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panorama

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Panorama sectors

SOMMAIRE

This Panorama includes our global sector barometer, which analyses the situation in fourteen key economic sectors in three of the world's major regions (European Union, North America and Emerging Asia) through a single credit risk indicator. In Europe, sector risks continue to deteriorate, especially in chemicals due to the remaining difficulties in the European industry, and also in the pharmaceutical branch due to the fiscal tightening measures taken by the governments.

This Panorama also contains our study on the refocusing of European carmakers on emerging countries through two key emerging markets, Russia and Turkey.

Turkey's automotive sector, more seen as a re-export hub, will have to face the competition of low cost countries in a near future as the current effort in R&D is insufficient.

A growing domestic market makes Russia very attractive for European car manufacturers and the country tries to preserve its own automotive industry through creeping protectionism.

For both cases, the emerging middle classes remain a powerful driver. However, governments are heavily orienting the fate of these industries, by capturing a bigger share of the added value. This is a required condition for a long term success.

SECTOR BAROMETER

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Despite the end of the recession in the euro zone, sector risks continue to worsen in Southern Europe. There has also been a slight deterioration in credit risk in emerging Asia.

In Europe, the chemicals and pharmaceuticals sectors have deteriorated as a result of weakness in industrial activity and measures aimed at curbing health spending. In emerging Asia, we note an increase in credit risk, mainly in the textile-clothing sector.

Credit risk index *			
Sectors	Emerging Asia	North America	European Union (à 15)**
Agro-food	Medium risk	Medium risk	Medium risk
Retail	Moderate risk	Medium risk	Medium risk
Textile-clothing	Medium risk	Medium risk	Medium risk
Services	Medium risk	Medium risk	Medium risk
Electronics, IT	Medium risk	Medium risk	High risk

Sources: Datastream, Coface
* At end July 2013
** See chart of credit risk index page 3

Moderate risk · Medium risk · High risk · Very high risk

AGRO-FOOD

This sector suffered from adverse weather conditions in the second quarter of 2013, in particular within the European Union and emerging Asia. Overall, the sector is medium risk. It remains dependent on raw materials prices (cereals, meat and milk), which are still very volatile and are now following a downwards trend whilst remaining at a high level (price indices are a least twice as high as in 2007).

- **EU 15**
  The European Union and Spain in particular, is seeing a decline in production, partly as a result of adverse weather conditions in the second quarter of 2013. This trend also derives from the fall in consumption: in June 2013, sales of agro-food products in the euro zone declined by 1.6% (1) (versus June 2012). In addition, production prices for food products are rising (in particular for fruit and vegetables) depressing margins for farmers and breeders. In spite of this, turnover for the sector as a whole rose by 8% in July 2013.

- **Emerging Asia**
  Risk remains stable in the agro-food sector in Asia, which alone accounts for 50% of global cereal production, but caution is nevertheless still advised. In fact, heavy summer rainfall in India, China and the Philippines paralysed cereal production. In order to meet domestic demand and rebuild stocks, China has had to increase imports, in particular for wheat, maize and rice.

- **North America**
  These temporary shortages in Asia are benefiting exporters in the North American sector, where harvests were good. One slight negative is the fall in the consumer price index for food due to the decline in food raw materials prices. Thus at the end of July there was a limited rise of 1% in the turnover of companies in the sector, with sales rising 2.7% for the first seven months of the year in the US. In Coface's credit risk index this corresponds to medium risk.

TEXTILE-CLOTHING

This sector has medium credit risk: on the one hand there has been an improvement in clothing sector sales in North America and Asia. Nevertheless difficulties remain for textile companies as the branch is closely linked to troubled sectors such as automotives, transportation and real estate.

- **EU 15**
  There is significant risk within the European Union. Production declined by 1.7% for the textile sector and 3% for clothing in the first quarter of 2013 versus the first quarter last year. Sales are suffering from the contraction in household consumption and the vagaries of the weather. In the first half of the year clothing spending (2) fell by 2.3% in France.

- **Emerging Asia**
  Asia, which produces the bulk of global supply for both domestic consumption and export, saw its profitability ratio increase by 8% year-on-year at the end of July. China remains a dominant player in the sector accounting for a third of global exports.
  However, caution is advised as regards risk, for as salaries continue to rise in China, we are witnessing the transfer of some Chinese production to Bangladesh and Vietnam where production costs are lower. This relocation of production is proceeding in line with the development in salary costs, which penalises companies which already have production facilities.

- **North America**
  In North America the sector is performing well and its credit risk is stabilising. Turnover was up 11% year-on-year at the end of July. Clothing sales in the US are rising in line with the pick-up in consumption. The textile sector is also benefiting from good results in the American construction sector which is providing a boost for the furnishings segment. Corporate sentiment is improving after a decade of businesses relocating abroad. Some companies are now returning to North America as a result of production costs increasing in Asia.
  Clothing sales fell by 1.8% in July 2013 versus June 2013 in Canada, and consumer prices fell by 0.9%.

(1) Source: Eurostat
(2) Source: IMF

Credit risk index *			
Sectors	Emerging Asia	North America	European Union (à 15)**
Mechanicals	High risk	Medium risk	Medium risk
Metals	High risk	High risk	Very high risk
Automotives	Moderate risk	Medium risk	Very high risk
Construction	Medium risk	Medium risk	High risk
Energy	Medium risk	Moderate risk	Medium risk

Sources: Datastream, Coface
* At end July 2013
** See chart of credit risk index below

Moderate risk · Medium risk · High risk · Very high risk

CONSTRUCTION

Credit risk in the construction sector remains medium. This overall trend results from very different regional situations.

- **EU 15**
  Within the European Union, the sector is showing some timid signs of recovery: corporate turnover in the sector rose by 7% year-on-year in July 2013. At the end of the first half of 2013, Eurostat's production index for construction had risen for three consecutive months, whilst still remaining at a very low level. Sector performance is also very diverse between Northern and Southern European countries: the index in the last three months showed a spread of +8.6% in Germany to -0.9% in Spain (Spanish production remains 23% below the level seen at the beginning of 2010). This translates into a high credit risk.

- **North America**
  In North America, sector momentum remains favourable despite the deterioration in key indicators for construction seen during the summer.
  In the US, the real estate recovery is running out of steam somewhat: in fact, new home sales were down 13.4% in July (the biggest drop since May 2010). The number of construction starts continues to grow, but at a slower rate. These developments are partly due to the rise in interest rates on real estate loans linked to expectations of tightening monetary policy. Despite this, the various sector players remain confident for the medium-term sector outlook, which benefits from growth in household borrowing and the gradual fall in unemployment. The credit risk remains medium.

- **Emerging Asia**
  With 14% year-on-year growth in turnover, and 25% in cash flow at the end of July, momentum remains good in the construction sector in emerging Asia. Households' strong demand for properties continues to provide support. This explains the strong rise in real estate prices. It is becoming increasingly difficult to find available land, particularly in urban regions. Thus the sector saw an 8% rise in the price per square metre of new homes in China. This represents the fourteenth consecutive monthly increase. In India, prices have doubled since 2009. At the end of March 2013, the price index for houses had risen by 19% versus the previous year (1).

(1) Source: RBI (Reserve Bank of India)

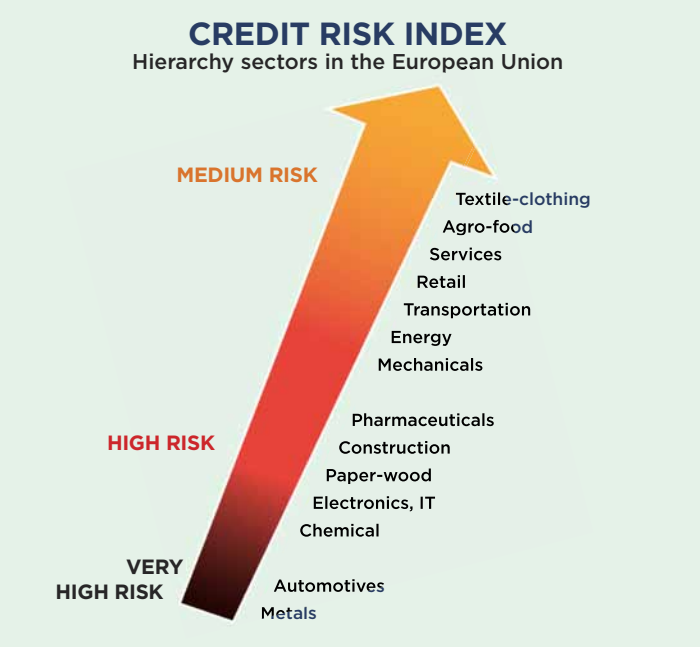
METALS

There is overproduction in aluminium and steel, which is impacting the earnings of the sector's major companies. Demand is not sufficiently strong to support business in any region. This is hitting corporate earnings in the sector, particularly in the steel branch. The risk remains high in metals.

- **EU 15**
  European industrial production is in the doldrums as is the construction sector, which remains high-risk. Cash flows are showing declines of over 22% year-on-year, and turnover is down by close to 3%. There is clear overproduction in steel as evidenced by the European Commission's initiative for an action plan for the sector.

- **North America**
  Although an upturn in construction activity is stimulating growth in the consumption of zinc and other metals (notably copper), risk remains high. According to the USGS (U.S. Geological Survey), stocks are at a high, and demand is not sufficiently strong to support production. The American steel sector is suffering competition from Asian and Latin American exporters, and margins are collapsing. Profitability is at 7.5%, whilst cash flows have plummeted by 15% year-on-year.

- **Asie émergente**
  Risk is high in all metals due to significant overcapacities. In particular, the absence of consolidation in the steel sector means that margins continue to decline. Profitability continues to decline by 16.5% year-on-year, and turnover is down 3.5%.



Credit risk index *			
Sectors	Emerging Asia	North America	European Union (à 15)**
Chemicals			
Pharmaceuticals			
Wood-paper			
Transportation			

Sources: Datastream, Coface
* At end July 2013
** See chart of credit risk index page 3

Moderate risk · Medium risk · High risk · Very high risk

CHEMICALS

As an extremely pro-cyclical business, the chemicals sector is seeing increasing risk in 2013.

- **Emerging Asia**
  The emerging Asia risk profile continues to worsen. Indeed the chemicals sector in this region has deteriorated since the previous report, moving from medium risk to high risk. More particularly in China, the situation of large public-sector companies is hiding the difficulties of small and medium-sized chemicals companies, the first victims of the credit squeeze, which is drying up their access to liquidity. Moreover, new production capacity is coming on line, exerting pricing and therefore margin pressure, within an environment of declining demand. Cash flows have fallen by 7% year-on-year bringing down profitability, which has fallen by 9%. The debt ratio is keeping step, rising by 33% over the same period.

- **North America**
  The risk profile is stabilising in North America. Cash flow has remained stable year-on-year (-0.6%), whilst net debt has increased very slightly by 1.2%. However, infatuation with shale gas seems to have disguised the fact that demand is insufficient to allow any real improvement in the branch's risk profile. Indeed, the US purchasing managers index is on a negative trend for chemicals and plastics. Sluggish demand is forcing North American chemicals companies to increase exports, of course to emerging countries and Europe. However, this is not enough to offset the decline in domestic demand. Additionally, new capacities are being developed, thanks to an abundance of cheap raw materials. Prices are likely to fall in the coming months. Of course there will be a corresponding erosion in margins.

- **EU 15**
  Very few positive signals in Europe. Customers are suffering: the automotive sector is still contracting whilst construction is in the doldrums. The major chemicals companies are revising down their earnings forecasts. Year-on-year, profitability has collapsed by 19 %, due to apathetic demand and competition from American exporters, which have a better cost structure than European chemicals and plastics companies. Finally, the Gulf economies are attempting to diversify and moving into petrochemicals taking advantage of the freely available oil. They are forming natural partnerships with the Asian economies, which is accordingly reducing opportunities for the Europeans.

PHARMACEUTICALS

There is one constant making itself felt in each of our three regions and that is the desire to reduce the growth in health spending, which is rising structurally quicker than GDP. Nevertheless, some regions have better momentum than others, with the implementation of national health insurance systems. Generics are becoming entrenched everywhere and are threatening the position of the large pharmaceuticals groups in many areas of medication (analgesics, antidepressants, etc.). We have seen some relative stabilisation in the sector's risk profile in Asia (moderate and medium risk), whilst it is deteriorating in Europe.

- **Emerging Asia**
  Most countries in emerging Asia are gradually implementing national health insurance systems. Drugs sales are therefore showing good momentum despite the desire of the countries concerned to manage growth in health spending. Turnover has risen by 10% year-on-year. Sector profitability has also increased by 4% over the same period. The risk profile remains moderate given good corporate performance in the sector.

- **North America**
  The US has historically been the top global market for healthcare, spending more in this area than all other developed countries. However, those footing the bill in both the public and private sectors have also started to manage costs. This has led to a 1.4% drop in turnover year-on-year, and stabilisation of profitability. We do not see any deterioration in the risk profile, which remains medium.

- **EU 15**
  In Europe, the weakest segments in the health sector, such as retail pharmacies and distributors, have been hard-hit by austerity measures. In France, pharmacies have seen margins and turnover decline. This has even lead to a rise in failures of retail pharmacies. One positive remains and that is good momentum for certain types of medication (antiviral and cancer drugs, etc.), which have patent protection from generic competition. However, sector profitability in Europe is down by over 9% year-on-year. Risk is deteriorating and has become high.

METHODOLOGY FOR THE CREDIT RISK INDEX:

Coface's assessments are based on the financial data published by over 6,000 listed companies in three major geographic regions: Emerging Asia, North America and the EU 15.
Our statistical credit risk index simultaneously summarises changes in four financial indicators (changes in turnover, profitability, the net indebtedness ratio, and cash flow), and claims recorded in our network.

THE CAR INDUSTRY WORLDWIDE

Emmanuelle HIRSCH, Economic research department, Coface

The car industry is the world's 6th largest economic power by GDP equivalent with revenue of €2,000 billion. By 2018, the estimated average growth rate for the sector will be 5.6%, supported by the development of the car fleet in emerging countries, reflecting a shift in production and sales to higher growth regions. China accounted for 20% of global sales and 23% of production in 2012.

	2008	2009	2010	2011	2012
Global production *	70.5	61.8	77.8	79.8	84.1
Global sales * (all vehicles)	68.1	65.4	74.6	77.9	81.7

Source: OICA
* In million of units (PV, CV and IV)

RECENT TRENDS

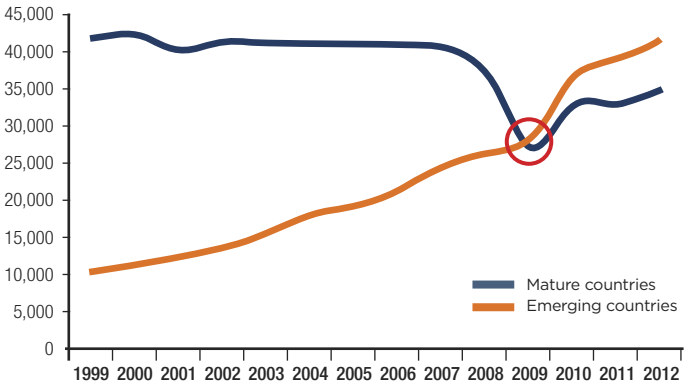
2009 was a pivotal year for the global car industry. It marked the parting of ways between mature and emerging countries. The latter continued to grow, while the crisis hit Europe and the US particularly hard.

Global car production fell, in 2009, by 13% vs. 2008 to 61.8 million units produced. Production in Europe (27) decreased by 17.3% to 15.2 million vehicles and in the US it plummeted by 34% to 5.7 million units produced. It was also the year when two of the Big Three, General Motors and Chrysler, applied for Chapter 11 bankruptcy protection.

The next two years saw an uptick in production and sales, especially in Asia, where China became the sector's driver.

The situation changed again in 2012. The European car market once more went into crisis while the US market experienced a rebirth with 14.8 million vehicles sold (+13% vs. 2011) although the pre-crisis level was not reached. China became in 2012 the leading global market with 19.3 million vehicles sold.

CHART 1:
Production evolution in mature and emerging countries
(in thousand of produced units)



Source: OICA

EUROPE

In 2012, the European market was particularly affected, and especially French carmakers, which struggled in their domestic market. 16.1 million vehicles were sold in Europe in 2012 (-5.6% vs. 2011), of which 1.8 million (-13.7% vs. 2011) in France. In the first half of 2013, 6.2 million vehicles were registered (-6.6% vs. the 1st half of 2012). Most European countries experienced a fall in registrations. Germany saw its registrations fall by 8.1% to 1.5 million, France fell by 11.2% to 931,476 and only the UK did well with a 10% increase in registrations to 1.1 million. Overall, the countries of Southern Europe have been hit harder than Northern Europe.

Simultaneously with the fall in sales, the relocating of production to Eastern Europe and Turkey since the 2000s is noteworthy. The latter accounted for around 8.9% of European production in 2002 whereas they represent a quarter in 2013. Volume carmakers (Fiat, Renault, etc.) have a greater presence in the East than premium carmakers such as BMW. Volkswagen has a subsidiary in the Czech Republic with Skoda.

The limited growth outlook in Europe is prompting European carmakers to turn towards other markets such as Russia, China and Brazil. This results from the production overcapacity in Europe. Some plants are operating at full capacity, such as those of Volkswagen and BMW, as their models are exported outside Europe, while in France the production capacity utilisation rate is 62%. It should also be borne in mind that this is the leading sector in terms of research and development in both Germany and France.

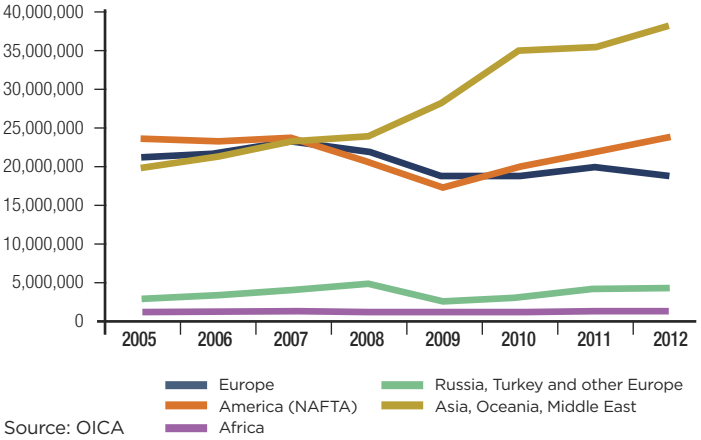
NORTH AMERICA

In 2009, the filing for "Chapter 11" for the two major US carmakers forced the latter to largely restructure the sector: closing of many unprofitable plants and cutting of US wages (USD14 per hour). In 2012 this resulted in the return of the US as a leading player on the global market with more than 14 million vehicles sold (+13% vs. 2011). These productivity gains led carmakers to turn towards other markets, exporting nearly 1.01 million vehicles in 2012.

According to the Polk institute, the sector's recovery should continue in 2013 and 2014, but without reaching the pre-crisis level

(around 17 million). In the first half of 2013, Americans bought 7.8 million cars (+7.7 vs. in the 1st half of 2012). The annual figure should reach around 15.9 million cars in 2013. Finally, the market share of the three local carmakers was 46.1% in the first half of 2013.

CHART 2:
World sales breakdown by geographic region
(in unit sold, PV, CV and IV)



Source: OICA

EMERGING COUNTRIES

Emerging countries seem to be the growth driver awaited by all of the car carmakers. They are setting up operations there either directly or jointly with a local partner. For instance, in Russia, Renault has entered into an alliance with Avtoframos, while in China, GM owns 34% of Wuling. Only the Indian market still remains the preserve of local carmakers.

In 2012 China become the global number 1, both in terms of sales and vehicles produced with more than 19 million. India sold 3.5 million vehicles and Russia 3.1 million. According to Ernst & Young, for these countries the number of vehicles per 1,000 inhabitants in 2012 was 52 for China, 17 for India, 260 for Russia and 532 for Germany, leaving considerable scope for progress compared to developed countries where the market is becoming saturated. These new markets also offer several high-potential segments: the premium segment for well off households and the low cost segment for the emerging middle class.

MAIN MARKET PLAYERS

Global carmkers ranked according to revenue

Rank	Company	Country	Revenu (in USD billion, at 31/12/2012)	Earning after tax (in USD billion, at 31/12/2012)
1	Volkswagen Group	Germany	254	28.6
2	Toyota Motor	Japan	224.5	3.4
3	General motors	United States	152.3	6.2
4	Daimler	Germany	150.8	8
5	Ford Motor	United States	134.3	5.7
6	Nissan Motor	Japan	113.7	4.1
7	BMW Group	Germany	98.8	6.6
8	Honda Motor	Japan	96	2.6
9	Hyundai Motor	South Korea	75	7.6
10	SAIC Motor	China	75	3.3

Source: Forbes

THE REFOCUSING OF EUROPEAN CARMAKERS ON EMERGING COUNTRIES: A BOLD BET? THE RUSSIAN AND TURKISH CASES

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The European car sector has suffered considerably from the prolonged crisis in the euro zone. It has been affected both by structurally high production costs and the lack of demand on its domestic market. In this environment, the sector's international groups are being prompted to turn more towards the emerging markets. The examples of Russia and Turkey illustrate this trend: the Turkish market is particularly attracting players wishing to benefit from lower production costs than in Western Europe, while Russia has the advantage of a large internal market (the foremost in Europe by size).

Nevertheless there are reasons for hope, especially for European carmakers. As in any country where living standards are rising, the population of Turkey and Russia is seeing its living conditions improving, a trend which goes hand in hand with a strong wish (and capacity) to buy goods to bring them into line with the countries of Western Europe. This development of the middle classes, which is a long-term process, is boosting the domestic economy and is accompanied by developments such as car purchases, growing urbanisation and the expanding of infrastructure.

However starting operations in emerging countries creates uncertainties about results. Aside from the risks linked to commercial activity in itself, emerging countries suffer from several disadvantages, which Turkey and Russia are not free of. These countries have relatively fragile institutional frameworks, with a less than optimal business environment generating costs that may discourage the setting up of companies or even stop it.

How can carmakers stuck in the doldrums of their domestic market escape and what solution do our two new car frontiers offer? Can these two countries be viewed as reliable markets able to offset the fall in European demand?

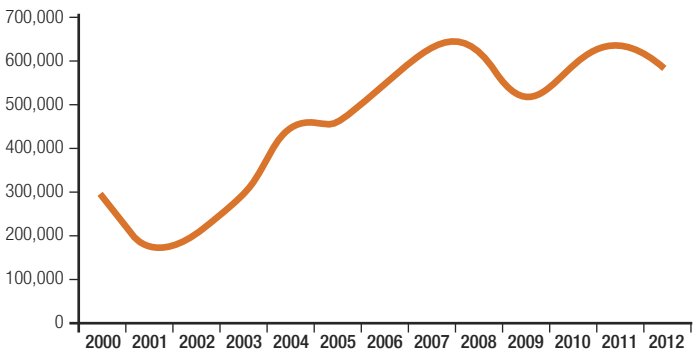
We will describe the characteristics of the automotive sector strategies in these two countries, while giving an overview of the Russian and Turkish car industries. Clearly there are risks inherent to setting up operations on foreign markets and we will try to summarise them before focusing on the opportunities offered by these markets, which we believe outweigh the disadvantages.

DIFFERENT MARKETS, DIFFERENT DEVELOPMENT STRATEGIES

Turkey: resolutely turned towards exports; Russia: a domestic power

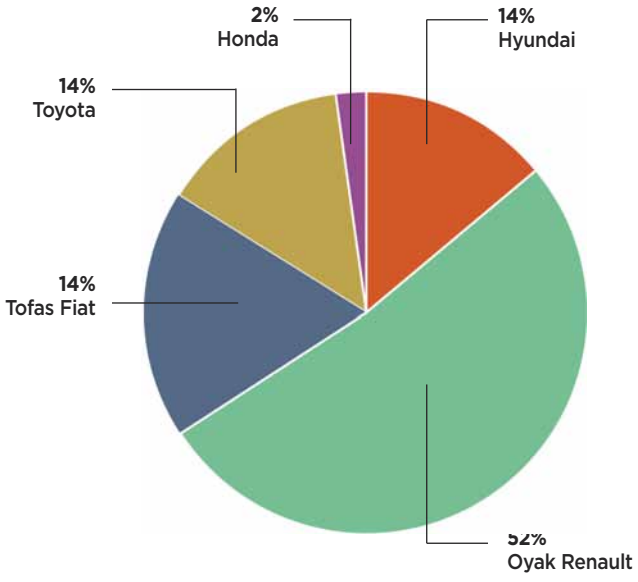
Car production has developed strongly in Turkey since the start of the 2000s. It has almost doubled in the space of 13 years, rising from 297,476 to 576,660 units *(chart 1)*. The market is dominated by Oyak-Renault. This is a joint venture between the pension fund Oyak and the Renault group and is home to more than half of production. It is followed by the joint venture Tofas, between the FIAT group and the Koç family *(chart 2)*.

CHART 1:
Car production in Turkey



Source: OSD

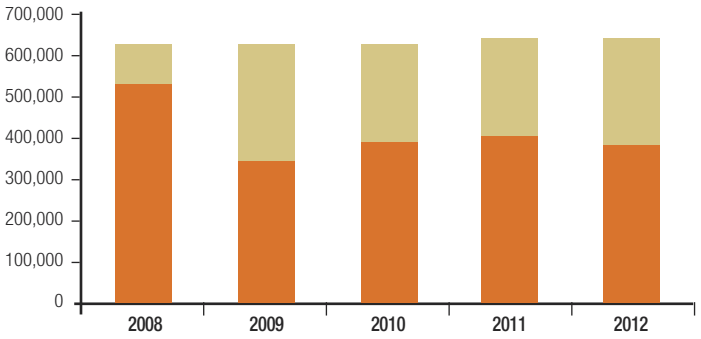
CHART 2:
Turkish car production in 2012 by carmaker



Source: OSD

One of the main features of this industry is that it is export-oriented: the share of cars produced that are exported fluctuates between 63% and 85% (chart 3). This industry therefore largely depends on the health of the West European car market, as nearly 83% of the cars exported during the 2008 to 2011 period were destined for the EU. However, if we calculate the number of cars exported to the EU as a share of passenger car production, we arrive at a ratio of 59% over the same period. South Korea's markets seem to be more balanced by comparison. The top three are North America, the Middle East and Latin America (24.4 %, 21.2 % and 16.1% market shares respectively).

CHART 3:
Share of exports in car production



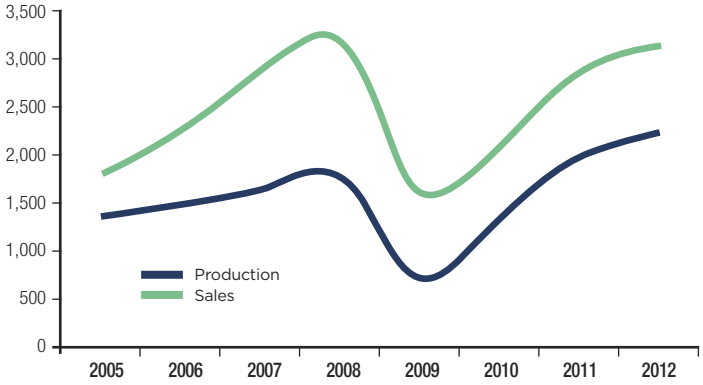
Sources: TSK Research, OSD

While the Turkish car industry is resolutely export-oriented, Russian carmakers are focused on the domestic market. In 2012, Russia in fact became the second largest car market (2.76 million vehicles sold, +10% over a year) in Europe after Germany (3.1 million vehicles sold, down by 2.9% over one year) and the global No. 6. It should take the number one spot from Germany by 2015. According to Professor Dudenhöffer at the University of Duisbourg, interviewed by Coface, the Russian catch-up has come alongside the development of the local automotive industrial base, particularly including the presence of the largest global carmakers and their original equipment manufacturers.

Traditionally three carmakers dominated the Russian market. GAZ produced top-end vehicles (the Volga), while Zavod Moskovitch and VAZ shared the rest of the market between them. In 1975, the Soviet Union produced 2 million vehicles, of which 1.2 million passenger cars. Lada was the market leader with 690,000 vehicles sold. Production stabilised at around 2 million (in 1983, 2.1 million vehicles were produced). Domestic demand could not be fully met, and part of production was earmarked for export (East Germany, countries of Central Europe). The dissolving of the Soviet Union brought an end to the supremacy of Russian vehicles. These could not withstand the arrival of the foreign competition, which offered high quality, modern vehicles. However, the first partnerships with foreign companies were signed starting in the 1970s (Simca-Chrysler, Fiat). This movement continued in the 1990s with Renault through its subsidiary Avtoframos and the setting up of General Motors. Little by little the main global carmakers then bought up former plants, modernised them and started location production operations there. The second-hand market is continuing to hold an important place though. In 2012, it accounted for 10% of total vehicle imports, the third market being for spare parts.

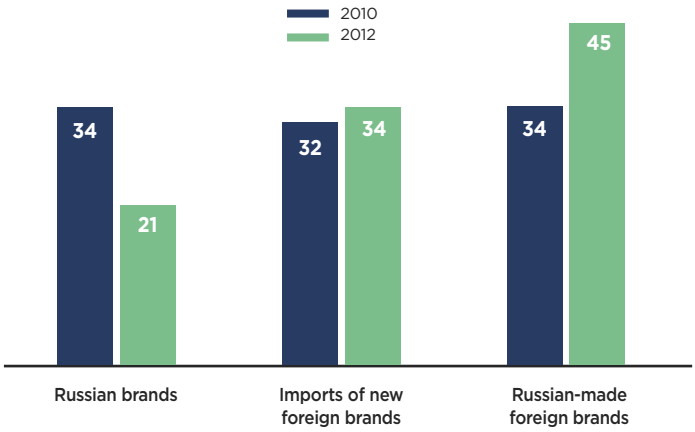
Driven by resilient Russian growth, passenger cars saw sharp growth between 2005 and 2012 (+ 174%, chart 4). To meet demand, as sales outstripped production growth, foreign vehicle imports increased and made up the difference.

CHART 4:
Change in car production and sales in Russia
(in thousands)



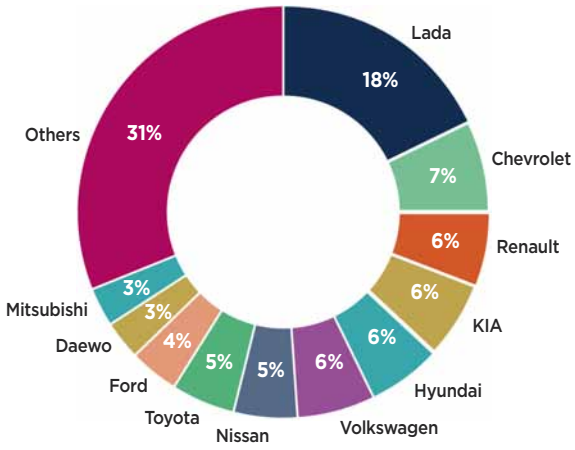
Source: OICA

CHART 5:
Breakdown of vehicles in Russia according to their origin, by %



Sources: ASM Holding, Ernst & Young

CHART 6:
Market share of car brands in 2012



Source: AEB, Ernst & Young

Several reasons explain the expansion of the car market in Russia and Turkey. It appears that one of these is that in both countries the State played a role steering the development of the car industry

Public policies have played a major role

As explained above, the Turkish car industry depends greatly on its export orders. The production apparatus is in the zone that is easiest to access by public transport: assembly plants are above all located in the West of the country, along the Ankara-Istanbul axis, profiting from the geographical proximity of the country to its main market, Europe. This gives it a substantial advantage in terms of logistics costs. The country is well connected to a constantly developing motorway network, and by myriad Black and Aegean sea ports.

The country also offers labour at an extremely competitive cost when compared with its peers in Western Europe. The hourly labour cost is in fact $4.5 in Turkey versus $40 in France and $25.9 in Spain (table 1). Turkey has an advantage over some western countries, in addition to the cost of labour. This comparative advantage is the result of a historical process.

The assembly industry began to develop in the 1960s, producing cars under licence. After this apprenticeship phase, a base of original equipment manufacturers formed, in a market protected from international competition by customs' duties. A phase of gradual liberalisation of the sector was then seen in the 1980s, accompanied by the importing of foreign technologies and by the opening of the market to foreign investments.

This phase coincides with the start of vehicle exports to Europe. Finally, at the end of the 1990s, the sector found its place in the global car industry value chain as a partner and an integrated production centre. One of the major challenges that the Turkish automotive sector must now face is rising up the value chain, which can alone sustain its development and isolate it from competition from countries with lower production costs.

TABLE 1:
Hourly labour costs

	Hourly labour costs in $
France	40
Greece	19.1
Spain	25.9
Turkey	4.5

Source: EIU

Automotive development was steered by the Turkish State through a series of incentives and has been stepped up in recent years with the introduction of incentives to attract major names in the sector. Aside from the two previously referred to, other players have also opened assembly plants in Turkey: Toyota (leading producer worldwide ahead of General Motors and Volkswagen), Honda and Hyundai are finding their place in a promising market where players who develop capacity before their competitors have the advantage. There are many incentives, including exemptions from taxes and duties and payment of a share of social security contributions by the State itself, and the provision of land. This is combined with an active policy of supporting R&D, and strong involvement in the training of future employees, including manual workers, technicians and engineers. The Turkish authorities are showing a clear wish to capture a greater share of the added value produced by this industry.

Finally, the introduction of a customs' union since 1995 with the EU increases the potential of this industry, giving it a foothold in a market of more than 11 million vehicles sold per year, allowing it to make economies of scale and benefit from technology transfers. By eliminating all restrictions on the trading of goods, the customs' union has made the EU the target export market for Turkish car production.

Due to its population (142 million inhabitants) and the buoyancy of its consumer spending (which is admittedly slowing but remains attractive), Russia offers the car industry a high-potential domestic market. However, high customs' duties on new and second-hand vehicle imports are limiting foreign investments. As their presence has caused the decline of Russian brands, the government decided, to ensure the survival of its local car industry, to facilitate alliances and joint ventures between local and foreign producers along the whole production chain (from research centres to assembly plants via the production of key components). The political tool used was decree 166, applied in 2005 and amended in 2011.

The local market has been protected by the introduction of large customs' duties on both new and second-hand vehicle imports. Decree 166 has imposed installation and production capacity requirements to be met by foreign investors. While in 2005, the decree required the local construction of a 25,000 unit production centre where 30% of the components had to be of Russian origin, its amending in 2011 raised the units to be produced to 350,000. It also demands that bodywork be produced on site and this must be operational 4 years at the latest after the start of production.

Sub-contractors must also produce locally: 60% of components must be of Russian origin or come from international suppliers producing in Russia. To reach this percentage, a local research centre is needed as the quality of domestic OEMs is not up to international standards. These measures have not, however, prevented high foreign direct investment flows.

These protectionist measures also illustrate the risks for international groups of starting operations in these countries.

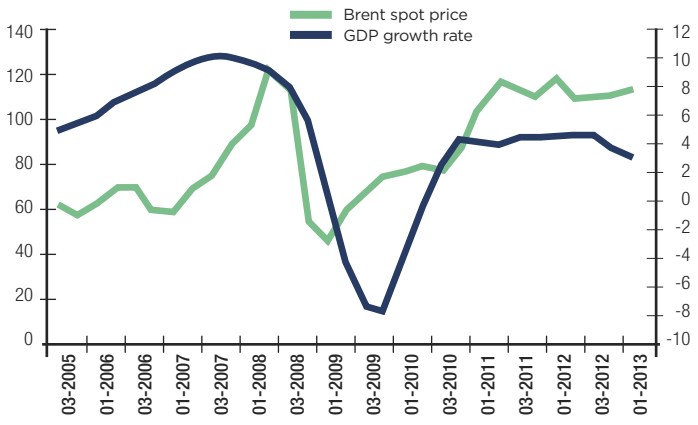
Companies must also deal with the risks linked to the business environment and the relative fragility of institutions. Like any commercial activity, the automotive industry also depends on its sales opportunities. The Russian economic environment is highly correlated with changes in hydrocarbon prices, and Turkey with the climate in the euro zone.

TWO RISKY MARKETS...

Two volatile economies

In Russia, GDP growth is correlated with the change in the oil price *(chart 7)*. Until the 2009 crisis, the high oil price in fact generated strong growth and enabled a rise in the living standards of the Russian population and therefore better access to the domestic car market. Since the crisis, the pace of activity

CHART 7:
Changes in the spot price of Brent oil and the Russian GDP



Source: Reuters, Datastream

has slowed sharply. While Russian GDP growth was 7.2% on average from 2000 to 2007, it reached 3.4% in 2012 and 2.5% is forecast for 2013. The current slowdown is linked to a series of factors: stable crude oil prices, stagnant energy production and a problematic business climate that is hampering investment. Consumer spending will remain the main growth driver in Russia, but it is worth noting that Russian consumers are no longer as euphoric as in the past. Between 2000 and 2007, consumer spending grew an average of more than 10% per annum. Between 2010 and 2013, the average should be 6.2%. This is still respectable, but investors who were counting on a double-digit boom in consumer demand may have to revise their figures.

In Turkey, the macroeconomic performance is even more volatile. Sharp recessions frequently correct periods of high growth. Firstly, the recession that has affected the euro zone has weighed on an industry resolutely focused on exports as Europe is the destination of 40% of Turkish exports and is this country's largest commercial partner. As explained, 83 % of the cars assembled in Turkey are exported to the West European market. Between 2011 and 2012, Turkish car production fell by 9.8%, as well as the number of passenger cars exported, which dropped by 7.7%. Between 2007 and 2012, the European car market shed nearly 3 million registrations, declining from 14 to 11 million. It has continued to contract in 2013. According to Ferdinand Dudenhöffer, the economic environment in Southern Europe is very important as a destination for Turkish car exports. Unemployment is high there and households are being affected by the eroding of their purchasing power. As the local market is too narrow, carmakers producing in Turkey must look for growth drivers elsewhere. Turkish production is already being off-loaded in North Africa and the Gulf countries, as well as Russia.

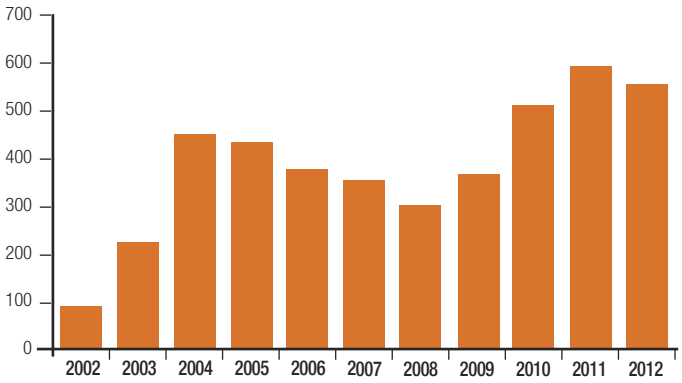
Also note that the volatility of the Turkish economy's performance exceeds the sole problem of dependence on the old continent. The growth of private demand is tending to inflate the current deficit, which is itself funded by companies' short-debt debt. In 2010 and 2011, the Turkish economy posted very sharp growth (9.2% and 8.5% respectively). The slowdown in the two subsequent years has been less steep than during previous cycles: growth was 2.6% in 2012 and should exceed 3% in 2013. The economy is nevertheless in a cyclical correction phase. Private demand contracted for a large part of 2012. The Turkish lira is also one of the major emerging economies' most vulnerable currencies. In the summer of 2013 it was also very much affected by massive capital outflows caused by announced changes in economic policy in the US. Overall, since 2002, Turkish economic fundamentals have improved, particularly when it comes to the public finances and the banking system. However, the country has not managed to control the volatility that characterises its growth and, even more so, its financial variables. The continuing erratic performance is clearly a handicap for investors.

Local demand that is under-exploited in Turkey

For the past 11 years, since 2002, Turkey has experienced sustained growth in passenger vehicle sales, rising from 90,615 cars sold to 555,280 in 2012, representing a 514% increase *(chart 8)*.

The Turkish car market has been turning over around 388,503 vehicles on average since 2002. The size of its market is in line with the norm for emerging countries. Mexico, whose GDP per inhabitant is close to that of Turkey, turns over an average of 601,212 vehicles for a population of 117 million inhabitants, versus 75 million in Turkey. The local market is too narrow, however, to offer large enough leeway to carmakers in terms of economies of scale. By comparison, nearly 3 million new vehicles are sold each year in Russia. In 2012, 19 vehicles were sold per 1,000 inhabitants in Russia, while in Turkey this figure stood at nearly 7 vehicles.

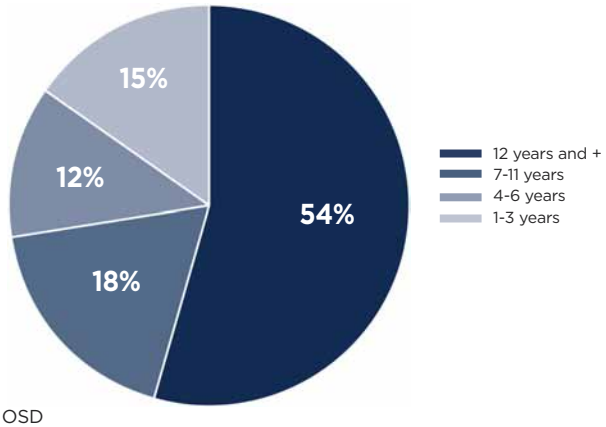
GRAPHIQUE 8 :
Car sales in Turkey
(in thousand)



Source: OSD

How can this disappointing demand be explained? Several effects are acting against the ramp-up of this market in the short term. One of the reasons that we believe dominates is vehicle purchasing costs. The State in fact levies duties on the purchase of vehicles that make them too expensive to buy, forcing potential buyers to hang onto their polluting and ageing cars *(chart 9)*. For example, the consumption tax is added to 18% VAT and changes according to the engine's horsepower. For engines with a horsepower of less than 1600 cc, the rate therefore amounts to 40% of the price excluding tax.

GRAPHIQUE 9 :
Breakdown of the Turkish car fleet according to age



Source: OSD

The price including tax of a litre of petrol is also more than 2 euros, which means that in Turkey the price of petrol is one of the highest in Europe. Households must not only pay a high purchase cost, which dissuades them from buying, but they must also pay a high price per kilometre (excluding vehicle depreciation, repairs, etc.). In such circumstances, a rational agent will put off his purchase to a better time.

Finally, there is the fact that nearly 73% of the vehicles sold in Turkey are imported. The local industry is struggling to conquer the domestic market with its products in the face of competition from the EU. However, local production is not short of room for manoeuvre to meet this high-potential demand. It is well placed to meet consumers' needs, producing urban and compact vehicles. The plant utilisation rate was also 76% in 2012 according to the OSD (association of Turkish carmakers), which is far from any bottlenecks. This could also foster economies of scale. Finally, the Turkish car industry has a base of second and third tier original equipment manufacturers, which would be encouraged to invest and recruit if ever the local market started to buy from them again.

The key partner in Russia

Although, on the one hand, the Russian automotive market offers major advantages, on the other hand, local production is still "under-developed" compared to demand. The government's policy has always been to support its industry through premiumisation and to find partners ready to set up operations locally, including producers, suppliers and sub-contractors. Government policy is also designed to protect the latter from competition through tax measures such as a recycling tax and high vehicle import customs' duties.

The intervention of politicians since 2005 in the Russian car sector may be viewed as a success as the share of foreign brands producing locally rose from 0% to 43% of total production in Russia in 2011.

The government also wishes to increase the automotive industry's share in the Russian GDP, from 1% currently to 2.5% by 2020. It is encouraging the development of infrastructure, cofunding projects and offering an investment guarantee so as to attract maximum foreign investment. The industry minister hopes in this way that more than USD 5 billion of investment will go to the various sectors linked to the production and manufacturing of components.

To set up operations in Russia, carmakers must therefore form alliances or find the "right" partner.

This is why the Renault Nissan alliance has signed an agreement with Avtovaz, the Russian market leader, and by 2014 should become its majority shareholder. Manufacturers need

TABLE 2: Examples of carmakers' investments in Russia

Groupe/Alliance	Investment sum	Planned production capacities	Production facilities	Timetable
Avtovaz/Renault-Nissan alliance	average 1.75 bn EUR	over à 1 million vehicles	Togliatti, Izhevsk, Moscou St Petersbourg	Investment plan up to 2020, modernisation of the Togliatti and Izhevsk plants
Ford/Sollers JV	n/a	350,000	St Petersbourg, Tatarstan, Yelabuga	Due to the decret 166, the Ford/Sollers JV must have reached a level of production of 350,000 units by 2016
Volkswagen/Gaz	840 million EUR	300,000	Kaluga, Nizhny Novgorod	Investment plan up to 2015 including a plant construction near Kaluga
Avtotor/Magna*	2.5 bn EUR	First 250,000, later 350,000	Kaliningrad	Project of 6 local automobile assembly plants and 15 local component manufacturers
Toyota	70 million EUR		St Petersbourg	Investment programme 2012 to 2014 body pressing, plant for plastic composent
General Motors	1 bn USD	350,000 (by 2015)	St Petersbourg, Togliatti	Expansion of the plants of St Petersbourg and Togliatti by 2015

Sources: Autostat, GTAI, Automobilewoche, Raiffeisen Research

* assembly of BMW, Hyundai, Chevrolet, Cadillac, Opel, Land Rover, Subaru and others

TABLE 3: Examples of OEMs' investments in Russia

Groupe/Alliance	Investment sum	Field of activity	Production facilities	Timetable
Schaeffler	50 million EUR	Manufacturing of components for international and Russian car manufacturers	Ulyanovsk	Production start early 2014
Continental (Contitech)	13 million EUR	Manufacturing car air-conditioning systems and for the hydraulics of the steering system	Kaluga	Production start December 2013
Michelin	10 million EUR	Replacement of tyres	Davydovo	Completion by 2015
Magna	2.5 bn EUR	Automobile assembly plants for numerous western manufacturers and components plants	Kaliningrad	Project of 6 local automobile assembly plants and 15 local component manufacturers
Bosch (Bosch Termotechnology)	40 million EUR	Manufacturing of anti-lock braking systems and generators	Samara	Construction start first semester 2013, completion 2015
Sanoh Industrial	29 million EUR	Manufacturing of fuel and brake pipes	Togliatti	Completion by 2014

Sources: Autostat, GTAI, Automobilewoche, Raiffeisen Research

large production capacities to generate economies of scale and have leeway for future sales. Clearly only major players, such as GM, Ford and Renault-Nissan, can bear the start-up costs for production sites of 300,000 to 350,000 units per year. Some manufacturers in the premium sector, such as BMW, prefer joint venture agreements. Currently, 10 out of the 13 largest car manufacturers already operate in Russia through production sites or in JVs with local partners, imposing their quality standards. In fact now is the one and only time to move into the Russian market. Some analysts, including those at Raiffeisen, believe that the market has already reached a certain maturity and there will no longer be double-digit growth. However, all are forecasting a growth rate of around 5% until 2018, which should fall to 4% as from 2019.

This obligation to work through a local partner creates numerous constraints: the management of the many staff that must be adjusted and trained, and the human resource factor that could ultimately become the weak point in the Russian car industry. By 2020, 660,000 workers may be needed whereas 77% of the sector's employees are currently more than 30 years of age and 42% of them have no professional qualifications. Staff need to be trained to meet international standards. Initiatives promoted by professional associations are taking shape, such as the creation of specialised technological universities. Four universities have been established in partnership with local carmakers: Avtovaz, Sollers, GAZ and KAMAZ. These qualified staff will be more expensive but will allow the industry to meet international standards and develop exports.

A vulnerable positioning in the value chain

The Turkish car industry (excluding OEMs) is very largely a car assembly industry. According to the Global Value Chains Initiative at Duke University in the US, car assembly is a medium added value activity, unlike the R&D and design activities that capture a large share of the value chain's added value. The local car industry must secure a larger share of R&D.

Although Turkey has high quality human resources in the engineering field and in the application of tried and tested production management processes, it lacks strong involvement from technological research centres in the development of this industry. The R&D shortfall also risks weakening the Turkish automotive sector as having a low cost labour force is no defence against competition from other countries in the region that also have low costs *(charts 10 and 11)*.

Finally, the automotive sector is facing several technological challenges that it must overcome. Electric cars are a good example, but not the only one. More generally, the reduction of CO^2 emissions is an objective that must be met through a greater contribution from research and development so as to capture a larger share of added value. The Turkish State has understood the difficulty that this industry is in and it is within its scope to help overcome this problem.

To this end the State is offering companies tax credits if they undertake research and development activities. These make nearly 100% of the amount of an investment tax deductible. It also offers technological development zones (for example in Bursa) focused on R&D activities. Companies who set up operations there do so in partnership with local research centres and benefit from exemptions from corporate and other taxes (stamp duty, social security contributions, etc.).

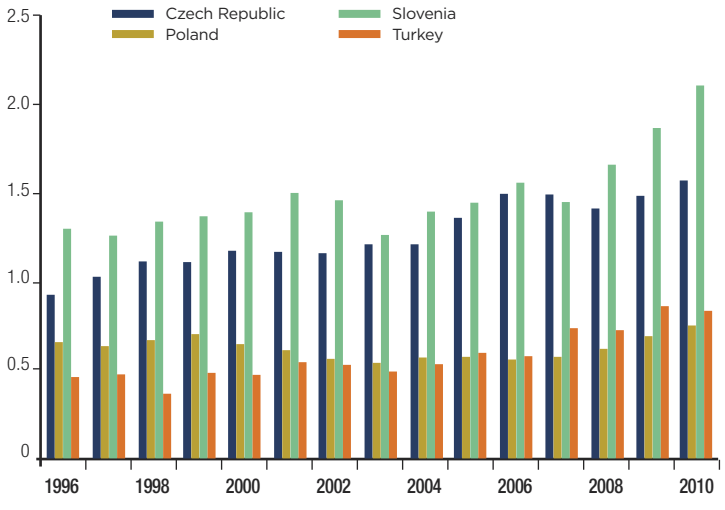
Possible European relocations and creeping protectionism in Russia

The continued contraction of the European car market for the past 5 years has sharply focused attention on the jobs issue in the European Union. This rise in unemployment is driving governments to introduce incentives for carmakers to relocate their production platforms and contribute to the national reindustrialisation effort.

The competitiveness agreements signed between Renault and the French and Spanish unions are part of this process and have resulted in an increased workload at the Vigo site in Spain and the Flins site in France.

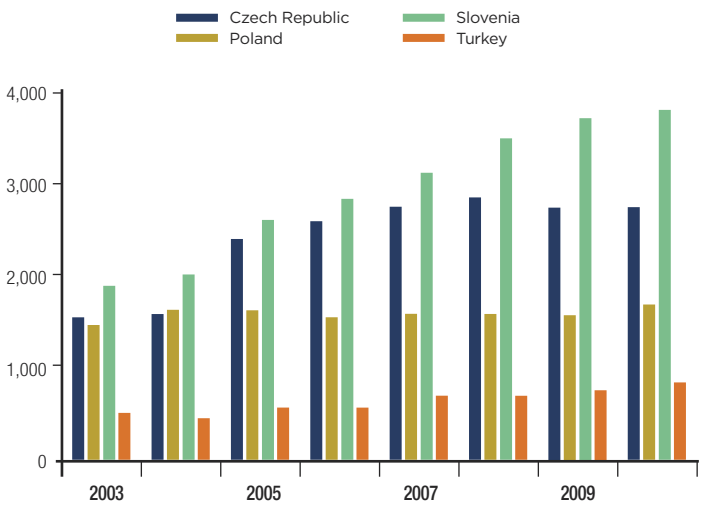
With the fall in registrations in Western Europe, which is the leading destination for exported Turkish cars, competition between plants within the same group has been stepped up. This competition may be detrimental to Turkish plants, bearing in mind the political pressures applied to carmakers. This is exacerbated by the fact that Turkey is the preferred haven for mass-market carmakers, according to Ferdinand Dudenhöffer, which are more sensitive to production costs and must therefore choose between several production sites. Again according to professor Dudenhöffer, Russia is not facing the same problems given the size of its domestic market. Its goal is to no longer be a net importer of cars. According to the Russian Federal Customs' Service, imports in the first few months of 2013 fell by 12.5% (373,800 vehicles) compared with the same period in 2012, while vehicle exports rose by 25.4% over the

CHART 10:
Comparison of R&D efforts, by % of GDP



Source: World Bank

CHART 11:
Number of R&D researchers per one million in habitants



Source: World Bank

same period (53,300 vehicles, of which 52,000 to CIS countries). The path towards achieving this goal will be long as sales are growing faster than production given that carmakers must take on board all of the current quality standards.

Russia tried to protect its domestic market through high customs' duties on both new and second-hand vehicles. Its membership of the WTO has led to their lowering. Before it joined, customs' duties stood at 30% for new cars and 35% for second-hand cars. These rates should fall to 15% by 2015. It has introduced a recycling tax of 6% of the selling price of imported vehicles, however. This rate represents a sum that may range from EUR 430 to EUR 15,266 depending on the model, although there is no local ad hoc structure for recycling. Anti-dumping duties have also been introduced for light commercial vehicles at a rate of 29.6% for the Volkswagen and Mercedes brands and 23% for Fiat. These various taxes are designed to slow the importing of foreign vehicles as those produced locally are exempt. The European Commission has filed a complaint with the WTO. These protectionist measures reflect the government's wish to promote local production, and consequently foreign investment, to the detriment of imports.

... BUT UNDENIABLE ADVANTAGES

Although the Russian and Turkish car markets are different in many ways, they should both continue to benefit from the emergence of their respective middle classes. Turkey and Russia offer positive prospects to manufacturers and investors looking for growth.

Although a sharp slowdown in sales was recorded in the first half of 2013, with a fall in new car sales by 5.8% and 11% over one year, the Russian market remains one of the most promising worldwide.

Over the long term (2025), according to Raiffeisen's analysts, the market could reach between 3.8 million and 5.1 million cars sold. The projected growth will not be linear. There may be falls, plateaus and rises depending on economic growth or political events.

3 QUESTIONS TO PHILIPPE JÉOL

Directeur du Business Développement, Groupe Renault

• As a pioneer with the purchase in 1998 of Avtoframos, how are you including Russia in your global strategy?

Russia is a strategic market for Renault. The Russian car market has a strong growth potential. Renault has some significant assets with Avtoframos, and since 2008 with Avtovaz the first Russian carmaker with the Lada brand.

Russia has become the Group's second largest market (at the end of June 2013) with vigorous Duster and Entry range sales. Only Lada is ahead of sales. Renault, Avtovaz and Nissan are aiming at covering all the Russian car segments, to have a 40% market share of an expected 4 million automobiles market.

• What are the keys to success?

Success requires a solid product plan, a growing sales network, and a powerful industrial foothold. It is only possible with long term partnerships, as what was the case with Avtovaz the leading Russian carmaker. A decisive move occurred in early 2013 with the agreement between Russian Technologies, Avtovaz and Nissan. Today, our teams are working together to develop news products, to manufacture the 3 cars brands in the same plants, for our expanding business development, as a part of a win-win approach.

• What is the future outlook given that the Russian car market has been contracting since the start of the year?

We fruitfully increased our sales by 9% (first half of 2013) in a decreasing market (-6% during the first half of 2013) thanks to our successful models. This is a strong validation of the strategy we implemented with our partners. Moreover, we are working hard together on developing synergies with plant capacities and platforms sharing. We are also expanding the local sourcing to reach 80% of Russian purchasing.

Quality & innovation: opportunities to be grasped?

The Russian car fleet is ageing and the vehicle ownership rate is low (260 vehicles per 1,000 inhabitants in 2012 versus 499 vehicles per 1,000 inhabitants in France). The firm Ernst & Young predicts that this rate could reach 344 vehicles per 1,000 inhabitants in 2018 and 543 vehicles per 1,000 inhabitants in 2025. Local production cannot meet the whole of this extra demand on its own. There are therefore major opportunities for global carmakers.

Until the start of the 2000s Russian carmakers had a large proportion of integrated production, at around 80%. The arrival of foreign carmakers prompted a rise in the quality of the products used to make vehicles. Vertical integration has therefore fallen to between 20% and 30%. This has changed the Russian car industry's value chain. What is its future then?

Most of the foreign brands present in Russia are organised around SKD assembly (little added value, parts mostly imported with local assembly). Ford and Toyota are organised around CKD assembly (package containing all of the spare parts needed to assemble the vehicle). Renault-Avtoframos moved toward a deeper local integration, started purchasing Avtovaz parts. Russian suppliers mainly produce for Russian carmakers, but competition is increasing between local subcontractors for business from foreign carmakers. This should result in the modernisation of production as only around 5% of local suppliers meet West European standards (1% of local companies export). Mercedes is looking for local suppliers that meet its standards: 45 local OEMs have been contacted, of which 25 for bodywork, which the carmaker would like to source locally as a priority. OEMs are still not segmented as in the West (tier 1, tier 2 and tier 3).

Producing locally, in other words making cars "made in Russia", allows foreign companies with local operations to promote themselves and meet the Russian government's priorities. But OEMs need to catch up. According to Andrey Dmitriev, head of purchasing at Magna in Kaluga: "... the quality of the steel is not consistent. Local production obligations are prompting a priority focus on the local manufacturing of large and costly parts. However, the production of the simplest and also least expensive parts is the most suited to local production....". At Ford, the Focus is produced in Russia, while at Renault more than 50% (by value) of the parts making up the Logan are of local origin. Volkswagen locally produces more than 70% of the vehicles that it sells.

The spare parts market is also developing around the market for the sale of second-hand or new vehicles. The continuous growth in the number of vehicles on the road, difficult weather conditions, infrastructure of varying quality and the fact that owners of foreign vehicles are very concerned with the quality of spare parts give this market growth potential for companies in this sector. There is no carmaker monopoly on the distribution of spare parts. This practice is declining or even disappearing under the influence of foreign carmakers as it is an additional source of profit. Continental, Michelin and Yokama are setting up operations. Also note that this market has maintained its appeal in a crisis period.

There is no point of sale without a distribution network. In Turkey, car distribution networks need to develop to meet sharply growing demand. In the automotive value chain distribution holds a privileged place as it is a high added value activity. It involves offering services to attract consumers and promote cross-selling so as to retain customers. You need to not only sell cars but also the accompanying services, such as loans, maintenance and warranties. This requires a complex alchemy, particularly as it means selling services and goods from different business sectors. As keeping customers loyal costs less than winning them back, they must be offered a full, differentiated range of products to set themselves apart from the competition.

Car marketing and distribution are activities in the downstream part of the value chain. At the other end of the chain, R&D activities relating to car design and innovation are just as important. Aside from OEMs, the Turkish car industry largely consisted of assembly activity, which generates medium added value. However, the Turkish State wishes to push the industry up the value chain to protect domestic production against competition from companies that benefit from comparable production costs.

To achieve this, a platform, the OTEP, composed of carmakers, engineering companies, professional unions, research centres and State bodies, has been tasked with successfully developing research and innovation in the upstream part of the car production process. This platform is responsible for ensuring that the car industry's frontiers are reached, while remaining consistent with the broad guidelines of the Turkish R&D strategy. Protecting the environment, reducing emissions, and producing lighter vehicles and smart cars are all challenges to be met by the global car industry, and even more so by the Turkish industry as it faces them.

Aside from the organisational aspects, assistance is granted to companies involved in the resurgence of R&D, such as an exemption from VAT, customs' duties and social security contributions for 7 years, the providing of land by the State, preferential interest rates, and so on.

Turkey nevertheless suffers from a shortage of qualified labour. The population is in fact not sufficiently well trained to meet the challenges implied by competition to attract investment (tables 4 and 5). Conversely, South Korea has managed to stabilise its automotive production, which is strongly export-oriented, particularly thanks to an abundance of qualified labour, as shown by the scores from the PISA assessments (South Korea is in 1st place and Turkey is in 23rd).

TABLE 4:
Turkey/OECD comparison of access to secondary education

Percentage of the population that has attained secondary education	Turkey	OECD average
25-64 years	31%	74%
25-34 years	42%	82%
55-64 years	19%	62%

Source: OECD

TABLE 5:
Turkey/OECD comparison of access to higher education

Percentage of the population that has attained tertiary education	Turkey	OECD average
25-64 ans	13%	31%
25-34 ans	17%	38%
55-64 ans	9%	23%

Source: OECD

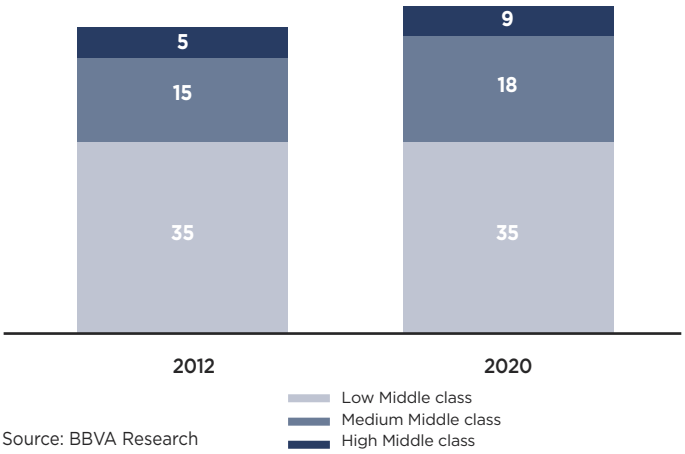
(1) According to an Ernst & Young study, the average age of a vehicle in the Russian car fleet is 11.8 years and 1/3 of the car fleet is more than 15 years old. A more detailed analysis shows that foreign branded vehicles are younger (9.4 years) than vehicles of Russian origin (15.7 years). The replacement rate for foreign branded vehicles is higher and these vehicles have a better reputation.

The rise of the middle classes is the ultimate strength of both markets

There was a middle class in Turkey well before the abolishing of the Ottoman Caliphate by Mustafa Kamal Ataturk. After the advent of the Republic, this middle class mainly consisted of public servants and soldiers. During the crises in the 1980s and 1990s, one of whose prominent features was very high inflation, the number of people belonging to this class dropped dramatically. The AKP's victory in the early 2000s coincided with macroeconomic stabilisation, which allowed the re-emergence of this class, the number of whose members was increased by the arrival of the Anatolian businessmen who have been the main beneficiaries of economic liberalisation and the export boom.

According to BBVA [2], the middle class will continue to grow in the next few years . Income per household should increase throughout the decade from 2010 to 2020 and, helped by demographic growth, this class should see its numbers rise, with growth particularly in the wealthiest group. The middle class should in fact grow over the same period from 55 million to 62 million people. The lowest income members of this class should remain constant at 35 million, while the median class should increase by 20% to 18 million individuals, and the wealthiest group should almost double in size, from 5 million to 9 million *(chart 12)*.

CHART 12:
Growth of the middle classes in Turkey in 2012-2020

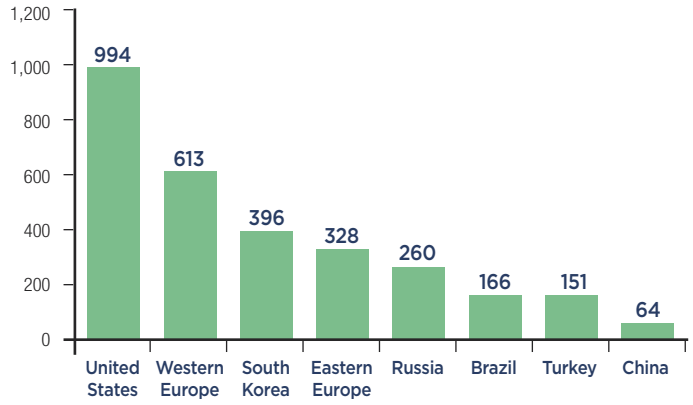


Source: BBVA Research

The wealthier households become, the smaller the share of basic necessities in their expenditure. According to Engel's law, the share of spending on food falls as revenue increases. Its elasticity is less than one. Conversely, the share of transport expenditure, including costs linked to car ownership, increases with income, as its elasticity is greater than one.

Turkey is a country whose car fleet is not very large by international standards *(chart 13)*. Turkey has 151 vehicles per 1,000 inhabitants, while there are 260 vehicles per 1,000 inhabitants in Russia. In the US and Western Europe this ratio is 994 and 613 respectively.

CHART 13:
Car fleet per 1,000 inhabitants



Source: OSD

In recent years, the emergence of a middle class has also been seen in Russia [3] due to the steady increase in wages (table 6) and the fall in unemployment (2009: 8.4%, 2012: 5.4%). 82% of Russian households will belong to this class by 2015. According to a Nielsen study in 2013, the Russian middle class should reach 104 million and increase by 16% by 2020. By this time it should account for 86% of the population and its purchases should amount to USD 1.3 billion. The distribution of income by social class is still concentrated as 20% of the wealthiest people receive 47% of the country's total revenue, while the middle class receives 48% of total revenue (chart 14). In 2011, the Russian middle class had an average income of between USD 315 and USD 845.

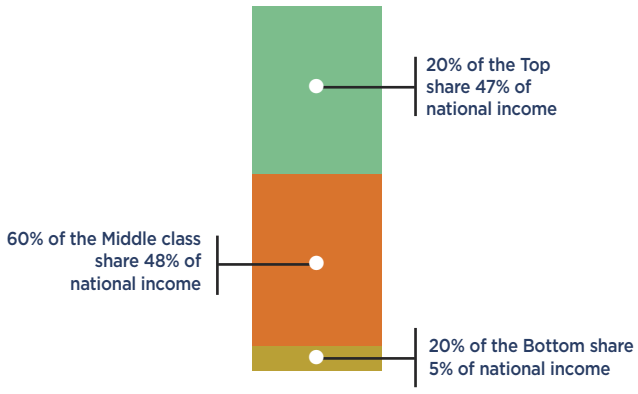
TABLE 6:
Change in GDP per inhabitant in current USD

2008	2009	2010	2011	2012	2013*	2014*	2015*	2016*	2017*	2018*
11,631	8,568	10,674	13,335	14,247	15,650	16,847	18,113	19,533	21,132	22,906

* Estimate

Source: IMF

CHART 14:
Distribution of national income within the Russian population



Source: AC Nielsen

(2) According to BBVA, the emerging middle classes are made up of three groups: the "lower" middle class, whose annual revenue adjusted for PPP is between USD 5,000 and 15,000; the "median" middle class, whose adjusted revenue is between USD 15,001 and 25,000; and the "upper" middle class, whose revenue is between USD 25,001 and 40,000.

(3) The Russian sociologist Tatiana Zaslavskaya defines the Russian middle class as an "almost porous layer that is currently under formation and has the precious quality of being able to adapt to reforms. It also offers a potential for innovation and knowledge that one day will allow it become a middle class in the Western sense of the word". This quotation is taken from L'émergence d'une nouvelle classe moyenne en Russie ou les caractéristiques d'une nouvelle consommation by Natalia Guilluy-Sulikashvilil.

Russian spending on cars needs State support, however.

Although the average salary has risen considerably, from 8,555 roubles (EUR 251) in 2005 to 23,683 roubles (EUR 571), some categories have benefited from this rise more than others (table 7). However, the confidence of consumers within this middle class is falling in the short term, with nearly 56% of Russians believing that their personal financial position will be bad or not very good in 2013 (Source: Nielsen).

TABLE 7:
Average monthly Russian salary by economic sector

	2005	2007	2008	2009	2010	2011
Economy average	8,555	13,593	17,290	18,638	20,952	23,683
Agriculture, hunting and forestry	3,646	6,144	8,475	9,619	10,668	12,320
Manufacture of textile and textile products	3,986	6,590	8,454	9,021	10,302	10,941
Financial intermediation	22,464	34,880	41,872	42,373	50,120	56,478
Public administration and defence	10,959	16,896	21,344	23,960	25,121	27,741

Source: Rosstat

Various carmakers have been affected by strike action. At Avtovaz, in April 2013, workers demonstrated for a rise in their pay from USD 250 per month. The demonstrations at Volkswagen in May 2013 concerned working hours and at Ford in June 2013 the cause of the protests was working conditions and wage indexing (Source: Les lettres du Fil). As this is combined with excessively high borrowing costs and a higher vehicle ownership cost (increase in insurance premiums, introduction of paying parking spaces in cities, various levies, etc.), potential buyers are limiting or deferring their purchases. The vehicle replacement rate was only 3% in 2012 (6% in Germany). We shouldn't just consider Moscow and Saint Petersburg, however, which are the country's shop-windows. Premium brands reign in these two cities as this is where the people with high purchasing power live, while most of the Russian population can only afford cars in the A (or B1) and C segments, in other words small sedans and compact 4X4s. One example is the Logan, which has enabled Russians to buy a foreign vehicle for the first time. The Russian government has therefore once more decided to support the car industry (as it did between 2009 and 2011) through preferential loans by the end of 2014 for vehicles in the price range up to 700,000 roubles (around EUR 16,432). The State should reimburse the bank for the discount granted on the loan, while the buyer is supposed to contribute 15% of the sum borrowed for a car worth up to 700,000 roubles and for a loan with a maximum duration of 2 and a half years. As an indication, Renault's Logan is worth 349,000 roubles (around EUR 8,192) and Chevrolet's Cobalt is worth 409,000 roubles (EUR 9,600) while the most sold vehicle in 2012 was the LADA Granta, which is currently worth 239,000 roubles (EUR 5,610).

The Russian market's appeal could ultimately be reduced by its demographics, however. There are 143 million people in Russia, 73% of them living in urban areas. Half of all Russians live in a city with more than 100,000 inhabitants, Moscow has nearly 11 million inhabitants, St Petersburg 4.8 million and Novosibirsk 1.4 million. This high rate of urbanisation is helping to develop the Russian middle class. The unfavourable demographic outlook may hold it back, however.

The effects of the fall in registered births in the years from 1995 to 2005 should be felt towards 2025-2030, due to the lower number of women of child-bearing age.

Conclusion

From the carmaker's viewpoint, Russia and Turkey offer many advantages for setting up operations, including the size of the domestic market and competitive advantages. This is the result of a long process of development of these sectors fostered by public policy.

These two countries have in common the fact they are both emerging countries driving the global economy. And although growth in these countries seems to be slowing, their middle classes should continue to develop and increase their wealth in the medium term. These socio-economic changes imply considerable demand from first-time buyers of various goods, which is behind buoyant consumer spending that the car industry will surely be able to benefit from.

To continue to attract foreign investment, the implementation of policies fostering innovation will nevertheless be a key factor in the medium term. Differentiation based on costs is not a sustainable long-term industrialisation policy. More investment is needed in R&D and a move up the chain towards higher added value. In both of the cases studied, the State will continue to play a significant role in a sector policy whose main goal is the development of a domestic industry able to compete on quality.