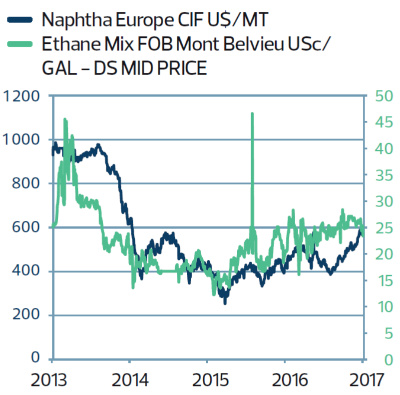
+ STRENGTHS

- Fall in prices of the main inputs
- Robust of US demand
- Specialty chemicals less dependent on the economic situation

- WEAKNESSES

- Strong dependence of base chemicals on the economic situation
- Overcapacity in China
- Increase in ethylene production capacity

PRICES OF NAPHTHA AND ETHANE



Source: Datastream

RISK ASSESSMENT

The prices of the main inputs for chemical production (Brent, natural gas, naphtha) increased throughout 2017, although remaining at historically low levels. The relative weakness of prices for the principal raw materials, in particular for naphtha, offered some respite for European producers. Activity is however still below the sector's potential and has not reached the levels seen in 2006, a record for both output and consumption.

US petrochemical producers continue to benefit from access to cheap and plentiful natural gas. The fall in crude oil prices has however allowed European producers to make use of naphtha to restore their position, but without managing to reduce the competitive advantage of US producers. A low naphtha price also helps Chinese producers. Nevertheless, the development of olefins via coal, which is abundant and cheaper, is very capital intensive and puts significant pressure on the environment, in a context of overcapacity in some chemical industry segments, such as PVC (polyvinyl chloride).

DEMAND

Global demand for chemical products is expected to increase in 2018, thanks to the economic recovery in most of the regions we monitor.

In Western Europe, activity in the chemical industry has been expanding as a result of strong growth and improvements in the margins of companies in the sector. However, the political fallout from the ongoing negotiations on Great Britain's exit from the European Union could have negative repercussions for this trend. 75% of the industrial output of European chemical producers goes to its domestic markets. We expect that most of the chemical industry sub-sectors will experience positive growth, thanks to the recovery in two of its key sectors, which use industrial chemical products: the automotive sector and the construction sector. The automotive sector seems to be doing well, with rising new vehicle sales (approximately 4% at the end of October 2017 over one year). The construction sector was also resilient, with the building permits indices in the European Union (EU) countries reaching 110.3 in Q2 2017, against 100.6 the previous year.

The demand for chemical products in North America is expected to continue growing in 2018. Coface expects US GDP growth of 1.8% in 2018, with continued strong growth in retail sales. Automotive sales as well as construction activity in the US will have an impact on demand. Sales of new vehicles in 2018 will continue to decline, as a result of higher interest rates, and in a saturated market. Private housing starts were down approximately 3% in a year to the end of October 2017. Home builders are however optimistic, despite the difficulties of increasing access to land in the country. The US property index relating to future constructions, the NAHB HMI, reached 70 points, its highest since March 2017.

Demand in China for chemical products is likely to be restrained in 2018. We are expecting the Chinese GDP growth rate to be lower in 2018 (+6.2%) than in 2017 (6.5%) partly thanks to slowing housing sales in October 2017, dropping 3.4% on a year. Private sector debt in China sector is at a very high level; local property developers are no exception; with debt of as much as 30 billion dollars in 2018. In a context of restrictive monetary policy imposed by the authorities with the aim of bringing the property bubble under control; demand for chemical products within the Chinese construction sector is likely to remain limited. Vehicle sales however are holding up strongly and are likely to remain strong in 2018. At the end of October 2017, these were growing at an annual rate of around 6%, but were less dynamic than the average during the first half of 2017 (+13%). Industrial production was also down, by 0.4 points at the end of October 2017 against September.

SUPPLY

Crude oil prices which are at historic lows, have helped improving the margins for those chemical producers using naphtha, but without actually eliminating the comparative advantage of chemicals from natural gas.

In Europe in 2018, the recovery in economic growth, the historically low price of oil, in spite of a slight rise, could continue to have a positive effect on chemical production. In addition, prices for naphtha, the raw materials derived from crude oil and widely used in the European petrochemical industry, is likely to follow the same trend as for crude oil. In 2017, the output of chemical products was up 3.7% at the end of August and over eight months, benefiting in particular from an 8.5% growth in exports, together with an increase in sales of chemical products of just over 8%. European naphtha prices picked up in 2017 (473 USD/t in 2017 against 386 in 2016). We are not expecting naphtha prices to climb further; as a result, the cost of this input should not have a negative impact on profit margins for chemical industry companies in 2018 (the net margin for companies in the sector was estimated at 7.6% in Q3 2017 compared with 6.4% the previous year). In addition, "ex-factory" output prices were up 5.3% in the first eight months of 2017.

In the United States in 2018, domestic demand is likely to provide opportunities for US producers. The price of ethane, ex-pipeline in Mont Belvieu in Texas, was 24.75 cents/gallon in mid-November 2017, versus 23.38 cents/gallon in mid-January 2017, a 6% increase. This means that US petrochemical producers are competitive and especially in olefins. The ratio of crude oil (Brent) to Henry Hub natural gas began to recover as of January 2017 and was at 20.5 at the end of November 2017, still to the advantage of US petrochemical producers, and is expected to increase in 2018. Nevertheless, the segment is performing well in the United States, as the American Chemistry Council's activity index continues to rise, but at a slower pace.

China is suffering from overcapacity in petrochemicals, even though year-on-year production in this country was up 3.3% at the end of September. This was the case for polyethylene, PVC (where the capacity utilisation rate is around 60%), and methanol. In the medium term, the increase in production capacity in olefins, produced via coal, may dent the profitability of producers. Moreover, this technology requires significant consumption of water and capital and, above all, has serious environmental impacts, a sensitive issue in China. In 2017, close to three-quarters of the ethylene produced in China came from naphtha. The fall in crude oil prices has in turn been passed on to it, giving a boost to margins for companies in the sector. In 2018, the Chinese chemical industry will continue to suffer from overcapacity, resulting in poor profitability. These difficulties in the local market should drive producers to export, copying what has been done in the steel industry since 2015.