

The Dream of Large-Scale Truck Transport Enterprises – Outsourcing Experiments in the German Democratic Republic, 1957-1980

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Abstract

Under state socialist economic policy, the concept of large-scale factories played an important role. The assumption was that large productivity gains would result from large-scale organisation and so large-scale concepts were also applied to the transport sector. Thirty years before Western management started outsourcing truck transportation from their factories, from 1957 state socialist traffic policy in the German Democratic Republic pulled truck fleets out of nationally-owned enterprises, concentrating them into large and dedicated transport service enterprises. As this policy did not increase productivity, it was partly revised in the 1960s. The centralisation policy was unsuccessful because state-owned enterprises struggled against the state socialist transport department to keep the fleets they needed to conduct business. Conflicts between the state socialist ideology of centralisation and the operational needs of transportation within commerce, construction and industry took on many forms. For example the enterprises transferred only old trucks to the service companies. The paper shows that the theorem of the 'economies of scale' that was derived in the process industries does not apply in the transportation trade.

Key words: trucks, outsourcing, Soviet-Union, GDR, cargo transport

Introduction

In the 1950s, the Soviet Union put the issue of truck cargo transport on the political agenda. Trucking was at the top of the policy agenda at the 20th Communist Party convention in 1956. Party leader Nikita Khrushchev stated that the truck fleets in Moscow were highly fragmented and declared that there were enormous hidden truck capacities among Moscow's state-owned enterprises that operated own fleets of trucks.¹ All that the state socialists had to do was withdraw trucks from enterprises and concentrate them into separate transport service enterprises. State socialist planners claimed that truck capacity would be used more efficiently in large-scale enterprises than in small enterprises. They envisaged large-scale truck enterprises of between 200 to 500 trucks, thereby leading to so-called 'economies of scale' and resulting in low unit costs in the transportation trade. This saving is established theory in capitalist societies and explains the rapid decrease of unit costs when the scale of the factory expands – at least in the capital-intensive process industries.² State socialist politicians declared this 'law' as central to their Marxist-Leninist ideology.³ They observed that in many private sectors, small-scale production persisted, for example, in the construction industry. But the tendency toward large-scale production was regarded as inevitable. The state socialists sought to connect this theory to reality. They assumed therefore that this law would also apply to service industries such as transportation, but they did not fully consider the possible results.

In the 1950s, a policy aimed at concentrating truck enterprises was put into action in Moscow, where 50% of the Soviet Union's truck fleet was based. Experiments were conducted on concentrating 1,000 trucks into parking yards.⁴ The Soviet Union imposed its transport policy on all its East Bloc satellite states; the German Democratic Republic (GDR) is the only case examined here.

In the GDR the truck policy was conducted in the following frame. Traffic policy concerning motorised vehicles was executed by the “Kraftverkehr” department within the transport ministry. As a second level of administration, the GDR introduced 15 regions (Bezirke) where offices for motorised vehicles (Bezirksdirektion Kraftverkehr – BDK) were located and which reported to the Kraftverkehr department of the transport ministry. When the so-called ‘Kombinat’ trust structures were established in the traffic sector between 1968 and 1972, the regional offices were dissolved and their tasks transferred to the Kombinats.⁵

Parallel to this structure, the government established Transport Committees at the central and regional levels. In the central committee, 48 ministry representatives, dispatched from the numerous industry sections and agriculture, had a seat.⁶ The regional administration, railway, mass transit enterprises and nationally-owned truck enterprises were represented in the regional committees. The regional committees approved programs to meet the demand for transport capacity for the upcoming year, which the central transport committee consolidated into a national program.⁷

The GDR’s economic and traffic policy was conducted in a complex environment. Unlike in the Soviet Union, in the GDR there were three different types of enterprise: private, cooperative and nationally-owned (volkseigene Betriebe – VEB). In addition, some enterprises were led by the central branch ministries in Berlin while others were under the control of one of the 15 regions; conflicts could thus arise between the central and the regional level. This was the case for the truck enterprises. The paper focuses on nationally-owned enterprises because they represented the major share; it distinguishes enterprises of production, construction and commerce because these sectors have special conditions of delivery that were also taken into account by the traffic policy. The outsourcing policy in the GDR referred exclusively to nationally-owned enterprises.

The paper follows János Kornai and Martin Kragh in identifying ‘shortage’ as a defining feature of state socialist economics. To overcome the bottlenecks in the procurement of material, the enterprises had to procure material from black market sources through special agents, or turn to corruption. According to Kragh, the idea of a shortage economy “allows scholars of command economics to organise observed phenomena, such as delays, production stoppages, spoilage, low productivity, and inefficiency, into a single coherent framework.”⁸ The traffic policy in the GDR followed the general lines of the policy. As pointed out by André Steiner, the 1950s was an era when there was close adherence to the Soviet Union’s centralising concepts.⁹ When the Soviet Union started its campaign against the enterprise truck fleets in 1955, the GDR followed. The same happened when the Soviet Union introduced the 7-year-plan in 1958; the GDR put into place such a plan in 1959. This economic policy created a crisis in 1960/61. In 1962, the GDR passed many economic decisions from the central level to enterprises and to the regional level (“New economic policy”). Because this new policy did not generate better economic results, in 1968, the economic policy reverted to centralisation. It was during this period that the Kombinats, characterised by their directors’ strong leadership, were introduced in the trucking sector. In each region, one Kombinat was introduced to lead all the VEB truck companies in the district towns. The directors of the VEB truck enterprises had no decision-making authority at the Kombinat level; their function was limited to giving advice.¹⁰

The paper focuses solely on truck transport in the German Democratic Republic; it does not attempt to advance existing knowledge about the co-operation between truck enterprises and the railway in the transport chain of packaged goods.¹¹ The paper is based on transport journals that took up the issue of GDR transport policy; many papers on the Soviet Union’s transport policy were published in German. The paper also draws on contemporary PhD thesis research on GDR transport policy from Dresden’s traffic university (Hochschule für Verkehrswesen) and on state archive sources in Berlin and Brandenburg. These archives contain the decisions of the regional councils concerning traffic policy, the minutes of the regional transport committees in Berlin and Frankfurt (Oder), reports by the forwarder enterprises (‘VEB Kraftverkehr’) and the reports issued by the communist site groups in the forwarder enterprises (‘VEB Kraftverkehr’). In the Federal Archive of Germany in Berlin, use was made, of the minutes of weekly

meetings between leading officials of the transport ministry, the commerce ministry and the construction industry. A few files in the Kraftverkehr department of the transport ministry were also useful.

There have already been several studies of the railway system in the GDR.¹² But the issue of truck transport in the East Bloc has not drawn much scholarly attention. In 1978 and in 1980, Bogdan Mieczkowski published volumes on East European transport, focussing on roads, trains and cars. One chapter deals with agricultural transport in Poland. In 1999 Reinhold Bauer published a study of the automobile industry in the GDR but avoided the subject of truck transport. In his 2008 study ‘Cars for Comrades’, Lewis Siegelbaum pointed out the Soviet Union’s lack of road infrastructure and outlined the debate on ‘roadlessness’. This implies that long distance transport by truck played only a marginal role in the Soviet Union and that truck transport was conducted only in the vicinity of major cities. Indeed, in the 1950s, about half the country’s trucks were concentrated in the capital of Moscow. Siegelbaum’s ‘Little Tsars of the Road’ comes closest to any study of trucking in the Soviet orbit, but its focus is sixty years of public images of truck drivers in the Soviet Union.¹³

Two Modes of Truck Transport and Outsourcing

The tensions between both two dominant modes of truck transport, the forwarder truck enterprises and the company fleets, are not widely known. To deliver merchandise to a customer, a company had – besides postal services – two choices: either give a transport order to a forwarder or else transport the goods by one’s own trucks (transport ‘on own account’). If one compares only the cost of transportation, in many cases – at least for long distance - transport by a forwarder is cheaper than transport by one’s own fleet because the forwarder can make better use of truck capacity by bundling several orders with a similar destination into one shipment. This is something that state socialist planners in the GDR transport ministry

underscored in a long series of statements from 1958 to 1989. But, as demonstrated by the broad debate during the 1920s concerning the economic advantages a company can achieve using own truck fleets, there are other benefits to using one's own fleet.¹⁴ Many of these advantages result from the close ties between production and transportation, which also applied to enterprises in state socialist countries. In addition, the enterprises don't just take the isolated cost of transport into account but also the gains effected by immediate delivery.¹⁵ There are seven main advantages to 'own trucking':

(1) The most important advantage is the immediate availability of vehicles compared to having to engage a forwarder, i.e. the reduction of transaction costs to issue an order to a forwarder and to draw up a contract. No time was consumed in having to commission a forwarder if, for example, a spare part for production is needed urgently and can be procured by one's own truck at a spare parts warehouse.

(2) For short-term planning in production enterprises, the exact time schedule for employing a truck cannot be foreseen. This planning problem was also recognized in the GDR.¹⁶ Trucks had to be available on standby for short-dated express deliveries or for delayed deliveries at night. If the company were to commission a forwarder truck company, it would be obliged to pay for the idle time. In comparing the cost of both choices, one must thus consider the costs for waiting. Another situation arose if a company delivered a fixed quantity according to a regular time schedule, for example, a full truck load every Friday. In this case, it is more economical to employ a forwarder.

(3) Some transport orders are urgent, for example, a spare part for a machine, but take up only a small part of the loading capacity. The state socialist trucking enterprises were not interested in such orders because they did not meet its objective to fully load a truck.

(4) Customer loyalty is created when deliveries are handled by the same driver. Mutual trust is created, enabling the driver to have access to a customer's warehouse or yard. For example, in the case of milk collection directly from a farm, a trusted, familiar driver will be given access to the yard. In 1961, the VEB

Guterkraftverkehr Berlin complained that it faced alternating drivers and could not employ a permanent staff.¹⁷

(5) Company vehicles (including the driver) bear the company's logo, resulting in advertising in motion on the streets when they make deliveries. This marketing function of delivery operations was important for breweries and food-producing factories in establishing their brands. This effect is lost when delivery is carried out by forwarders which bear forwarders' logos. One can assume that this marketing function did not apply in state socialist countries that are characterised by a shortage of goods. In companies, procurement constituted the bottleneck, not the selling of goods. But surprisingly, marking up a delivery truck with a brand was also an issue in state socialist transport policy. As an incentive to outsource, the transport ministry offered food factories the opportunity to continue to advertise on their trucks if they would transfer the vehicles to the VEB trucking enterprises.¹⁸

(6) Delivery trips also encompass customer service. The driver can give the customer advice on how to use the goods they deliver and could sometimes help with setting up displays. This kind of customer service cannot be offered by drivers of forwarder trucks who are employed to deliver a broad variety of merchandise to alternating customers.

(7) Transportation in the commerce sector is not an operation that is strictly limited to driving a truck from the wholesale company to a shop; instead it also requires special knowledge concerning the customers, as the head of the GDR commerce transport pointed out.¹⁹ What are the conditions for delivering merchandise to the shops? Where can a truck stop and unload cargo, in the front or in the yard? Are cranes or ramps available? Do the bakery shops expect three daily deliveries of fresh biscuits? Perishable goods for grocery stores require cooled transport chains and quick response to demand. Here, experienced drivers are needed; they can't be replaced by the alternating drivers of a forwarder.

The paper explores the struggle of the GDR transport department against company truck fleets from 1957 and its attempt to transfer company fleets to truck forwarder enterprises. Interpreted with the modern terminology of management science, the state socialist planners did nothing other than to

'outsource' (is this effectively the same as 'consolidation' – no!?) transport services from the nationally-owned enterprises in industry, construction and commerce. But they did this 30 years before Western management started to outsource and they used a more radical approach than their Western counterparts. All of this occurred instinctively without any theoretical insight into business processes.

Rapid growth and high earnings during the years of the economic miracle from 1950 to 1980 enabled the well-unionised work force of the automobile industry in the West to implement high company tariffs. Management balanced high costs and affordable end products. Outsourcing production and logistics to low-wage sectors and low-wage countries served as a way out of the cost trap. The transfer of warehouse operations and production supply processes to low-wage employees of the logistics trade lowered costs. This was the starting point for the development of just-in-time-delivery and the outsourcing of parts production to low-wage countries in the 1980s.²⁰

When the outsourcing movement in Western management started in the 1980s, logistics services were outsourced as well as computing and administration services such as billing. But the outsourcing movement in Western management was only partial and not as radical as the state socialist approach to outsourcing. Western management acted very cautiously. Before a service was outsourced, business partners entered into long negotiations. The advantages and risks of outsourcing were precisely described in comprehensive contracts. Reference enterprises were visited to assure management. Western management placed outsourcing contracts only with esteemed enterprises like IBM or Siemens and had no interest in bargaining with a low performance company. Management was eager to retain control over its core processes by outsourcing, thus, only activities not closely tied to core processes could be outsourced.²¹ Applied to construction sites, this meant that excavation and delivery of pre-cast segments stayed under the control of the construction company. Also in the commerce segment, shop delivery was to remain under the control of wholesale enterprises. Western outsourcing practices were put into place within the context of an economy under competition. When a forwarder company did not operate to the satisfaction of its customer, this customer could transfer the transport orders to another company. But this kind of

reaction to bad service was not possible in a centrally organized economy where the local forwarder held a monopoly.

In the West, it was left to the discretion of management to what extent it employed trucking services. Some enterprises operated their own fleets, some relied on external forwarders, while yet others used mixed models. In the competition economies of the West, enterprises could find transport service enterprises that offered a standard or even a high-quality of delivery service. But this was not the case in state socialist economies which were characterized by shortages and a low degree of labour division. Enterprises in the East Bloc could not access a reliable network of suppliers.²² Thus, they developed internal supplier relations by vertical integration ('Kombinat'). As one element of vertical integration, they also employed own truck fleets to evade the trap of poor service by the socialist trucking enterprises. In statements that they issued, GDR transport ministry officials always took note of the large share that company fleets had in the GDR truck transport realm and interpreted this as 'disproportionate'. They were not aware that this was a consequence of the shortage economy.²³

Truck Fleet Policy in the German Democratic Republic

When the state socialists came to power in East Germany in 1945, they nationalized parts of the industry that were termed as 'nationally-owned'. But many small and medium sized plants remained as private property until 1970. The state socialists had to run the railway system and mass transit municipal enterprises. Both were large-scale enterprises conforming to the ideology of Marxism-Leninism.²⁴ But this was not the case with cargo transport by trucks. There were many small private truck transport enterprises and also small fleets of trucks in nationally-owned enterprises.

In the 1950s the transport ministry started to establish large-scale, nationally-owned service enterprises for truck transport by extracting some trucks from the nationally-owned enterprises and transferring them to the new nationally-owned truck enterprises. These enterprises were called VEB Guterkraftverkehr (nationally-owned enterprises for truck transport) or VEB Kraftverkehr (nationally-owned enterprises for motorized transport, including coaches and taxis). In 1956 the deputy traffic minister, Valdemar Winkler, proclaimed – in a pioneering article on traffic policy – the start of “socialist large-scale production” in the trucking business.²⁵ To support this policy, state socialist planners exerted pressure on owners of private truck transport enterprises to join the VEB and to transfer their trucks by reducing the supply of fuel, batteries and tires to the private sector. About 20 per cent of the private enterprises signed co-operation agreements with the VEB. Despite the pressure, private enterprises held their position and transported about 70 million tons each year between 1950 and 1970.²⁶

The process of outsourcing developed gradually, beginning in 1957. Surprisingly, there was no top-level decision that initiated this process. Neither the Politburo, nor the Council of Ministers, nor a party conference gave the signal to start outsourcing. There is no keynote speech by party leader Walter Ulbricht espousing outsourcing. Only the ministry of transport can be identified as a player in this matter. When the Council of Ministers approved the 7-year-plan for 1959 to 1965, the traffic section offered weak support for outsourcing efforts, demanding only that the current transfer of truck capacity from enterprises to the truck service enterprises should be continued to “improve efficiency”. The implementation guidelines of the 7-year-plan on 3 November 1959 clarified the details of the transfer. Evaluating the growth rates of the 7-year-plan, Siegfried Nobis, an official of the transport ministry, estimated that 47,000 tons of truck capacity had to be transferred by 1965.²⁷

The transport ministry formulated and executed the policy of outsourcing. It spotted the high share of transports by enterprise fleets (nearly twice as high as the VEB truck transport share) and tried to change the balance. As early as 1956 the transportation ministry exerted pressure on enterprises, including centrally-led enterprises, to procure new trucks only if their propositions were approved by the regional

councils and the regional offices for motorised vehicles (BDK). The ministry sent a circular to the branch ministries and regional councils and also signed a research contract with Dresden's traffic university to develop measures to counter the truck fleets.²⁸ In 1957, it issued a survey to wholesale enterprises to gauge their attitudes towards outsourcing their fleets.²⁹ Also in 1957, it persuaded the region of Leipzig to conduct experiments in outsourcing among construction enterprises. The region's traffic planner did not select a large, powerful, centrally led construction company in Leipzig, but instead small, regionally-led, rural construction enterprises. These unfortunate enterprises were deprived of their fleets to the extent that they could only transport meals for their workers.³⁰ The outsourcing policy of the transport ministry was addressed primarily to the regionally-led industries to avoid resistance by the central ministries in Berlin. A report by the VEB Kraftverkehr Zwickau in 1960 showed the major share of the transferred trucks originated from regionally-led industries.³¹ To support its policy, in 1960, the Kraftverkehr department arranged two meetings for the regional traffic officials and, on 11 January 1960, it sent a circular to the regional councils explaining the next steps to implement outsourcing.³²

In a long series of statements from the 1950s and 1960s officials of the transport ministry promoted outsourcing in the transport journals of the 'transpress' publisher in Berlin. Their campaign started at the end of 1957 when they asked: "Are the truck fleets bloated ?" in response to an article on outsourcing in the region of Leipzig.³³ Earlier, at a transport conference in 1957, the issue of outsourcing had not even been mentioned.³⁴ The officials adopted Khrushchev's view of highly fragmented truck fleets and accused nationally-owned enterprises of insufficiently using their truck capacity. They reported on the supposed economic advantages of large-scale truck enterprises where capacity could be used fully.³⁵ The advantages of operating large-scale transport enterprises were given as follows:

- High productivity. By bundling a large number of transport orders, truck capacity could be used more efficiently. Published statistical data suggested that the transport performance (ton-km) was higher for each truck in the VEB than for trucks in enterprise fleets.
- Fewer kilometers driven by trucks without load (dead mileage).

- Central facilities for repair and maintenance could operate in an industrial manner. Assembly line methods could be applied.
- Taking advantage of technical progress, for example, punch card technology for administration.
- Simplified administrative procedures using standard methods on more trucks and drivers.

At first glance, this concept of large-scale trucking enterprises seems to be convincing. But in an economy characterised by shortages, the large-scale trucking enterprises fall short of fully operational conditions and could only offer poor service. The traffic policies with regard to truck transport differed in East and West Germany. While the transport ministry of West Germany fought against the forwarder truck enterprises leaving company fleets untouched,³⁶ the transport ministry of the GDR fought against the company fleets and favored the forwarder truck enterprises.

The legal and political basis for outsourcing remained shaky with only weak support from the GDR's political apparatus. When, in 1964, the head of the Kraftverkehr department, Alfred Seeling, published an article on the state of outsourcing, he was only able to refer to the implementation rule on 3 November 1959 – five years previously – as the sole legal basis for outsourcing.³⁷ There were no acclamations for outsourcing at the party conferences and no keynote speeches by Walter Ulbricht to promote outsourcing. The advocates of outsourcing could thus not count on political support. Instead, they emphasised the supposed economic advantages of outsourcing by referred to Moscow's "shining" example. In 1959, a delegation of the transport ministry visited Moscow to study outsourcing in Moscow's construction industry.³⁸

Is there any sense in which you could say that the ideologically driven decision to outsource was irrational?

Can you help readers to distinguish between nationlisation, centralisation, aggregation / consolidation, modernity, economies of scale, and outsourcing? (Economies of scale are described in the introduction!)

Outsourcing is described on page 9. The paper cannot give an explanation for general economic terms that are not used here.).

The Resistance of Enterprises to Outsourcing

The transfer of truck capacity that the 7-year-plan required met with resistance from the branch ministries of commerce and construction. Already the implementing rule on 3 November 1959 exempted the commerce sector from such a transfer and demanded the establishment of working groups on a regional level to explore the issue. Moreover, the transfer in the construction sector was subject to “special agreements” between the transport ministry and the construction ministry which left the implementing rule unexplained.³⁹ In all of the other industrial sectors, the implementation guidelines for the transfer did not call for any restrictions.

The nationally-owned production enterprises did not want to bow to the idea of VEB truck enterprises. They fought hard against the state socialist transport department to keep their trucks for their own operations. The enterprises emphasized the close ties between production and transportation and warned that production would have to be reduced if trucks were unavailable exactly when needed. Some of these objections were published in the trade journals. When, in 1957, the journal *Der Deutsche Strassenverkehr* declared the advantages of outsourcing truck traffic, heads of company fleets submitted a barrage of letters to the editor.⁴⁰ The deputy minister of transport, Volkmar Winkler, evaluated the correspondence and was astonished to discover that the arguments put forth by the enterprise heads were similar to those espoused by the capitalist world, which was governed by “brutal competition”. According to the letters, the advantages of operating own fleets included independent dispatch, special knowledge of packing, and trained drivers with know-how regarding the special conditions of the sector.⁴¹ The fleet head of the chain works in Weissenfels expressed a widely held view when he wrote that industry would support outsourcing if the VEB truck transport could guarantee on-time delivery. Heinz Bremer, head of the VEB

truck company in Potsdam, reported on the objections to outsourcing: bad experiences with VEB truck enterprises, the VEB's inability to respond in short terms, the drivers' lack of knowledge of the sector.⁴²

It was not easy to motivate enterprises to relinquish their trucks. The enterprises were big and powerful if they were led by central ministries in Berlin.⁴³ The ministries feared reduced industrial output due to outsourcing and did not want to follow the lead of regionally-steered VEB truck enterprises. The production enterprises developed different forms of resistance. Many of the trucks that enterprises were obliged to transfer to the new VEB truck enterprises were selected from trucks that weren't even operational and might as well have been consigned to a scrap heap. Many truck drivers remained with their company where they got higher wages such that the transport services did not have enough qualified drivers. Furthermore, the truck repair and maintenance facilities remained with the enterprises.⁴⁴

Most notable is the commerce sector's approach in defending its fleets. To secure the supply for shops and restaurants, wholesale enterprises operated their own truck fleets with experienced drivers who were familiar with the commerce sector's special conditions. Drivers were permanently assigned to specific delivery tours for which they also assumed responsibility. The quality of supply was politically sensitive because people blamed empty shelves on the communist party. In one episode, during Easter 1959, shops on Stalin Avenue – East Berlin's showcase street – faced a shortage of milk. The party press *Neues Deutschland* commented bitterly that the situation did no credit to socialism.⁴⁵

To counter objections about operating their own fleets, wholesale enterprises invented a new kind of enterprise, namely "collective commerce transport" (Transportgemeinschaft Handel – TGH). In July of 1959, this new kind of enterprise was approved at the conference of commerce that was jointly arranged by the ministry of commerce and the economic commission of the Politburo. The conference approved a fundamental paper on the new orientation of the commerce sector.⁴⁶ To overcome the fragmented structure of the wholesale enterprises – the same argument as in the trucking business – one wholesale enterprise for industrial consumer goods was to be established in each region, while wholesale enterprises for grocery goods and for fruit and fresh vegetables were to be established in each district town

(Kreisstadt). The enterprises of collective commerce transport were to support this new structure. After conducting pilot projects in the regions of Dresden and Leipzig, this new structure was inaugurated in September 1959 in the region of Schwerin.⁴⁷

The enterprises' collective commerce transport conjoined transport across various groups of merchandise. The attribution of 'collective' indicates that these enterprises were using their truck capacity fully by bundling transports. The new enterprises were decentralised. In the 1960s, every district town established its own collective commerce transport enterprise. The central office of wholesale enterprises in Berlin, which strictly conducted the collective commerce transport enterprises, served as the umbrella organization. They were not low performance enterprises but held a strong position in the GDR, operating with a staff of 11,000 workers and running their own network of repair shops and spare parts warehouses.⁴⁸ They even insisted on taking over remaining transports of the nationally-owned truck enterprises within the commerce sector. For example, even as late as 1967, the VEB Gutekraftverkehr Berlin delivered milk bottles from the dairies to the shops in Berlin using 90 trucks.⁴⁹

As demonstrated by the exemption clause in the implementation rule on 3 November 1959, the officials in the commerce ministry feared empty shelves in the shops. To secure the supply in the commercial sector, the transport ministry grudgingly accepted collective commerce transport as a new kind of transport even though it didn't correspond to the state socialist ideal of nationally-owned truck enterprises. In 1963, the ministries of commerce and transport signed an agreement that limited collective commerce transport activities, as well as that of nationally-owned cargo transport.⁵⁰

Poorly performing regionally-led VEB Truck Enterprises

The VEB truck enterprises continued to be a "showcase" of the shortage economy. They started in the 1950s, when they emerged from very modest beginnings marked by a scarcity both of trucks and yard

space. The trucks were old and workers earned low wages, leading the best to drift toward more lucrative employment. The nationally-owned truck enterprises didn't have the necessary capacity for repair and maintenance work. Archival sources show that in the 1950s and 1960s there was a considerable shortage of trucks, parking space, workers and repair and maintenance facilities in the nationally-owned truck enterprises. Accordingly, truck enterprises could offer only poor quality service.⁵¹

Compared to the nationally-owned enterprises in industry, construction and commerce, the VEB truck enterprises were low-performance enterprises and lacked investment. Their revenues were low and some accrued losses. It was thus difficult for them to save for investment in new trucks⁵² ("extended reproduction"), whereas the nationally-owned enterprises of industry, construction and commerce turned profits and were able to expand their truck fleet. They could select old trucks to be transferred to the nationally-owned truck enterprises, but buy new ones to compensate. Between 1960 and 1975, the expansion rate for truck fleets in the industry, construction and commerce enterprises was 244%. This rate was even higher than in the sector of nationally-owned truck enterprises, which grew at 184%.⁵³

The poor performance of the VEB truck enterprises could be explained by their decentralised leadership. They were not directly led by the transport ministry but by regional councils which did not make sufficient investments in this sector. As the minutes of the regional council's decisions reveal, the regions did not have a strong interest in VEB truck enterprises. Thus, the regions distributed the investment funds received from the transport ministry to projects with higher priority, such as road construction and mass transit enterprises. Had the VEB truck enterprises been directly led by the transport ministry, the latter could have authorised strong investments in the VEB truck enterprises.

Many archival sources show a great shortage of spare parts to the extent that damaged trucks could not be used and remained idle. The spare parts shortage in the truck sector was an example *par excellence* of the GDR's shortage economy; this phenomenon could in fact be observed in all sectors and

led to a considerable decrease in the productivity of machine investments.⁵⁴ In the truck sector the shortages were aggravated by the decentralised structure of leadership of the VEB truck enterprises. Instead of pursuing a strategic approach and simplifying maintenance by procuring trucks for the nationwide fleet from a limited range of models – an obvious approach in a centrally planned economy – the nationally-owned truck enterprises extracted hundreds of different models from the enterprises in their region. Maintenance was labour-intensive and nearly impossible. Many spare parts had to be locally produced in maintenance shops. Achieving the productivity effects of large-scale operations was not possible.

The Disadvantages of Centralisation in the Transport Trade

The law of economies of scale was derived in industries such as steelworks or electrical power generation. In these cases, production was concentrated at one geographical point. But truck transport is conducted between enterprises that are geographically scattered. So the question arises as to whether this law is applicable to the transportation industry. The planners in the GDR transport ministry found that the concentration of trucks in large parking yards increased the number of kilometers driven by trucks without a load. This, of course, negates the goal of reducing dead mileage in large-scale truck enterprises: In the morning empty trucks had to drive from the yard to the first customer to pick up the first load. The more the yards were centralised, the longer – on average – was the distance to the first customer. Trucks returning to the yard in the evening usually had no return load. The first great centralised truck yard was built in Karl-Marx-Stadt between 1957 and 1959. It became a showcase for visiting international delegations. A second centralised truck yard, however, was never built. The planning for a central yard in Magdeburg was stopped in 1963 because it caused too much dead mileage.⁵⁵

Curiously, at the top level of policy making, the Council of Ministers warned about its own state socialist principle of centralisation. In 1962, it advised not to take the principle of centralisation of truck fleets too seriously in order to reduce dead mileage.⁵⁶ To avoid the drawbacks for central locations, in the 1960s, the VEB truck enterprises redirected trucks to the industrial, construction and commercial enterprises from where they had originally come.⁵⁷ Many of the returned trucks remained in the ownership of the VEB truck enterprises which also decided how to employ the trucks. In 1965, there were already 410 decentralised service company locations situated at the industrial, construction and commercial plants.⁵⁸ The nationally-owned truck company in Potsdam employed specially trained dispatchers to direct truck assignments in the fields of industry, construction and commerce.⁵⁹ In this way, the VEB truck enterprises operated in the same way as former company fleets. They were small, customised fleets for enterprises that could not achieve the reduction of unit costs of large-scale operations. In 1978, the former transport minister Erwin Kramer confessed that in industry, construction and commerce there might be special circumstances whereby a fleet of trucks is necessary even when truck capacity is only partially used.⁶⁰

Specialisation and Single-Shift Regimes Impeded Full Capacity Utilisation

In the 1960s many observers reported on increased truck specialisation for special demands: flat-bed vehicles for heavy loads, thermo-isolated trucks for food transport, tipper trucks for construction material, trucks with hydraulic loading devices, trucks with attached cranes, and trucks for transporting liquids.⁶¹ This specialisation calls into question an assumption implicit in the law of economies of scale: load is not a homogeneous entity such that different trucks can substitute for one another. A thermo-isolated truck cannot carry construction material and a flat-bed truck cannot transport frozen food. In fact, the more the fleets were specialised, the less the trucks could be substituted. Upon fulfilling a transport order, the truck

cannot get a return load for its way back. Rather, it has to return empty. A tanker truck arriving at a dairy processing facility with a full tank of milk, for example, would have to return to the farm empty.⁶² Indeed, specialisation results in a higher share of dead mileage.

Figure 1: Milk tanker truck in Berlin.

The party newspaper *Neues Deutschland* estimated that by 1961, 25 per cent of all milk in the GDR would be transported via tanker trucks. This share was predicted to rise to 90 per cent in 1965.⁶³ A tanker truck, however, is not a general purpose vehicle and can be used for nothing other than the transportation of milk.⁶⁴ So, in various specialised fleets, the economies of scale law cannot apply. The expected reduction of unit costs of large-scale enterprises vanish. And due to the growing specialisation of trucks, the share of dead mileage in the truck fleets of the GDR rose in the 1960s and 1970s.⁶⁵ This was bleak outcome for state socialist planners who had advocated large-scale enterprises with better utilisation of transport space. Seasonal “transport campaigns” also led to an increase of dead mileage because transport enterprises had to honour only the specific goal of the campaign. During such campaigns, when a truck, for example, transported potatoes from the fields to the city, it had to return immediately to the fields for a new load. Campaigns were held on the occasion of the autumn harvest and the Leipzig fair in Spring.⁶⁶ Every year, the summer meetings of the central Transport Committee issued alerts to be prepared for the autumn harvest. VEB Auto Trans Berlin complained that the campaigns would result in excessive dead mileage and thus diminish capacity utilisation.⁶⁷

Another implicit assumption of the law of economies of scale is the continuous utilisation of capacity over time, such as an electric power generator operating around the clock. Only when this

condition is met is economic facility use possible. According to the sources examined for the entire time period from 1950 to 1989, all planners of the regional and central Transport Committees and in the nationally-owned truck enterprises, demanded a second shift on business days as well as work on weekends. In its meeting on 22 August 1969, the central Transport Committee demanded the introduction of a three-shift regime for all truck enterprises to counter the backwardness of the railway which had a queue of unloaded wagons with 50,000 tons of packaged goods.⁶⁸ But these demands remained declarations and were never implemented. Only in rare cases could a two-shift regime be achieved under the conditions of a scarce labour market. Production and commerce enterprises refused again and again to employ a work force outside of the day shift to handle cargo transshipments. The head of the VEB Kraftverkehr Frankfurt (Oder) reported that in the first quarter of 1983 each truck operated only 7.7 hours per day on average.⁶⁹ After the GDR introduced the 5-day-labour week in August 1967, few workers were inclined to also work on weekends. The communist site group of VEB Kraftverkehr Frankfurt (Oder) reported to the regional head of the Communist Party in 1982 that seven workers had refused to work on weekends.⁷⁰

The 1960 Transport Crisis and the Revision of Transport Policy

In 1960 a transport crisis coincided with the general crisis in the GDR economy. The VEB truck enterprises' poor transport services caused a shipments crisis in the construction sector. Construction sites in Berlin and Leipzig fell idle because transport services failed. The trucking company VEB Guterverkehr Berlin conducted all transport for the construction industry in Berlin at the following locations: plants for pre-cast elements, bricks and mortar, the VEB enterprise for underground work, and construction sites. According to VEB Guterverkehr Berlin, it was unable to co-ordinate the transport of pre-cast segments with loading and unloading devices in a timely manner, resulting in long, unproductive waiting times (Figure 2). The same

coordination problem arose in the transport of excavators with flat-bed trucks. In the first half of February 1960, more than 1,700 hours of waiting time accrued. The VEB Guterverkehr Berlin had to pay high contractual penalties for delayed delivery fulfillment.⁷¹ A political scandal ensued because the combination of construction with pre-cast segments and transport by nationally-owned truck enterprises should have demonstrated the superiority of socialism over capitalism. Party leader Walter Ulbricht was upset.⁷² The VEB Underground Work managed to get its trucks returned to its own fleet. The Kraftverkehr department in the transport ministry admonished the VEB Kraftverkehr enterprises and insisted on improving the quality of delivery in the construction trade and tailoring it to the peculiarities of this sector. It wrote a bitter letter to the regional administration of Berlin complaining of the “permanent weakness” of VEB Guterkraftverkehr Berlin and demanding more resources for this company to improve its performance.⁷³ The council of Berlin responded to the pressure and split the construction-based transports of the VEB Guterkraftverkehr Berlin into a separate company, the VEB Bautransporte Berlin.

Figure 2: Transport of pre-cast elements in Berlin.

According to an analysis by Herbert Krunau, the VEB truck enterprises were bound by a system of goals which the centralised state plan outlined. This caused problems in co-operation with the construction enterprises: the overall objective was to transport as much as possible in terms of tons and of ton-kilometres. Enterprises thus chose only orders that conformed to these goals. Short-notice orders to transport cargo comprising less than a truck load were deemed less important.⁷⁴

Confronted by the disastrous effects of their transport policy, the transport ministry relaxed its policy in the 1960s. The planned transfer of nearly 50,000 tons worth of trucks from the enterprises to the nationally-owned truck transport enterprises – as the 7-year-plan of 1959 demanded – was halted. The ministries of construction and transport signed an agreement on 9 March 1960 to the effect that construction enterprises could govern their own fleets in connection with excavations and pre-cast segments, whereas the nationally-owned truck enterprises were to transport mass material like sand and gravel. As in the commerce department, the agreement delegated the decision-making on outsourcing to working groups on the regional level.⁷⁵ The state socialist proponents in the transport ministry for nationally-owned truck enterprises had to acknowledge that the enterprises could keep their truck fleets as long as the nationally-owned cargo transport system was unable to meet full operational conditions.⁷⁶ While the service provided by in VEB trucking enterprises was beset by quality problems due to alternating drivers, in 1965 the Kraftverkehr department adopted a “same driver” feature to ensure quality delivery services when it offered the food producing industry an outsourcing contract.⁷⁷

The nationally-owned truck enterprises were concentrated in the 1960s. Their number dropped from 182 in 1955 to 80 in 1970. In the 1960s their scope of tasks was reduced and adjusted to the requests of their customers for specially trained dispatchers. But they still sought expansion and demanded that the

nationally-owned enterprises of industry, construction and commerce should reduce their fleets. The nationally-owned truck company in Potsdam accused the Potsdam brewery of conducting illegal truck transport. And the gardening company Werder expanded its fleet in an “alarming manner”.⁷⁸

Between 1968 and 1972, in every region, all nationally-owned truck enterprises were led by the trust structure ‘Kombinat’, which could include also taxis and buses for mass transit. State socialist planners could proudly report that the Berlin-based Kombinat ‘Autotrans’ had joined branch enterprises and had acquired nearly 2,000 trucks and more than 1,000 trailers.⁷⁹ The Kombinat VEB Kraftverkehr Frankfurt (Oder) also encompassed mass transit, taxis and a driving school; in 1982, it consisted of 19 divisions (Table 1). The data are drawn from a report of the communist site group.⁸⁰ One cannot imagine that this combination of different divisions would result in considerable productivity gains.

Table 1: Divisions of VEB Kraftverkehr Frankfurt.

Conclusion

The state socialist dream of large-scale truck enterprises could not be turned into a reality. The expected gains in productivity hoped for by the state socialists did not materialise. There were too many obstacles. Whereas Western management carefully studied conditions necessary for outsourcing transportation services, state socialist planners had no idea of business processes, and about how production and transportation were linked. Besides complex business processes, there were other obstacles that hampered

full capacity utilisation of large truck fleets: limited investments in the traffic sector (which impeded the supply of spare parts), growing specialization of the fleets (not foreseen by state socialist planners), and the limits of a one-shift work regime in a society with a tight labour market. Centrally-planned restrictions on the number of truck models would have simplified maintenance work. The large scale Kombinats were only a formal centralisation of different branches. The supply of transport services remained local at the great production enterprises which operated customised small fleets. In the conflict between the state socialist principle of centralisation and operational needs, the production enterprises prevailed. The state socialist leaders' vision of a secular trend toward large-scale enterprises in all sectors of society was not supported by historical developments in the capitalist world. There is symbiotic coexistence of large- and small-scale businesses, for example, in the franchise sectors.⁸¹

Acknowledgments

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Notes:

¹ Nikita Chruschtschow, *Rechenschaftsbericht des Zentralkomitees der KPdSU an den 20. Parteitag* (Berlin, Dietz, 1956), 60.

² Alfred Chandler, *Scale and Scope: The Dynamics of Industrial Capitalism. A History 1880s – 1940s* (Harvard, Harvard University Press, 1990). Chandler stated on page 22 that in such labor-intensive manufacturing industries as apparel, textiles, lumber, furniture and printing, the decrease in unit costs was only marginal.

³ For the USSR, see Andrei Yudanov, 'USSR: Large Enterprises in the USSR – The Functional Disorder', in *Big Business and the Wealth of Nations*, edited by Alfred Chandler, Franco Amatori, and Takashi Hikino (Cambridge, MA, Harvard

University Press, 1999), 395–432. Helmut Fleischer (ed.), *Short Handbook of Communist Ideology: Synopsis of the Osnovy Marksizma-Leninizma* (Dordrecht, Reidel, 1965). *Osnovy marksizma-leninizma* was published 1960 in Moscow and was translated into nearly all European languages by the local national communist parties. German edition: *Grundlagen des Marxismus-Leninismus. Lehrbuch*, edited by Horst Ullrich (Berlin, Dietz, 1960), 650-660.

⁴ Herbert Krunau, 'Kraftverkehr und Bauwesen. Zur Auswertung eines Erfahrungsaustausches in Moskau', *Der Verkehrspraktiker*, 3:3 (1960), 10-14; Inbert Goermann, 'Zur Reorganisation des Kraftverkehrs in Moskau', *Der Verkehrspraktiker*, 2:6 (1959), 15-17; Wolfgang Bober, 'Werkverkehr und gewerblicher Güterverkehr in der UDSSR', *Der Verkehrspraktiker*, 1:2 (1958), 13-15. Whether the outsourcing in Moscow resulted in a deterioration of transport services remains unknown and is left to further research.

⁵ Heinz Wolf, 'Ergebnisse und Erfahrungen bei der Kombinatsbildung im Kraftverkehr – dargestellt am VEB Kombinat Auto Trans Berlin', *DDR Verkehr*, 3:3 (1970), 193-196.

⁶ Klaus Otto, *Entwicklung und Bedeutung der Transportausschüsse und ihrer Arbeitsorgane zur Festigung des einheitlichen Systems des Sozialismus*, PhD thesis, Dresden University of Technology, 1968, 82.

⁷ Verfahren der monatlichen Transportplanung, draft by the transport ministry on 21 April 1975, in: Federal Archive Berlin, file DM1/8321.

⁸ János Kornai, *Economics of Shortage* (Amsterdam, North-Holland, 1980) 2 volumes. Martin Kragh, 'The Soviet Enterprise: What Have We Learned from the Archives?', *Enterprise & Society*, 14:2 (2013), 360-394, here 372.

⁹ André Steiner, 'Dissolution of the "Dictatorship over Needs"? Consumer Behavior and Economic Reform in East Germany in the 1960s', in Susan Strasser, Charles McGovern and Matthias Judt (eds.), *Getting and Spending. European and American Consumer Societies in the Twentieth Century* (Cambridge MA, Cambridge University Press, 1998), 167-185; André Steiner, *Von Plan zu Plan: Eine Wirtschaftsgeschichte der DDR* (München, DVA, 2004); André Steiner, *Die DDR-Wirtschaftsreform der sechziger Jahre. Konflikt zwischen Effizienz und Machtkalkül* (Berlin, Akademie Verlag, 1999).

¹⁰ Wolf, 'Ergebnisse und Erfahrungen'.

¹¹ See Rosemarie Schneider, 'Das Verkehrswesen unter besonderer Berücksichtigung der Eisenbahn', in Eberhard Kuhrt (ed.), *Die wirtschaftliche und ökologische Situation der DDR in den achtziger Jahren* (Opladen, Westdeutscher Verlag, 1996), 177-222.

¹² Christopher Kopper, 'Die Deutsche Reichsbahn 1949-1989', in Lothar Gall and Manfred Pohl (eds.), *Die Eisenbahnen in Deutschland* (München, Beck, 1999). Rosemarie Schneider, 'Das Verkehrswesen'. Ralf Kaschka, *Auf dem falschen Gleis. Infrastrukturpolitik und -entwicklung der DDR am Beispiel der Deutschen Reichsbahn 1949 – 1989* (Frankfurt, Campus, 2011).

¹³ Bogdan Mieczkowski, *Transportation in East Europe* (New York, Boulder, 1978); Bogdan Mieczkowski (ed.), *East European Transport – Regions and Modes* (London, Matinus, 1980); Jacek Romanowaki, 'Agricultural transport in Poland', in Bogdan Mieczkowski (ed.), *East European Transport – Regions and Modes* (London, Matinus, 1980), 124 – 146; Reinhold Bauer, *PKW-Bau in der DDR – Zur Innovationschwäche von Zentralverwaltungswirtschaften* (Frankfurt, Lang, 1999). Lewis Siegelbaum, *Cars for Comrades: The Life of the Soviet Automobile* (Ithaca, Cornell Univ. Press, 2008); Lewis Siegelbaum (ed.), *The Socialist Car: Automobility in the Eastern Bloc* (Ithaca, Cornell Univ. Press, 2011).

¹⁴ Vahrenkamp, 'Logistic Revolution', 84.

¹⁵ A similar list of advantages can be found in a research contract with the traffic university in Dresden that the Kraftverkehr department drafted in 1956, see Federal Archive, DM 1/2740.

¹⁶ Joachim Herrmann, *Die ökonomische Entwicklung des volkseigenen öffentlichen Güterkraftverkehrs in der Deutschen Demokratischen Republik*, PhD thesis, Dresden University of Techology, 1974, 44.

¹⁷ Komplexanalyse über die Arbeit des VEB Guterkraftverkehrs Berlin im Jahre 1960, on 7 February 1961, in: State Archive Berlin, file Rep. 114/344.

¹⁸ 'Sicherung der Transporte für den Lebensmittelfrischdienst', in *Verfügungen und Mitteilungen des Ministeriums für Verkehrswesen, Teil Kraftverkehr*, 17:25 (1965), on 28 December 1965, appendix.

¹⁹ Lecture by Fritz Schmidt, in Zentrales Warenkontor für Lebensmittel, Obst und Gemüse und Haushaltchemie (ed.), *1. Transportkonferenz des sozialistischen Lebensmittelgrosshandels* (Berlin, Dietz, 1967), 11.

²⁰ Martin Christopher, *Logistics and Supply Chain Management* (London, Pitman, 1992).

²¹ Marc J. Schniederjans and Dara G. Schniederjans, *Outsourcing and Insourcing in an International Context* (Armonk, Sharpe, 2005), 29.

²² Yudanov, 'USSR', 417.

²³ In Poland the company fleets had a share of 70 per cent, see H. Lieber, 'Der Aufbau der Binnenspedition in der VR Polen', *Der Verkehrspraktiker* 8:5 (1965), 14-18.

²⁴ Mieczkowski, *Transportation in Eastern Europe*, 46. For the enterprises of mass transit in the GDR, see Barbara Schmucki, *Der Traum vom Verkehrsfluss* (Frankfurt, Campus, 2001).

²⁵ *Der Deutsche Strassenverkehr*, 4: 7 (1956), 219.

²⁶ Letter of the motorized traffic department of the government of Groß-Berlin to the planning commission on 13 March 1956, in: State Archive Berlin, file Rep. 114/294. Joachim Herrmann, *Die ökonomische Entwicklung*, 55. According to Wolfgang Kohl, *Güterkraftverkehr in der DDR* (Berlin, Verlag Wissenschaft und Technik, 2001), 154, the trucking business in the private sector had a market share of 12 per cent until 1989.

²⁷ 'Gesetz über den Siebenjahrplan', *Gesetzblatt I* on 17 October 1959, 703-745, here 721-722. 'Anordnung über die Zentralisierung des Güterkraftfahrzeugen bei den Betrieben des volkseigenen öffentlichen Kraftverkehrs', *Gesetzblatt II* (1959), 291-294. Siegfried Nobis, 'Bis 1965 sind 47 Tausend Tonnen Laderaum umzusetzen', *Der Verkehrspraktiker* 3:2 (1960), 1-6.

²⁸ Federal Archive, file DM1/2740.

²⁹ *Vorschläge für die Einführung eines neuen Transportsystems im Großhandel*, file DM1/2745, Federal Archive Berlin.

³⁰ 'Fahrzeugumsetzungen haben begonnen', *Der deutsche Strassenverkehr*, 5:12 (1957), 412-413.

³¹ A call for outsourcing by the VEB Kraftverkehr Zwickau demanding largescale enterprises in the transport trade, *Verfügungen und Mitteilungen des Ministeriums für Verkehrswesen, Teil Kraftverkehr*, 12:15 (1960), 66.

³² *Verfügungen und Mitteilungen des Ministeriums für Verkehrswesen, Teil Kraftverkehr*, 12:15 (1960), 83.

³³ *Der deutsche Strassenverkehr*, 5:11 (1957), 357. 'Fahrzeugumsetzungen haben begonnen', *Der deutsche Strassenverkehr*, 5:12 (1957), 412-413.

³⁴ *Der deutsche Straßenverkehr*, 5:2 (1957), 54.

³⁵ Nobis, ‘Bis 1965 sind 47 Tausend Tonnen Laderraum’. Siegfried Nobis, ‘Es ist notwendig, den Werkverkehr einzuschränken’, *Der Verkehrspraktiker* 2:6 (1959), 9-14; Otto Glum, ‘Sozialistische Großbetriebe – Bestandteil der Rekonstruktion im Kraftverkehr’, *Der Verkehrspraktiker* 2:3 (1959), 7-11; Volkmar Winkler, ‘Über die Zweckmäßigkeit des Werkverkehrs’, *Der Verkehrspraktiker* 1:3 (1958), 4-9. In his lecture for the tenth anniversary of Dresden’s traffic university, the deputy transport minister, Helmut Scholz, singled out the highly fragmented transport enterprises as one of main problems confronting traffic policy and demanded large-scale organisation in truck transport: Helmut Scholz, *Die Durchsetzung des neuen ökonomischen Systems der Planung und Leitung der Volkswirtschaft im Verkehrswesen* (Berlin, Dietz, 1964), 67.

³⁶ Richard Vahrenkamp, *The Logistic Revolution – The Rise of Logistics in the Mass Consumption Society* (Cologne, Eul, 2012), 288. The truck policy of the transport ministries differed widely in the Western world. For the United States, see Shane Hamilton, ‘The Populist Appeal of Deregulation: Independent Truckers and the Politics of Free Enterprise, 1935–1980’, *Enterprise & Society*, 10:1 (2009), 137- 177. For Europe, see Ruud Filarski and Gijs Mom, *Shaping Transport Policy. Two Centuries of Struggle between Public and Private Sectors* (Den Haag, SDU, 2011), 147-176.

³⁷ Alfred Seeling, ‘Zum Perspektivprogramm des Kraftverkehrs’, *Der Verkehrspraktiker* 7:3 (1964), 1,4-6, here 6.

³⁸ *Verfügungen und Mitteilungen des Ministeriums für Verkehrswesen, Teil Kraftverkehr*, 12:15 (1960), 66. Krunau, ‘Kraftverkehr’.

³⁹ ‘Anordnung über die Zentralisierung des Güterkraftfahrzeugen bei den Betrieben des volkseigenen öffentlichen Kraftverkehrs’, *Gesetzblatt II* (1959), 291-294.

⁴⁰ *Der deutsche Straßenverkehr*, 5:11 (1957), 357. ‘Fahrzeugumsetzungen haben begonnen’, *Der deutsche Straßenverkehr*, 5:12 (1957), 412-413.

⁴¹ Winkler, ‘Über die Zweckmäßigkeit’, 7-8. The Kraftverkehr department also referred to a list of advantages of truck fleets when it drafted a research contract for the traffic university Dresden in 1956. Draft on 28 November 1956, Federal Archive, DM 1/2740.

⁴² Heinz Bremer, ‘Zur Umsetzung der Fahrzeugkapazitäten des Werkverkehrs’, *Der Verkehrspraktiker* 1:6 (1958), 42-45.
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⁴³ *Ibid*, 45.

⁴⁴ Nobis, ‘Bis 1965 sind 47 Tausend Tonnen Laderraum umzusetzen’, 5.

⁴⁵ Neues Deutschland on 2 April 1959, 8. For the consumer policy in the GDR, see Jonathan Zatlin (spelling? - spelling is ok!), ‘The Vehicle of Desire: The Trabant, the Wartburg, and the End of the GDR’, *German History*, 15 (1996), 358-380; Ina Merkel, *Utopie und Bedürfnis. Die Geschichte der Konsumkultur in der DDR* (Köln, Westdeutscher Verlag, 1999); Mark Landsman, *Dictatorship and Demand: The Politics of Consumerism in East Germany* (Cambridge, MA, Harvard University Press, 2005).

⁴⁶ ‘Der Handel im Siebenjahrplan der DDR’, *Handelswoche*, 4:28 (1959), appendix. See also file DL1/2460, Federal Archive Berlin.

⁴⁷ *Handelswoche*, 4:44 (1959), 7.

⁴⁸ Zentrales Warenkontor für Lebensmittel, Obst und Gemüse und Haushaltchemie (ed.), 1. *Transportkonferenz des sozialistischen Lebensmittelgrosshandels* (Berlin, Dietz, 1967), 54.

⁴⁹ Press release by the press agency ADN on 8 August 1967, Federal Archive Berlin, image number Bild 183-F0808-0025-001.

⁵⁰ ‘Vereinbarung über die Zusammenarbeit bei der Durchführung von Handelstransporten’, in *Verfügungen und Mitteilungen des Ministeriums für Verkehrswesen, Teil Kraftverkehr*, 15:13 (1963), appendix.

⁵¹ VEB Gutekraftverkehr Berlin: Maßnahmen zur Sicherung der Planerfüllung 1961 on 30 March 1961, in State Archive Berlin, file Rep. 114/344.

⁵² Joachim Herrman, *Die ökonomische Entwicklung*, 74-77.

⁵³ Erwin Kramer, *Verkehrswesens*, 154. The data should be used cautiously as it constitutes official data released for publication and frequently did not reflect actual economic performance.

⁵⁴ For the spare part problem in the construction industry at the end of the 1950s, see the minutes of the meetings of leading officials of the construction ministry, Federal Archive, file DH1/8415, 8416, 8417.

⁵⁵ 'VEB Kraftverkehr Karl-Marx-Stadt', *Der Verkehrspraktiker* 7:5 (1964), 23-29. Karlheinz Palapys, 'Vorplanungen und Aufgabenstellungen für die Kraftverkehrshöfe', *Verkehrspraktiker* 7:6 (1964), 4-8. Until 1964, the yard in Karl-Marx-Stadt lacked a shop for repair.

⁵⁶ Meeting of the council of ministers on 15 February 1962, Federal Archive, file DC 20-I/3/358. The implementation rule of this call was published one year later: 'Direktive über die maximale Ausnutzung und ökonomisch zweckmäßige Verteilung der Transportmittel sowie Festlegung von optimalen Standorten', *Verfügungen und Mitteilungen des Ministeriums für Verkehrswesen, Teil Kraftverkehr*, 15:12 (1963), 41-46.

⁵⁷ Erwin Kramer, *Verkehrswesens*, 46.

⁵⁸ Joachim Herrmann, *Die ökonomische Entwicklung*, 31.

⁵⁹ Gerd Machgut, 'Rationelle Transportdurchführung', in VEB Guterkraftverkehr Potsdam (ed.), *Ökonomische Probleme im Güterkraftverkehr* (Potsdam, VEB Kraftverkehr, 1968), 46.

⁶⁰ Erwin Kramer, *Verkehrswesens*, 157.

⁶¹ Bremer, 'Grundfragen des Guterkraftverkehrs', 12s. Already the attachment for the Council of Ministers' approval on the 7-year-plan on 21 September 1959 referred to specialisation of trucks. Until 1963, a total of 330 silo trucks was projected. Federal Archive, File DC20-I/3/307, page 120.

⁶² There is a broad body of literature on the milk supply to cities in Germany, for example Werner Schmitt, 'Die Milchversorgung der Großstädte', in VDI (ed.), *Der Güterumschlag* (Berlin, Springer, 1926), 235–237. For milk supply in the United States, see the study of Shane Hamilton, *Trucking Country* (Princeton, Princeton University Press, 2008), 163-186.

⁶³ Neues Deutschland on 2 April 1959, 3.

⁶⁴ Herman, *Die ökonomische Entwicklung*, 93.

⁶⁵ *Ibid*, 185.

⁶⁶ Meeting of the Transport Committee Berlin on 23 February 1972 where priority for transport to and from the Leipzig fair was declared, State Archive Berlin, File C rep 114/674.

⁶⁷ Report on the year 1969 to the Transport Committee Berlin on 3 February 1970, State Archive Berlin, file C rep. 114/672.

⁶⁸ State Archive Berlin, file C rep. 114/672.

⁶⁹ Letter to the SED administration of Frankfurt (Oder) on 8 May 1984, in: State Archive Brandenburg, file rep. 732/3684.

⁷⁰ State Archive Brandenburg, file rep. 732/3684.

⁷¹ VEB Gutekraftverkehr Berlin: Maßnahmen zur Sicherung der Planerfüllung 1961 on 30 March 1961, in State Archive Berlin, file Rep. 114/344. Komplexanalyse über die Arbeit des VEB Gutekraftverkehrs Berlin on 7 February 1961, in State Archive Berlin, file Rep. 114/344, 36, 40, 90. Volker Winkler, *Die Überlegenheit*, 244. Leipziger Volkszeitung on 7 April 1961, p. 3.

⁷² R. Davies and Melanie Ilic, 'From Khrushchev (1935-1936) to Khrushchev (1956-1964): construction policy compared', in Jeremy Smith and Melanie Ilic (eds.), *Khrushchev in the Kremlin* (London, Routledge, 2011), 202-230. On 4 June 1959 the GDR's council of ministers passed a resolution on the industrialisation of construction, Federal Archive, file DC 20-I/3/300.

⁷³ *Verfügungen und Mitteilungen des Ministeriums für Verkehrswesen, Teil Kraftverkehr*, 12:15 (1960), 83. Letter on 30 May 1960, in State Archive Berlin, file Rep. 114/344.

⁷⁴ Krunau, 'Kraftverkehr', 14.

⁷⁵ 'Rundschreiben über die Zusammenarbeit zwischen Kraftverkehr und Bauwirtschaft', in *Verfügungen und Mitteilungen des Ministeriums für Verkehrswesen, Teil Kraftverkehr*, 12:15 (1960), 66.

⁷⁶ Max Döschel, 'Die Umsetzung der Lastkraftwagenfahrzeuge des Werkverkehrs', *Der Verkehrspraktiker* 3:3 (1960), 23.

⁷⁷ 'Sicherung der Transporte für den Lebensmittelfrischdienst', in *Verfügungen und Mitteilungen des Ministeriums für Verkehrswesen, Teil Kraftverkehr*, 17:25 (1965), on 28 December 1965, appendix.

⁷⁸ Machgut, 'Rationelle Transportdurchführung', 46.

⁷⁹ Erwin Kramer, *Verkehrswesen*, 161.

⁸⁰ Report of the site organization of the SED of VEB Kraftverkehr Frankfurt (Oder) to the SED administration of Frankfurt (Oder), State Archive Brandenburg, file rep. 732/3684. Out of the 605 employed workers, 75 were members of the SED.

⁸¹ Thomas Dicke, *Franchising in America: The Development of a Business Method, 1840-1980* (Chapel Hill, University of North Carolina Press, 1992), 25.