



The road kings: CEE Autos

Export dependency sustains take-up

The significant weighting of the auto production and component supplier sector in the exports of the CEE-6 countries is by itself likely to sustain demand for take-up space in the CEE industrial arena in the short to medium term. Auto exports range from 4.7% of total exports in 2015 in Bulgaria, upwards to 28.0% in Hungary and 34.6% in Slovakia (source OEC data). The combined CEE-6 export value connected to autos was EUR 133.6bn in 2015, growing at a weighted average rate of 7.4% in the 2010-15 period. With this firepower, we believe that even moderate reinvestment and expansion capital expenditures are likely to sustain auto take-up in the region at over **1.1mn sqm** in 2017 and **c.0.8mn sqm** in 2018. Our view is that the region's competitive advantages triggering this investment are still apparent.

Location drivers pivoting east?

The conditions for locating fresh auto supplier production remain in place in most of the region. The **price of labour** remains very low, the **availability of that labour** is more plentiful the farther east one travels. Shortages may be appearing in Czech Rep. and Hungary. Wage growth may act as a brake on business model calculations but then should attract a better calibre of worker, perhaps even back from Western Europe.

The moderate improvement in **infrastructure links** seen in recent years is likely to continue, reducing the geographic disadvantage of those locations further east. **Tax rates** in the region are very competitive, are likely to remain so and the Romanian and Bulgarian governments, for example, remain very committed to attracting new suppliers. All of the CEE-6 have become easier places to do business in general, though further improvements can always be made. Our overall survey assessment is that **Bulgaria** and the **Czech Rep.** are most attractive within CEE-6 for a new auto supplier to consider, with **Hungary** as a close third place. None of their peers score badly overall.

Electric cars – a short-circuit?

CEE-6 autos have a high weight of internal combustion engine (ICE) production/component supply. This dependency, most acute in Hungary and Slovakia, is likely to require addressing in the mid term, as manufacturers shift towards electric car production globally. Opportunities for other suppliers are likely to arise, as evidenced by recent investments such as the headline Samsung SDI battery plant in Hungary.

The likely demand

Export weight to sustain take-up

The capture of supply market share by auto producers (often referred to as “OEMs”) and component-makers (“Tier 1, 2, 3”), including spare parts suppliers, in CEE is impressive, in the context of stagnating European new car demand. The latter grew at an annual rate of just 0.2% (OICA data) between 2010 and 2015. New markets may have been found: global demand grew by 3.6% annually (OICA data) in the same period. The weighted average annual growth of CEE-6 auto exports between 2010 and 2015 was 7.4% (OEC data). This is more than twice the rate of global new car demand growth. The eastward drift we analysed in our October 2015 EMEA Autos report “ Millennials Switching Gears” is very evident when examining the progression of take-up of industrial real estate space by auto suppliers.

Pipeline guidance of demand for sqm in H2 2017 and 2018 from our Industrial agents in the CEE-6 countries is consistently and healthily flat versus the post 2013 run rates in **Poland** and **Hungary** to higher in **Slovakia** and **Bulgaria** and perhaps much higher in **Romania**. Lower demand is foreseen in the **Czech Republic**, due to some suppliers perceiving the very tight Czech labour market as a barrier to entry/ growth: the sequential post-2014 decline looks likely to continue.

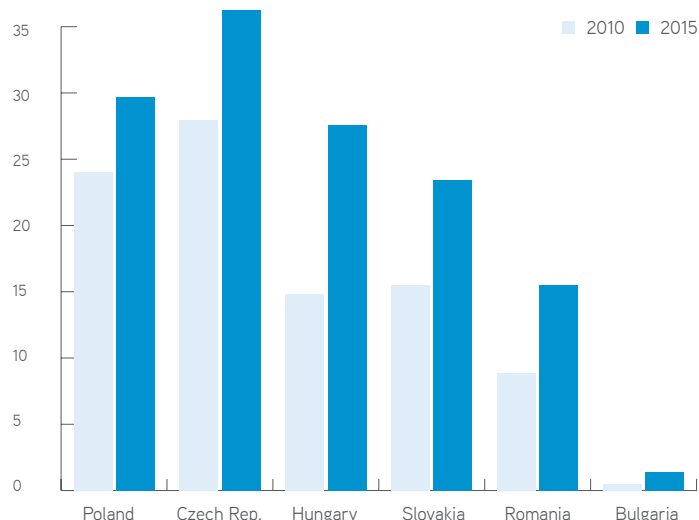
Total take-up in the auto sector in the CEE-6 amounted to 729,300sqm in H1 2017, compared to 708,269sqm in the whole of 2016 (with no 2016 data for Romania). Take-up may well reach 1.1mn sqm in 2017 and c.0.8mn sqm in 2018.

The stand-out in terms of progression of take-up of industrial real estate space by auto suppliers this year is Hungary, where both the total (394,500sqm in H1 2017 alone) and average size of deal (23,206sqm) were the most impressive in the region. That total include Samsung SDI’s electric vehicle battery plant (85,000sqm, our estimate) and Apollo’s tyre factory (170,000sqm). The leader in the four countries where we have detailed data, when stripping out renewals and owner-occupied deals, was Poland at a steady 109,503sqm in H1 2017. Average deal ticket sizes in CEE have risen or stayed steady since 2013.

Auto exports as a whole are very significant contributors to the region’s economies and thus naturally form chunks of the always-lumpy take-up profiles in the industrial sector. Auto-related exports compared to total exports were in the range of 16.0% (Poland) to 34.6% (Slovakia), excluding Bulgaria’s less mature 4.7% level in 2015. Auto take-up as a ratio of total take-up vary considerably, fluctuating with the total take-up itself. This and the lack of a longer term data series makes proper analysis difficult. The national totals for take-up data are not easy to verify right across the region. Poland’s auto take-up ratio fluctuated between 1%-8% in 2013-H1 2017, Slovakia’s range was 14%-55% whilst Czech Rep.’s was 10%-22% from 2014 onwards.

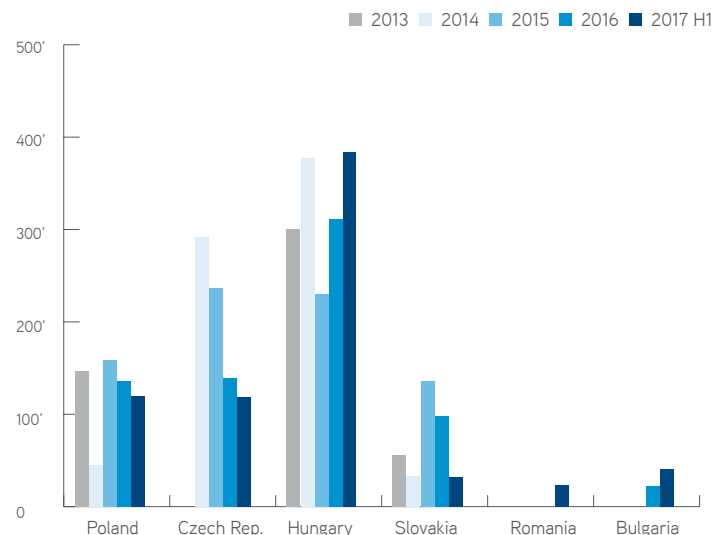
Capital reinvestment and moderate expansion plans can add up to significant totals, even with average deal sizes of 5,000-10,000sqm. With exports the size of 2015’s EUR 134bn and growing at an annual rate of 7.4%, the CEE-6 auto producers and their suppliers have the financial firepower to afford to spend c.EUR 0.3bn-EUR 1.1bn on c.0.6-1.1mn sqm of new space in the region annually. A major disrupter to that export story, such as the electric car, may of course appear, upsetting or morphing the recent dynamics.

Fig. 1: Value of auto exports in 2010 and 2015 [EUR bn]



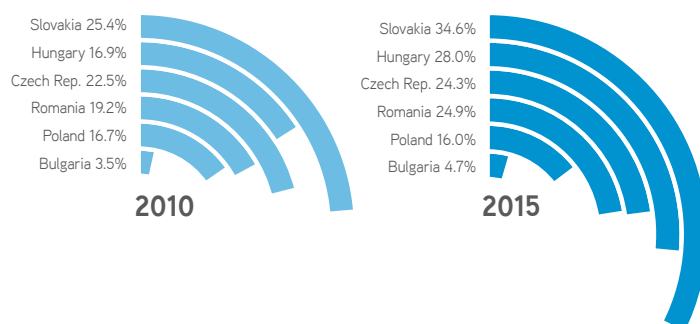
Source: Observatory of Economic Complexity (“OEC”) (see appendix), Colliers International

Fig. 2: Take-up by auto sector (suppliers + producers, incl. owner-occupied) [sqm, 2013-2017 H1]



Source: Colliers International

Fig. 3: Auto exports / total exports 2010 and 2015



Source: OEC (see appendix), Colliers International

Drivers for location

The most important factor is..

Establishing and analysing the factors involved in an auto player's location decision-making process can reinforce predictions of future demand for space. Our analysis suggests that the most important factors remain in favour of location in CEE markets, versus elsewhere in Europe, suggesting demand should stay robust, absent general recession conditions.

What factors are most important? We asked this question of a sample of components producers in our extensive October 2016 "Automotive Industry in Bulgaria" study, co-produced with the Automotive Cluster of Bulgaria.

The most prevalent factors were labour force price (50% of respondents), EU membership (45%), location (accessibility, 45%) and taxes & fees (36%).

Discussions with our Industrial agents across CEE are consistent with the survey suggesting both labour force price and location (accessibility and infrastructure) as the most important factors, others having lesser influence in general.

...labour force price

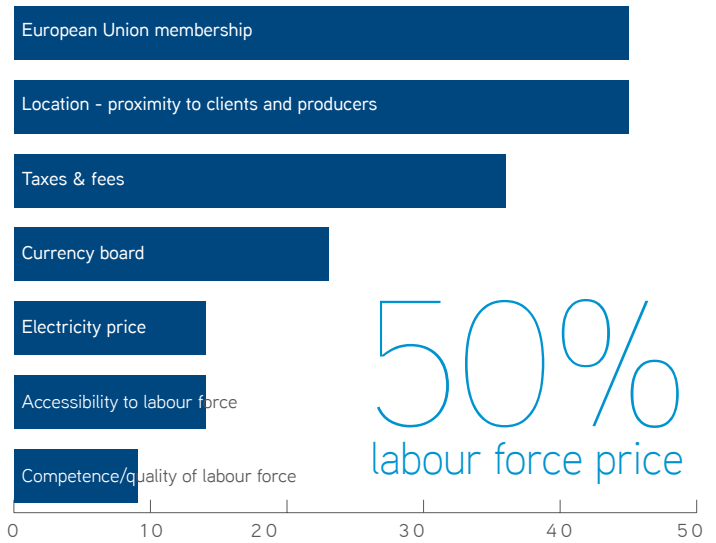
Whichever measure is used, it is clear that the CEE unit labour cost discount versus the EU average is substantial, even in the case of the most expensive country, Slovakia (EUR 10.9/hour). Bulgaria is the cheapest, at just EUR 4.2/hour. This is CEE's main competitive advantage.

Is it sustainable? These are average numbers and the CEE/EU average wage differential (and availability) of, for example graduate level managers and engineers and mid-ranking skilled workers may well be narrower. The workforce education/skill levels are seen as very important in determining the location of auto players by our Industrial agents in Slovakia and Hungary and important by Bulgaria.

The demand for skills and even basic labour is having an effect: Headline wage hikes specific to the sector have occurred in the last 12 months, for example in Skoda Auto (Czech, 11.2%), Audi (Hungary 10%-30% range), VW (Slovakia, 14.1%) and also in Romania (Dacia) and Bulgaria's suppliers (in the Plovdiv region).

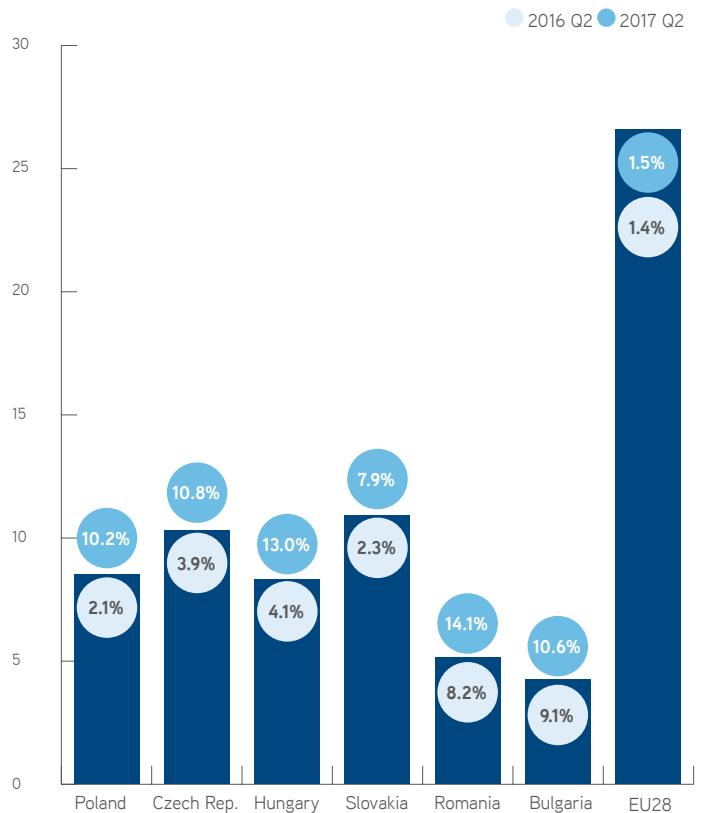
Wage growth is accelerating (between 7.9% and 14.1% in the Industrial sector in the region in Q2 2017), a factor that we believe (and have believed for some time) will sustain at least into 2018. Labour markets are tight. Evidence includes, first, that all the CEE-6 countries have low unemployment levels versus their history (and Czech Rep. with the lowest in the EU at just 2.9% according to Eurostat) Secondly, the latest quarterly survey of manufacturing companies has a still sky-high 81% of Hungarian companies, for example, stating that labour shortages are acting to constrict expansion of production.

Fig. 4: Reasoning for locating in Bulgaria, views by % of auto suppliers in 2016



Source: Automotive Cluster of Bulgaria Colliers International

Fig 5: Unit labour costs (EUR/hour) and year-on-year growth (%) in the CEE industrial sector



Source: Eurostat, Colliers International

So it might be the availability rather than the cost of labour that becomes more of an issue. This can be resolved partially by education and training of the workforce, something being addressed to varying degrees across the region and partially, as we set out in our July 2017 report “Labour Force Boomerang” by return migration of some of the 7m CEE-6 nationality workers currently residing in Western Europe. Some of that incentivisation to return might be higher wages or the existence of lower personal tax rates.

It would take until 2027 in Hungary and the Czech Rep. for wages to equalize with the EU average, applying the relatively acute Q2 2017 growth rates shown in Fig.5. Breakeven would be 2030 in the case of Poland, 2031 in Slovakia and Romania and 2038 in Bulgaria.

Location & transport infrastructure

The geographical location of each of the CEE-6 countries cannot be changed and the physical distance from Germany (the key export market in Europe) is greater from the Black Sea littoral of Romania and Bulgaria than western Poland or Czech Rep. Distance of Tier 1 suppliers from the key regional producers has a broadly similar pattern, with more of the key assembly plants located more to the west of the CEE-6 regions in general. The greater the distance, the higher the transport cost and delivery timing risk, something which the suppliers and OEMs have to build in to their business models.

What can be changed is accessibility and speed-to-market: between 2006 and 2015, Poland built 936km of dual-lane highways, Hungary more at 1,090km. Other countries were left in the shade. Hungary’s programme meant that in 2015, it had a higher ratio of highway km per head than any of the countries in the sample in Fig 10. Romania and Poland, with large rural/ spread-out populations, lag noticeably on this measure.

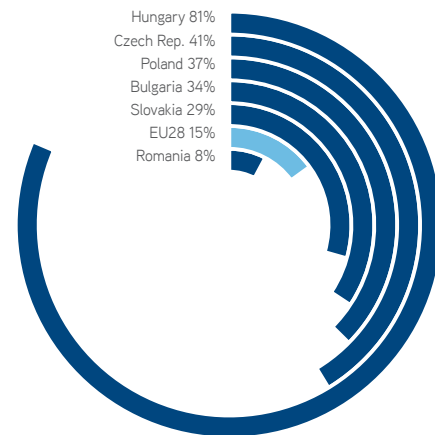
Romania, out of all the CEE-6 countries intends on “catching up” over the next 3-10 years with key highway links both within the country and accessing Hungary. Poland is also pressing forward with its highway-building programme and may overtake some of its peers on the per capita measure. Bulgaria is likely to address its links to the north and west. Even Czech Rep and Slovakia are likely to continue their road-building programmes into the next decade, with EU money helping.

Rail penetration is generally higher in CEE than in the major Western European states but is it being utilised? We analysed the tonnage utilised by transport equipment producers and compared it to the auto export totals: as an approximation, Bulgaria’s utilisation is interestingly higher than any CEE peer.

Taxes & incentives

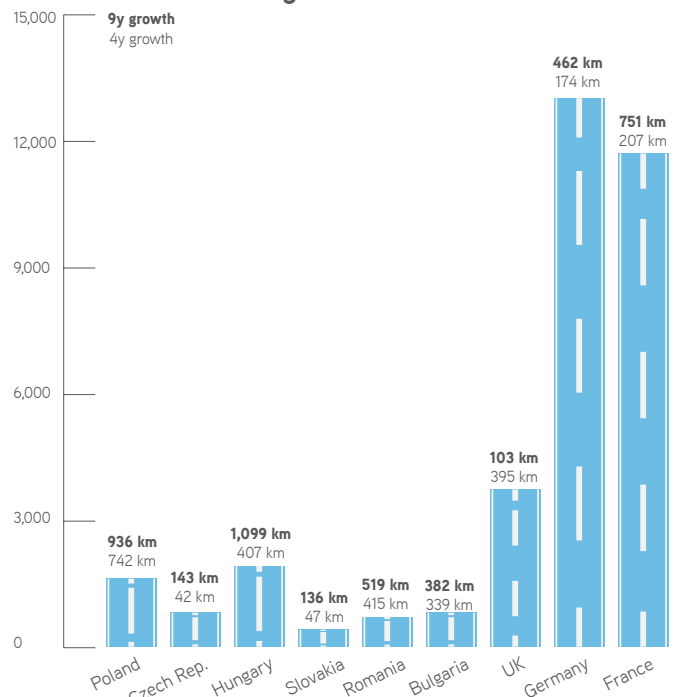
Low rates of individual taxation should help to keep workers in the region: low rates of corporate taxation are a feature of the CEE environment. Hungary has the lowest headline CIT rate at just 9%, with Bulgaria also well-positioned at 10%. The relative lack of significant budget deficits in general in CEE means that these low tax rates are likely to sustain in CEE. This cannot be said for W. Europe, where if anything, the pressure on tax rates in general is going to be upwards over the next 5-10 years.

Fig 6: % of manufacturing companies indicating labour shortage is a limit to production increases



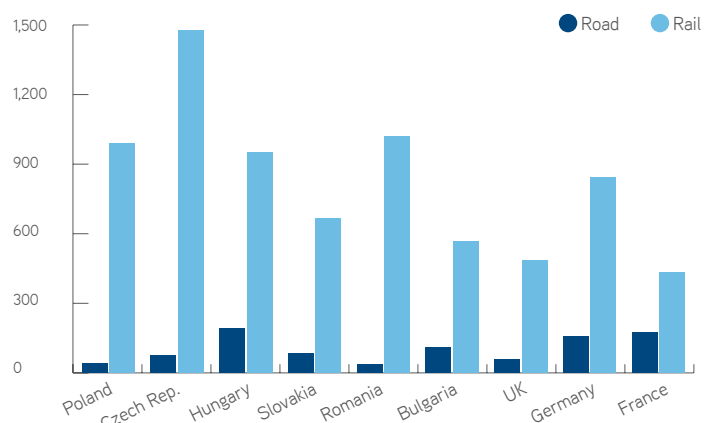
Source: National Statistical Agencies, Eurostat, Colliers International

Fig 7: Length in km of dual-lane highways in selected countries in 2015 and growth to 2015



Source: Eurostat, Colliers International

Fig 8: road and rail km per million of population in CEE countries (2015)



Source: Eurostat, Colliers International

Several of the CEE states have deployed incentives to encourage the location of auto suppliers (and other industries): Hungary has various job creation and local subsidies available; Slovakia has a job creation incentive of up to 35% of costs and discounted property transfer cost; Romania operates a state aid scheme covering up to 50% of costs; Bulgaria has reimbursement on social security for training and the building of infrastructure.

Stability and ease of doing business

Macro stability is in the minds of all foreign direct investors. As EU members, the CEE-6 have the legal frameworks in place that enable business to flourish. The ease of doing business, as measured regularly by the World Bank, has improved in the region across the board. Ranking globally, Poland is highest at position 24 (up from 54 11 years ago). Hungary is “worst”, ranking at 41 but coming well ahead of several EU peers.

Currency stability is also a planning factor: Slovakia with the Euro and Bulgaria with the Euro-Lev peg are the most stable. We believe some of the other currencies in the region may face appreciation pressure, thus inflating costs in EUR terms and making export production more expensive. Currency appreciation pressure applies particularly to the Czech Republic and perhaps Poland and Hungary.

Electricity and other costs

Electricity costs, less important than some of the above factors, are most competitive in the Czech Rep. and at a discount of 33% to the EU average.

Ranking of CEE countries by factor

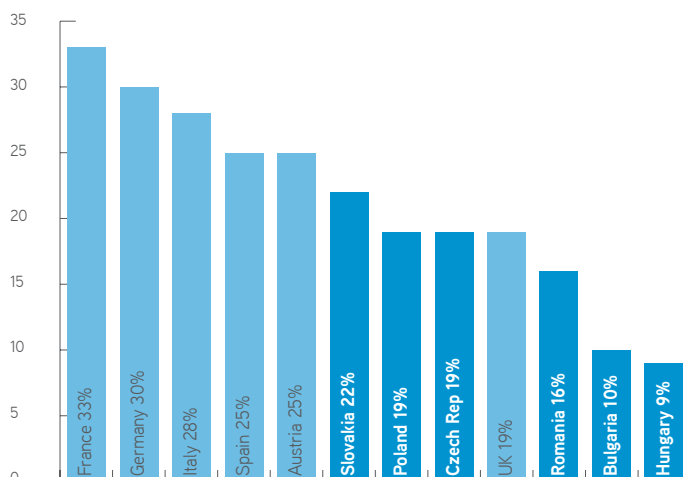
We assessed the above factors by ranking each of the CEE countries against each other: We summed the ranks of 8 factors, double-weighting the key labour cost and geographic proximity factors and took the average by dividing by 10. We thus assigned labour-related factors a weighting of 40% and infrastructure-related factors 30%. The tied “winners” of this survey were Bulgaria and the Czech Republic, Hungary a close third and the other three countries interestingly closely bunched at or just above the average rank of 3.5.

Tab 1: Average ranking (with labour cost and proximity 2x weight)

FACTOR	PO	CZ	HU	SK	RO	BG
Labour cost level, Eurostat Q2 2017 (double weight)	4	5	3	6	2	1
Stability of labour cost (2017E wage growth)	1	3	5	2	6	4
Ranking of Eurostat manufacturing workforce shortage	4	5	6	2	1	3
Geog. proximity to customers (ave. distance/access to Germany) (double weight)	3	1	2	4	5	6
Highway intensity vs. workforce (km per capita)	5	4	1	3	6	2
Electricity costs (EUR/MWh)	5	1	4	6	3	2
Corporate tax rates (%)	4.5	4.5	1	6	3	2
World Bank Ease of Doing business ranking (2017)	1	2	6	3	4	5
Average ranking (with labour and proximity cost 2x weight)	3.5	3.2	3.3	4.2	3.7	3.2

Source: Colliers International

Fig 9: Corporate taxation levels in selected EU countries in 2017



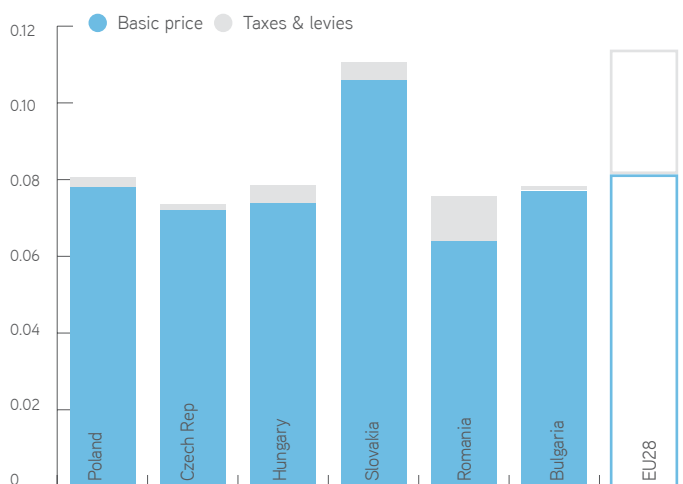
Source: Wikipedia, Colliers International

Fig 10: World Bank Ease of Doing Business global rank (2017) and change since 2006



Source: World Bank (see appendix), Colliers International

Fig 11: Cost of electricity for industrial company with 500-2,000MW of demand (EUR/MWh)



Source: Eurostat, Colliers International

Electric cars: a short-circuit?

Disruption coming for ICEs?

The electric car appears to be here to stay. Moves by governments to ban petrol-driven (ICE) vehicles make news headlines regularly. The Netherlands may be ICE car-free by 2025; Germany and India by 2030, France by 2040. The automakers have to move with the times, in the face of “Tesla” competition. Volvo announced this year the phasing out of new ICE cars by 2019. What will be the general effect in CEE? Almost all of the vehicle production is ICE vehicles.

The large proportions of exports from the OEMs are thus at risk of a “short-circuit”, a paralysing reduction from a rapid increase in demand for the electric car.

On top of that, we analysed which 2015 component exports were directly ICE parts. An estimated 8.2% of Hungarian total exports (mostly engines and parts for engines) were connected to ICEs in 2015. The range in the other 5 countries is 0.6% (Bulgaria) to 3.2% (Slovakia).

Summing the OEM production and ICE components, 22.8% of Slovak exports are vulnerable to this phenomenon, followed by Hungary’s 21.1%. Bulgaria, at 2.1% looks least at risk.

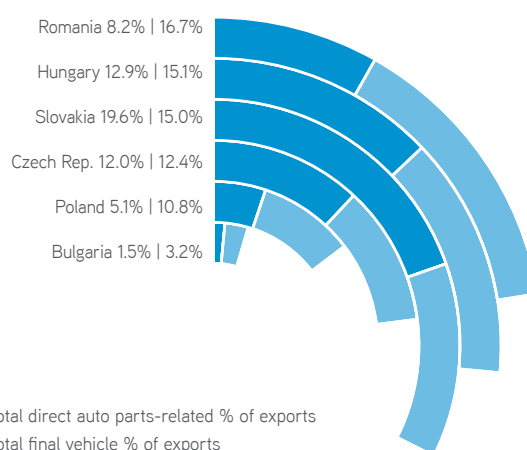
Electric cars require more circuitry, electronic components and systems, so some players, for example Bulgaria, who specialises in the latter, may well benefit from the shift. The Hungarian auto sector has made a start, with the already-mentioned EUR 300mn investment of Samsung SDI to build its only European electric vehicle battery plant in Göd.

Appendix – explanations of Figures:

FIGURES 1, 3, 12, 13 AND 14: The Observatory of Economic Complexity (“OEC”) is the world’s leading visualisation engine for international trade data, plotting export and import values for data to an 8-digit HS trade numbering system value up to 2015. To ascertain auto exports, all vehicle production (HS 87 category) and vehicle parts (also HS 87), engines and engine parts (HS 8407, 8408 and 8409), 2 tyre (HS 4011), 2 glass (HS 7007) and 26 HS 8 categories covering other components (seats, lights, electrics, wiring, locks, air con etc) were summed for 2010 and 2015 years. To calculate the ICE component totals for figure 13, the above engine and engine parts categories and 10 of the 26 component categories (clutches, exhausts etc) were summed.

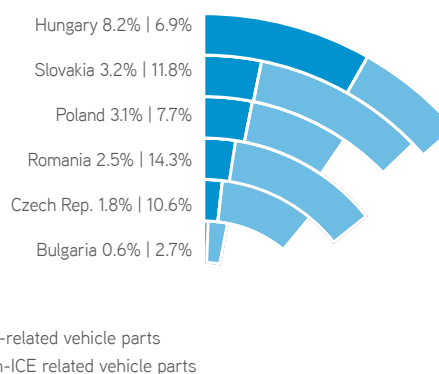
FIGURE 10: The change in ranking in the global World Bank Ease of Doing Business Index between the year 2006 and 2017 is shown. Taking the example of Romania, the country rank rose from 78th in the world in 2006 to 36th in the world in 2017. This was a rise of 42 places. The Ease of Doing Business Index is an index created by the World Bank Group. Higher rankings (a low numerical value) indicate better, usually simpler, regulations for businesses and stronger protections of property rights. The first survey was conducted in 2001 and is carried out annually. The report is above all, a benchmark study of regulation. The survey consists of a questionnaire designed by the Doing Business team with the assistance of academic advisers. The questionnaire centers on a simple business case that ensures comparability across economies and over time. Empirical research funded by the World Bank to justify their work show that the economic growth impact of improving these regulations is strong.

Fig 12: Vehicle production and vehicle component % of total exports in 2015



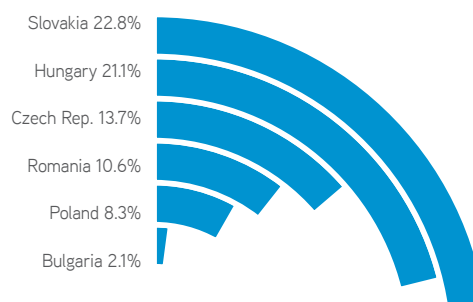
Source: Observatory of Economic Complexity (see appendix), Colliers International

Fig 13: ICE-related and non-ICE-related vehicle part % of total exports in 2015



Source: Observatory of Economic Complexity (see appendix), Colliers International

Fig 14: “ICE exposure”, sum of final vehicle production (OEM) and ICE-related vehicle parts, % of exports



Source: Observatory of Economic Complexity (see appendix), Colliers International

€2.3

billion in
annual revenue

170

million square meter
under management

15,000

professionals
and staff

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