

EUROPEAN CNR STUDIES

Road Freight Transport (RFT) in Germany - summary

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In the gloomy European economic environment, Germany has been an exception for several years. It arouses curiosity, and its successes - both criticised and admired - are often compared to the economic policies implemented in France. In an increasingly open and competitive European market, but profiting from the country's economic patriotism, does German RFT compare favourably?

To answer this question, CNR carried out a field study in 2012, not only to highlight the features of the German flag and analyse its activity, but also to point out the structural discrepancies between two neighbouring flags.

The full survey led in partnership with Laurent Guihéry, professor at Lyon 2 University and researcher at the LET, is available on CNR's website: www.CNR.fr heading: Publications CNR Europe. This document offers a synthesis that underlines the capital points and compares them with French RFT. For any further information, please contact Mr. Alex Ugurlu at the CNR, a-ugurlu@CNR.fr.

Economic framework and transport infrastructures

The export-oriented German economy underwent numerous reforms in the early 2000's in order to increase competitiveness. These reforms seem to have been used as a shield against the adverse effects of the 2009 economic crisis, in particular thanks to both increased flexibility of the labour market and strict control on public finances.

With 82 million inhabitants, Germany is the leading European economy. Its unemployment rate ranks among the lowest (about 5% vs. over 10% in France in late 2012). Germany's GDP has passed the 2,600 billion euro mark, i.e. almost €32,000 per inhabitant per year. Although the level of GDP/inhabitant can be compared to that in France, the index of the Germans' purchasing power is 121 (index 100 = UE27) vs. 108 in France.

Despite an exceptional downturn in 2009, the German state's public finances are doing well overall. The measures to reduce public expenditure that were launched in the early 2000's have borne fruit. It is to be noted that social VAT was implemented in 2007 to support economic competitiveness by enabling employers to reduce their contributions. Since then, the unemployment rate has continued to decline and the accounts of social welfare agencies have been in surplus (11 billion euro surplus in 2012).

In terms of infrastructure, Germany is among the best provided for countries in the world. However, motorways, especially in the Western Länder, have long been neglected in order to support the construction of new motorways in the East. Experts state that 20% of German motorways are alleged to be in a condition that necessitates major maintenance work, and 15% of bridges ought to undergo renovation straight away. These works, the costs of which are colossal, are the source of daily discussions among Germans who consider introducing tolls or a vignette on light vehicles, which have been exempted thus far.

As for the other methods of transport, the picture remains mixed. Concerning railways, Germany has a closely-knit railroad network and its high-speed lines total 1,500 km in length (2,037 km in France). Yet, ICE operation (German High-Speed Trains) differs from what is known in France, with more frequent stops and top speed no faster than 250 kph (155 mph). In addition, some large-scale development projects for high-speed lines regularly face hostility from local residents (e.g. the Stuttgart station).

In air transport, the delay in opening the Berlin-Brandenburg airport due to noncompliance of the passenger terminal architecture with technical and safety standards, ended up in a political crisis that brought about the Berlin mayor's resignation. Moreover, both main airports in Germany, Frankfurt and Munich, have suspended work because of the broad involvement of citizens against the development plans of these airports.

Despite its obvious potential, Germany today is facing numerous challenges. First, demographic ageing burdens the economy and the extensive and generous support given to families has not solved the problem. Germany is expected to be losing between 5 and 20 million inhabitants by 2050. For a number of workers, job instability is another issue. The provision of "mini-" and "midi-jobs" (minor employment) has energised the labour market by creating widely tax-exempted part-time jobs, but monthly wages between 400 and 800 € do not enable these workers to make ends meet. Wage pressure is increasingly keenly felt. As developed above, Germany benefits from a network of closely-knit transport infrastructures. However, it is ageing and often congested. Hold-ups on major projects persist under conditions of cuts in public expenditure, which continues to decrease the investment budget in this field.

Organisation and evolution of the RFT sector in Germany

In Germany there are 50,532 RFT companies, of which 39,312 firms have long- or short-haul activities, the remainder being mostly shared by freight forwarding and courier services. The flag accounts for 219,710 rigid, 154,591 tractors and 9,000 special vehicles, i.e. over 383,000 motor vehicles in total. There is an estimated 447,197 drivers, including entrepreneurs that occasionally get behind the wheel. Local organisations estimate at 400,000 the number of individual drivers, i.e. 1.05 drivers per vehicle. This number seems to have sharply increased in statistics since 2004 but this evolution is seen to be due both to a flow of drivers from Eastern European countries, and to a statistical anomaly (some entrepreneurs counted as part-time drivers).

The RFT sector is currently being restructured, more especially because of a driver shortage due to an increase of retirements and the end of compulsory military service by mid-2011. The full entry into force of the law harmonising working time and driving time¹ of drivers in Europe has also decreased the number of working hours, thus weakening company competitiveness.

RFT evolution in France and Germany*						
Transport Total million of t-km						
	2006	2007	2008	2009	2010	2011
France	211 445	219 212	206 304	173 621	182 193	185 685
Germany	330 016	343 447	341 532	307 547	313 104	323 833
Domestic Transport million of t-km						
	2006	2007	2008	2009	2010	2011
France	182 753	191 388	181 879	156 021	164 325	168 242
Germany	251 379	261 440	264 545	245 568	252 462	265 025
International Transport million of t-km						
	2006	2007	2008	2009	2010	2011
France	28 692	27 824	24 425	17 600	17 868	17 443
Germany	78 692	82 006	76 987	61 979	60 642	58 807

* in EU + Norway + Switzerland + Liechtenstein

Source : Eurostat

As for developing its full activity, the German flag seems to have cushioned the crisis, with domestic activities reaching a record level in 2011. Increased industrial export and economic patriotism have doubtlessly contributed to this outcome. However, this increase struggles to offset loss in international activities, which have been plummeting since 2007. International activities lowered from 24% to 18% between 2007 and 2011, and Germany lost European leadership to Poland.

Operating conditions and costs

Completion of the German RFT survey allowed for an objective cost analysis via two types of interview:

- One with companies both Western and Eastern to understand their mechanisms and assess their operating costs.
- And one with drivers in those large motorway truck parks at the French-German border, about their incomes and working conditions.

Considering the significant differences between Eastern and Western Länder, the following table summarises the results of these interviews (excluding structural costs) and suggests two separate profiles in Germany.

¹ Article 21a of the "ArbZG" (German Labour Code), adopted in July 2006 and amended several times since then, concurrently transposes into German law European directive CE 15/2002 and integrates some elements of EC regulation 561/2006.

Comparison of operating conditions and costs excluding structural costs, for a 40-tonne HGV. 2012 values				
	unit	France	Germany Western Länder	Germany Eastern Länder
Yearly mileage of vehicle	km	112.700	134.800	150.000
Number of operating days	days/yr	230	244	274
Semitrailer/tractor ratio		1.36	1.28	1.15
Driver cost	€/yr	44.616	41.948	30.510
Driver/tractor ratio		1.07	1.07	1.10
Yearly cost of vehicle financing and possession	€/yr	13.577	14.825	14.271
Average consumption per 100 km	litres	33.9	32.5	33.0
Fuel cost. 2012 average (1)	€/litre	1.13	1.25	1.25
Fuel cost	€/yr	43.115	54.844	61.967
Tyres	€/yr	3.381	3.550	4.000
Maintenance-repair	€/yr	8.227	8.400	7.500
Tolls	€/yr	8.644	16.420	19.800
Insurance (vehicle)	€/yr	2.639	3.665	3.800
Axle tax and other vehicle taxes	€/yr	516	929	929
De-minimis aid (2)	€/yr		-2.000	-2.000
Synthesis – cost price (except structural costs)		127.838	145.517	143.828
Cost/mileage ratio per annum	€/km	1.13	1.08	0.96
Base 100 France		100	95	85

(1) after partial recovery of TICPE in France

Source : CNR European Surveys

(2) aid up to 2.000 € per vehicle and 33.000 € per company

The main difference that emerges from this analysis is the yearly mileage of the vehicles. In Germany, vehicles are operated 20 to 38% more than in France. In addition, German companies profit from a cheaper labour cost than in France, for a seemingly higher productivity.

When comparing the competitiveness of the two flags, some cost items favour the French flag. For instance, fuel cost per kilometre is far lower in France after partial recovery of TICPE tax (0.39 €/km vs. 0.44 €/km in Germany). As for tolls, German hauliers massively drive on motorways which have been heavily taxed since the establishment of the kilometre tax called LKW-Maut. Tolls paid by German companies account for over twice as much as the yearly amount paid by French firms. The other cost items in favour of French firms are insurance and the axle tax.

The German sector particularly profits from a specific public aid aimed at RFT companies. This aid, called De-minimis, has been established to offset the additional costs of LKW-Maut. Considering the limited amounts at stake, De-minimis does not preclude European legislation, which keeps a close watch on this type of procedure. The maximum amount of this aid is 2,000 Euros per vehicle with a payload of at least 12 tonnes. It has been designed as additional funding of company expenditure, and can amount to at most 90% of the costs of some equipment such as particulate filters, wind deflectors, on-board electronics with GPS, some software... According to local organisations, this aid is believed to have increased the renewal rate of the German fleet. The 18.5% registration rise in 2011 seems to confirm this.

CNR estimates that the cost price (except structural costs) corrected for one km in the Eastern Länder is 15% lower than French cost. This gap is only 5% with Western Länder.

Driver employment and cost conditions

In Germany, working time and driving measures have been brought into line with European regulations at a very late stage. The entry into force of new regulations would have created a shock in the RFT sector, which used to profit from far higher labour productivity. Before 2009, weekly working time would reach 56.5 hours in average. It is now limited to 48 hours in average, just like everywhere in EU. As for remunerations, the new law generated a true revolution: The article that sets drivers' working time at 48 hours a week, *de facto* provides for overtime supplement from this threshold only, the 49th hour instead of the 41st previously.

As for social matters, job flexibility enables employers to hire and fire with ease. Therefore, fixed-term contracts are no longer used. German wage earners legally profit from a yearly 25 days paid leave. Up to an additional 5 days paid leave is often granted to reward seniority. For competitiveness reasons, employers have stopped using pay rises as driver incentives. Consequently, the main arguments to retain drivers are now frequent returns to base or retirement savings.

There is no minimum salary in Germany, either at federal or at Länder levels. Therefore companies are free to set hourly rates or choose monthly lump-sum salaries. Collective agreements, which are established at Länder level, do exist but are not mandatory. They are updated on a regular basis in the West, where almost a quarter of all companies are said to follow them. In the East, they are not updated and their use is exceptional. By way of comparison, in the Baden province, the conventional hourly rate has been set at €13.16 whereas it is only €6.22 in the 1996 convention in Saxony. Consequently, whether wages are conventional or not, they are subjected to significant differences between Länder.

In the RFT sector, the overall trend is to pay flat-rate salaries. This phenomenon is more prevalent in the East than in the West. It consists in setting a monthly salary irrespective of workload. In the RFT sector, flat-rate salaries are usually negotiated for an average working time of 48 hours a week. Other work and driving time are counted as working hours. Availability is included and remunerated only exceptionally. When collective agreements were recently rewritten, they had to be adapted to this flat-rate phenomenon by indicating a conventional flat-rate salary for 48 working hours a week on average. In accordance with the law, the new collective agreements provide for overtime supplements only from the 49th hour.

A minimum amount of daily and travel allowances has been set by law for all employees (in all sectors) according to the time spent outside their workplace. It amounts to 24 Euros (not subject to charges or taxation) for a 24-hour drive within Germany. In the event of an increase, travel expenses are not subjected to charges up to twice the minimum amount, but the increased part is taxed at a 25% flat-rate for the employee. Every year, the Ministry of Finance establishes a scale by country for maximum compensations related to international drives. Travelling expenses are neither charged nor taxed if within these limits.

Comparison between the cost of drivers in France and in Germany, 2012 values				
	Unit	France	Germany Western Länder	Germany Eastern Länder
Gross salary (miscellaneous bonuses and overtime included)	€/year	27,300	29,100	20,620
Travel expenses	€/year	8,826	5,292	4,536
Employer contributions (after deduction of state aids)	%	31%	26%	26%
Annual cost total	€/year	44,616	41,948	30,510
Number of actual working days per year	day/yr	216	228	249
Working time per year	hour/yr	1,572	1,806	1,980
Annual mileage		105,327	126,000	140,000
Cost of one hour's work	€/h	28.38	23.23	15.41
Base 100 France		100	82	54
Cost per kilometre	€/km	0.42	0.33	0.22
Base 100 France		100	79	51

Source : CNR European Surveys

In conclusion, although German RFT companies profit from favourable labour costs, the other cost items like tolls or fuel partly cancel this advantage. Yet, although costs are extremely heterogeneous from Länder to Länder, the German flag maintains some competitiveness reserves in the East where costs are minimised and productivity optimised. But on international markets, this feature is insufficient to compete with the flags of the neighbouring Eastern countries like Poland or the Czech Republic. On the other hand, domestic activities are preserved thanks to economic patriotism, industries and the export orientation of the German economy, with hauliers being located in the vicinity of the major industrial clusters.