



EUI Working Papers

MWP 2007/36

Motor vehicles vs. dollars: selling socialist cars in neutral markets.

Some evidence from the ŠKODA Auto case.

Valentina Fava

EUROPEAN UNIVERSITY INSTITUTE
MAX WEBER PROGRAMME

*Motor vehicles vs. dollars: selling socialist cars in neutral markets.
Some evidence from the ŠKODA Auto case.*

VALENTINA FAVA

This text may be downloaded for personal research purposes only. Any additional reproduction for other purposes, whether in hard copy or electronically, requires the consent of the author(s), editor(s). If cited or quoted, reference should be made to the full name of the author(s), editor(s), the title, the working paper or other series, the year, and the publisher.

The author(s)/editor(s) should inform the Max Weber Programme of the EUI if the paper is to be published elsewhere, and should also assume responsibility for any consequent obligation(s).

ISSN 1830-7728

© 2007 Valentina Fava

Printed in Italy
European University Institute
Badia Fiesolana
I – 50014 San Domenico di Fiesole (FI)
Italy

<http://www.eui.eu/>
<http://cadmus.eui.eu/>

Abstract

The paper analyses the relationship of Škoda Auto with its dealers in the neutral countries in the years from 1948 to 1964.

The takeover by the Czechoslovak Communist Party in 1948 and the rising tensions of the Cold War isolated the Czechoslovak manufacturer from the other European producers. This resulted in a redirection of Škoda exports towards the Soviet Union and the CMEA countries.

The paper argues that the technical and commercial relationships maintained by Škoda with its dealers in the neutral countries - in particular Finland, Switzerland, Austria and Sweden - during the First and Second Five-Year Plans, played an important role in stimulating and orienting the modernization of the Czechoslovak automobile production.

In this perspective, the letters of grievance received by Škoda and Motokov from their partners are examined. In the late 1950s, these letters, pointing out defects and bottlenecks of both Škoda production processes and products, were used by the technicians responsible of the Czechoslovak motor vehicle industry as a valid learning tool.

In the first half of the 1960s, foreign distributors helped Škoda take the first steps in automobile marketing, as well as in designing an assistance system of repair centres and overseas assembly plants based on licensing, fundamental to the establishment of an effective commercial organization.

Keywords

Knowledge, economic integration, East-Central Europe, CMEA, motor vehicle industry, Czechoslovakia, neutral countries, trade.

*Motor vehicles vs. dollars: selling socialist cars in neutral markets.
Some evidence from the ŠKODA Auto case.*

VALENTINA FAVA¹

Max Weber Post-Doctoral Fellow (2006-2007)
European University Institute, Florence, Italy

1. Introduction

The paper analyses the relationship of the largest Czechoslovak automobile company, Škoda Auto, with its dealers in the neutral countries in the years from 1948 to 1964.

The takeover by the Czechoslovak Communist Party in February 1948 and the rising tensions of the emerging Cold War isolated the Czechoslovak manufacturer from the other European and global producers. This translated into a wholesale shift of the commercial, financial and technical relationships that Škoda had originally established, resulting in a redirection of the export of its motor vehicle towards the Soviet Union and the CMEA countries.

Nonetheless, behind the Iron Curtain, Škoda technicians continued to jealously preserve their own technological ‘know-how’, acquired before 1949 and for the most part foreign to the Soviet industrial paradigm.² In the light of this, the paper argues that the technical and commercial relationships maintained by Škoda with its dealers in the neutral countries - in particular Finland, Switzerland, Austria and Sweden – during the first and

¹ An earlier version of this paper was presented at the International Economic History Congress in Helsinki in September 2006, session 101. I am grateful to the participants for their useful comments and, in particular, I would like to thank Giovanni Federico and Alice Teichová for their support and suggestions.

² V. Fava, ‘Between American Fordism and «Soviet Fordism»: the Czechoslovak way towards mass production’ in Arfon Rees, Apor Balazs and Peter Balazs, (eds.), *New Perspectives on Sovietisation and Modernity in Central and Eastern Europe 1945-1964*. (Washington, 2007) and V. Fava, ‘Taylorismo e Socialismo. Organizzazione del lavoro e della produzione negli impianti della Škoda Auto di Mladá Boleslav (1948-1963)’ [Scientific Management and Socialism. Organization of work and production at the Škoda Auto factory in Mladá Boleslav], (Università Luigi Bocconi 2004).

Second Five-Year Plans, played an important role in stimulating and orienting the modernization of the Czechoslovak automobile production.

In this perspective, the letters of grievance received by Škoda and Motokov - the State monopoly in charge of exporting automotive products - from their Austrian, Scandinavian and Finnish partners are examined. In the late 1950s, these letters, pointing out defects and bottlenecks of both Škoda production processes and products, seem to have been used by the technicians responsible of the Czechoslovak motor vehicle industry as a valid learning tool.³

The observation and criticism of the dealers in neutral countries, coupled with growing export difficulties in traditionally friendly markets, alarmed the planning authorities regarding the 'functional inefficiency' of the socialist system, carrying much more impact than similar complaints originating from the production unit, and eliciting a prompter response.

Finally, in the first half of the 1960s, foreign distributors helped Škoda take the first steps in automobile marketing, as well as in designing an assistance system of repair centres and overseas assembly plants based on licensing, fundamental to the establishment of an effective commercial organization.

Sources

The paper is based both on research conducted at the Škoda Auto Archives, in Mladá Boleslav - the AZNP records (Automobilové Závody, Národní Podnik- Automobiles Factories. National Enterprise) - and at the Central State Archives of the Czech Republic (Státní Ustřední Archiv- SÚA) - ČZAL (Československé závody automobilové a letecké- Czechoslovak motor vehicles and aeronautical factories), MAP (Ministerstvo automobilového průmyslu a zemědělských strojů- Ministry of motor vehicles and agricultural equipment) and MVS (Ministerstvo všeobecného strojírenství- Ministry of Engineering) records; HR ÚV KSČ (Hospodářská rada Ústřední vybor, Komunistická Strana Československa- Economic council of the Central Committee, Czechoslovak Communist Party) documents. The records of Motokov in SÚA are unfortunately closed to scholars' consultation. These sources are integrated with quantitative data from the Czechoslovak Statistical Yearbooks (Statistická Ročenka Republiky Československé).

2. Škoda and its 'internationalisation' strategy (1929-1948)

Škoda Auto (also known as ASAP, Akciová Společnost Automobilový Průmysl) was a large automobile maker in the years between the two wars: it was founded in 1925 as a result of the merger between the Škoda Works engineering and armament combine with Laurin & Klement, of Mladá Boleslav, one of the leading automobile factories in inter-war Czechoslovakia.⁴

³ K. Pavitt, 'Sectoral Patterns of Technical Change: Towards a Taxonomy and a Theory' in B. R. Nightingale and P. Martin, (eds), *The political economy of science, technology and innovation*. (Cheltenham, U.K. and Northampton, Mass., 2000), pp. 430-60 and K. Pavitt, 'Some Foundations for a Theory of the Large Innovating Firm' in G. Dosi, R. Giannetti, P. Toninelli (eds), *Technology and Enterprise in a Historical Perspective* (Oxford, 1992). See also N. Rosenberg, *Inside the black box: technology and economics*, (Cambridge, 1982).

⁴ For a company history of Škoda Works see: V. Karlický, P. Hofman, F. Janáček, A. Klimek, V. Krátký, *Svět okřídleného šípku. Koncern Škoda Plzeň. 1918-1945* [The world of the flying arrow. The Škoda Plzeň group], (Plzeň, 1999), pp. 395-403.

For the Škoda-Auto company history see: P. Kožíšek, J. Králík, *L&K - Škoda : 1895-1995. Let okřídleného šípku* [L&K - Škoda : 1895-1995. The years of the flying arrow], (Prague, 1997) while for the

In the inter-war years ASAP had close financial, technical and commercial ties with foreign companies: Škoda Works was controlled by the French Schneider et Cie combine through a holding company, Union Européenne Industrielle et Financière, created in 1920 to manage industrial and banking participation in the ex-Austro-Hungarian Empire (73% of the Joint stock capital in 1918, declining to 46.49% in 1937).⁵ The export department of Škoda Works in Plsen managed the export strategy for both engineering and automotive products while the Mladá Boleslav factory handled the technical relationships with the dealers.

In the 1920s-1930s, exports were destined mainly for Austria, Belgium, Bulgaria, Denmark, Greece, Holland, Yugoslavia, Romania, Spain (until the civil war), Switzerland and the Middle East, in particular Egypt, Palestine and Persia.

On the other side of the ledger, Škoda imported many car components from Western European countries: France (Solex), Germany (Bosch) and Italy.⁶

As far as the commercial organisation was concerned, Škoda Auto did not invest in foreign branches nor did it control foreign companies in charge of the distribution of its products or repair companies devoted to customer assistance, but instead relied on a network of independent dealers.

During the interwar years, the technical links with European companies were close: the ASAP technicians traveled to Switzerland, France, Italy visiting the most up-to-date mechanical factories, and focussing both on the adopted machinery and the methods of work organization. The technical modernisation of the Mladá Boleslav facilities in the late 1920s resulted from the Škoda technicians' many 'industrial pilgrimages' to the main American automotive companies, intended to study the new mass production methods.⁷

However, the German occupation (1939-1945) caused considerable disruption in the company's continuity, involving both productive methods and work organization

Škoda products' technical details see: M. Cedrych and L. Nachtmann, *Škoda. Auta známá i neznámá. Prototypy i seriové automobily vyráběné od roku 1934* [Škoda. Automobiles well known and less known. Prototypes and cars produced from 1934 onwards], (Prague, 2003).

⁴ A. Teichova, *An Economic Background to Munich. International Business in Czechoslovakia, 1918-1938*, (London, 1974), pp. 203-217, and C. Beaud, 'Investments and Profits of the Multinational Schneider Group, 1894-1943' in A. Teichova, M. Lévy-Leboyer and H. Nussbaum, (eds.), *Multinational Enterprise in Historical Perspective* (Cambridge, 1986), pp. 87-102. Concerning the development of the motor vehicles industry in Interwar Czechoslovakia see: E. Kubů and J. Pátek (eds.), *Mýtus a realita hospodářské vyspělosti Československa mezi světovými válkami* [Myth and reality of the economic development of Interwar Czechoslovakia], (Prague, 2000), p. 120 and V. Průcha (ed.), *Hospodářské a sociální dějiny Československa 1918-1992* [Economic and social history of Czechoslovakia. 1918-1992] (Brno, 2004), pp. 330- 340.

⁵ Škoda Auto Archives, Mladá Boleslav, hence forth Aša, records Akciová Společnost pro Automobilový Průmysl [Public Company for Automobile Production] hence forth ASAP and records Automobilové Závody, Národní Podnik [Automobile factories, state-owned enterprise] hence forth AZNP, box 55, Export automobilů [Exports of motor vehicles], 5 July 1955.

⁶ Concerning the trips abroad of Czechoslovak engineers see J. Paďourek, 'International Contacts of the Czech Technical Academy. The Masaryk Labour Academy and the World in between the Two World Wars', *Studia Historiae Academiae Scientiarum Bohemicae*, (1993), 35-50 and J. Paďourek, 'Snahy o organizování praxe Československých inženýrů v USA (20 a 30 léta 20 století)' [Efforts to organise internships for Czechoslovak engineers in USA in the 1920s and 1930s] in *DVT, Dějiny vědy a techniky*, (1992), 129-39. For the Škoda case see: V. Fava, 'Tecnici, ingegneri e fordismo. Škoda e Fiat nelle relazioni di viaggio in America' [Technicians, engineers and fordism. Škoda and Fiat in the travel reports of their engineers in the United States], *Imprese e Storia*, 22/2 (2000), 201-49.

systems.⁸ The company was integrated into the industrial structure of the German Empire and the civilian production programme was immediately limited and turned to the needs of the armed forces.⁹

Shortly after the war, on March 7, 1946, Škoda Works was nationalized and broken up into several independent enterprises. The Mladá Boleslav plant, which was re-named AZNP, Automobilové Závody, národní podnik (National Automobile Factories), became the center of the Czechoslovak automobile production.¹⁰

In the new post-war scenario, AZNP nurtured new expectations: between 1946 and 1947 a group of technicians from the ČZKS Československé závody kovodělné a strojírenské (Czechoslovak metalworking and engineering factories) - the central directorate charged with coordinating national mechanical production - developed a project to modernize the production facilities of Mladá Boleslav and to rationalize the entire Czechoslovak automotive industry. AZNP was to raise its production volumes, design a 'people's car' and hasten the motorisation of the country while reducing its production costs. Following this plan, the AZNP would attempt to penetrate the European automobile market, taking advantage of Germany's weakened position and Britain and France's difficulty in returning to their pre-war production levels in the short term. In this scenario, Czechoslovak production would have replaced German products on the foreign markets.¹¹

The plans reflected the political climate and possibilities raised by Czechoslovakia's imminent decision on whether to participate in the Marshall Plan. These options became unrealistic following the country's refusal and the events of February 1948. It became increasingly evident that Czechoslovakia would instead pursue an autarchic economic and commercial path, navigating a difficult course between the Western embargo on the one side and the difficulties of collaborating with the 'new' people's democracies of Eastern Europe on the other.

⁷ A. Teichova, *Německá hospodářská politika v Českých zemích v letech 1939-1945* [German economic policy in the Czech Lands between 1939-1945], (Prague, 1998) and V. Průcha, 'Hospodářský vývoj Českých zemí v letech 1938-1945' [Economic development of the Czech Lands in the years 1938-1945] in I. Smolka (ed.), *Studie o technice v Českých zemích, 1918-1945* [Studies on the history of technique in the Czech Lands], (Prague, 1995), pp. 35-46.

⁸ Aša, ASAP, box 3, Protokol o návštěvě p. presidenta Ing. V. Hromádky and Významnější zákonná ustanovení v Protektorátu Čechy a Morava z roku 1940 týkající se automobilového průmyslu a obchodu [Protocol concerning the visit of the president Hromádka and the most important laws established in the Protectorate of Czech lands and Moravia concerning both motor vehicles industry and trade], 10 July 1941; ASAP, box 12, *Cesta k firmám F. Krupp, R. Zapp, Humboldt-Deutz a Elbtalwerke*, 22-30 November 1939 [Travel report from the visits to the companies F. Krupp, R. Zapp, Humboldt-Deutz and Elbtalwerke], and Zpráva o studijní cestě po Německu [Travel report of the trip in Germany], 25 March 1941.

⁹ Státní Ústřední Archiv [Central State Archives of Czech Republic] hence forth SÚA, records Československé závody kovodělné a strojírenské [Czechoslovak factories for metalworking and engineering] hence forth ČZKS, Introduction to the documents. See also A. Teichova, 'Czechoslovakia. The halting pace to scope and scale' in A. Chandler, F. Amatori and T. Hikino (eds.), *Big Business and the Wealth of Nations* (Cambridge, 1997), pp. 447-61.

¹⁰ Aša, AZNP/p, box 4, Alexander Taub, A people's technology. A report to dr. Ing. František Fabinger, General Director of KOVO, Prague, September 1946, p. 6; see also I. Alice Teichova, 'For and Against the Marshall Plan in Czechoslovakia', in René Girault and Maurice Lévy-Leboyer, eds., *Le Plan Marshall et le relèvement économique de l'Europe. Colloque tenu à Bercy les 21, 22, 23 mars 1991* (Paris: L'Imprimerie Nationale, 1993), 840. and F. H. Žalud, *Přežili jsme. Zkušenosti z mého života 1919-1993, popsáné pro má vnoučata a jejich generaci* [We have survived. Experience from my life, 1919-1993, written for my grandchildren and their generation] (Prague, 1996), p. 61 and specifically on the Taub consultancy see Fava, 'Tecnici, ingegneri e fordismo. Škoda e Fiat nelle relazioni di viaggio in America'.

In terms of exports, during the Two-Year Plan there had been a decided upswing in the export of motor vehicle, topping pre-war levels though remaining largely limited to Škoda's traditional markets: Belgium, Holland and Scandinavia. With nationalisation, export management had been shifted from Škoda Plsen to KOVO, the central directorate in charge of coordinating the exports of the Czechoslovak light engineering products. However, during these years, the ANZP had maintained direct relations with the foreign dealers, not only in terms of contacts at auto salons and expos with both technical and sales personnel, but also through frequent visits by the dealers to the factory itself. Over the years, thanks partly to the continuity in both the factory technical management and the workshop personnel, an atmosphere of trust and cooperation had been created between manufacturer and distributors, as can be seen from the tone of some letters and memos written by the latter.

Following the creation of the Motokov - the state enterprise in charge of the export of all products of the motor vehicle industry, in 1950, the separation between production and export became more distinct than it had been, resulting in the partial interruption of contacts between the factory and the foreign dealers.¹² Over the course of the First Five-Year Plan, the ANZP was increasingly oriented exclusively towards production, without direct relations with its suppliers or with possible clients, and devoid of any decision-making powers concerning production or distribution. Not only were foreign trips by technicians suspended, but also bureaucratic obstacles prevented sending representatives to international auto exhibitions, effectively isolating Mladá Boleslav in every sense.¹³

3. The neutral countries in the Czechoslovak automobile exports

The launch of the First Five-Year Plan in 1949, which coincided with the worsening of international relations and the onset of the Cold War, had dramatic repercussions on the Czechoslovak foreign trade.

In 1949-1950, the embargo by the Western states followed by the establishment of the Coordinating Committee for Multilateral Export Control (Cocom) made it more difficult for Czechoslovakia to obtain strategic raw materials such as chemicals, metal and non-metal products and machinery, as well as to export its own products.¹⁴ At the same time, the first phase of the negotiations for the formation of the Council for Mutual Economic Assistance (CMEA) induced Czechoslovakia to redirect its exports towards the other countries of the Socialist bloc.

However, in the first years of the Cold War, the neutral countries played a valuable role by becoming an essential source of primary goods and hard currency for Czechoslovakia as well as significant markets for its industrial products. While some of them had a long history of commercial relations with Czechoslovakia, such as Austria,

¹¹ V. Fava, 'Between American Fordism and «Soviet Fordism»: the Czechoslovak way towards mass production' in Arfon Rees, Apor Balazs and Peter Balazs, (eds.), *New Perspectives on Sovietisation and Modernity in Central and Eastern Europe 1945-1964*. (Washington, 2007) and V. Fava, 'Taylorismo e Socialismo. Organizzazione del lavoro e della produzione negli impianti della Škoda Auto di Mladá Boleslav (1948-1963)' [Scientific Management and Socialism. Organization of work and production at the Škoda Auto factory in Mladá Boleslav], (Università Luigi Bocconi 2004).

¹² Aša, AZNP, box 55, Export automobilů.

¹³ J. Eloranta and J. Ojala (eds.), *East- West trade and the Cold War* (Jyvaskyla, 2005) and L. Segreto, 'East-West Trade in Cold War Europe: National Interest and Hypocrisy', *XIV International Economic History Congress* (Helsinki, 2006).

Switzerland, and Sweden, others, such as Finland, saw their volume of trade with the central European country grow enormously.¹⁵

This situation affected the Czechoslovak motor vehicle production in several ways: the scarcity of key raw materials for mechanical production made it difficult to concretely produce cars, and at the same time the traditional technical linkages and commercial partnerships were severed. The result was a significant delay in the modernization of both products and production processes that reduced product competitiveness.¹⁶ Yet, the technical cooperation with the dealers located in the neutral countries and the experience of selling cars in the neutral countries' markets represented an important learning tool, providing the Czechoslovak motor vehicle industry with important feedback, both about the quality and competitiveness of Škoda production and the more recent developments of the global automotive sector.

However, the production and trade statistics concerning automobiles exports, as well as the data from Škoda archives, illustrate the poor volume of both the Czechoslovak motor vehicle production and exports (table n.1).¹⁷

[Table 1 appears on page 7.]

¹⁴ SÚA, records Hospodářská rada Ústřední vybor KSČ [Economic council of the Central Committee of the Czechoslovak Communist Party], hence forth HR UV KSC, box 43, archival unit 305.

¹⁵ After the political upheaval of February 1948 and the launch of the first five-year investments in the automotive sector diminished to the point of relegating it to near irrelevance, with priority going to military production. SÚA, ČZAL, box 86, Problematika výroby automobilů a motocyklů, 1949 [Notes on the production of motor vehicles and motorcycles]; ČZAL, box 64, Program vývojového oddělení pro vozidla [Program of the development unit for motor vehicles], 22 June 1949.

¹⁶ To have an idea about the significance of that data, and the volume of both the Czechoslovak automobile production and the motorization of the country, it could be worth comparing this data with the Italian: as far as the production figures are considered, Italian national production in 1950 topped the 101,310 units vs the 24,000 units of Czechoslovak production. In 1961, the Italian total production was 693,672 while the Czechoslovak consisted of 58.840 units. The ratio between the Italian percentage of exports on total automobile production between 1950 and 1964 grew from 19,4% to 30,4% , with a peak of 46% in 1959. Finally, in 1969 the Italian production topped the 1,477,000 vehicles with an export ratio of the 40% while the Czechoslovak production did not exceed the 125,000 units per years. See ANFIA (Associazione nazionale fra industrie automobilistiche), *Automobile in cifre* [Automobiles in numbers] (Turin, 1982).

Year	Czechoslovak Automobile Production (Units)*	Czechoslovak Automobile Exports (Units)*
1948	17.971	7.074
1949	20.769	14.671
1950	24.463	19.380
1951	17.064	13.504
1952	6.295	6.762
1953	7.300	6.167
1954	5.375	4.776
1955	12.530	9.441
1956	25.068	14.718
1957	34.561	15.858
1958	43.439	25.037
1959	50.605	30.875
1960	56.211	30.556
1961	58.840	33.954
1962	64.325	34.741
1963	56.477	37.047
1964	42.115	25.419
1965	77.705	49.195
1966	92.717	51.331
1967	111.718	55.728
1968	125.517	60.527
1969	125.517	60.713
1970	142.858	73.909
1971	149.016	72.234
1972	154.454	88.638

*Table 1.
Czechoslovak
automobile
production and
export (1948-
1972).*

Source : Statistická
Ročenka
Republiky
Československé

1957-1973.

The data on the production of automobiles from 1949 to 1954 shows a significant negative trend in the first years of the Cold War: from 20,769 pieces produced in 1949 to 5,376 pieces in 1954. The exports during the same period fell proportionately, going from 14,621 to 4,776.¹⁸

The data from AZNP confirms this situation, both with regard to production and exports (from 11,645 vehicles sent abroad in 1949 to 3,533 in 1954) (table n.2).¹⁹

¹⁷ Figure 1.

¹⁸ Figure 2.

Table 2.

Mladá Boleslav factory production and export (1948-55)

	Mlada Boleslav factory Production (Units)**	Mlada Boleslav factory Exports (Units)***
1948	10.289	-
1949	10.712	6.080
1950	12.028	9.121
1951	9.342	5.252
1952	3.864	2.843
1953	4.698	2.865
1954	5.744	1.802
1955	10.159	3.458

Source : Škoda Auto Archive, AZNP, 5, March 26th 1954.

Furthermore, if we compare the available data on automobile production (up to 1952 including Škoda, Tatra, and in 1948-9, also Jawa), and their total exports, we see that from 1949 to 1955, the percentage of total production devoted to export was on average 75% (figures 1-2). This figure began falling in 1956, when a greater number of vehicles were made available for the domestic market. This means that the Czechoslovak automobile industry tended to be export-driven during the first Cold War years.

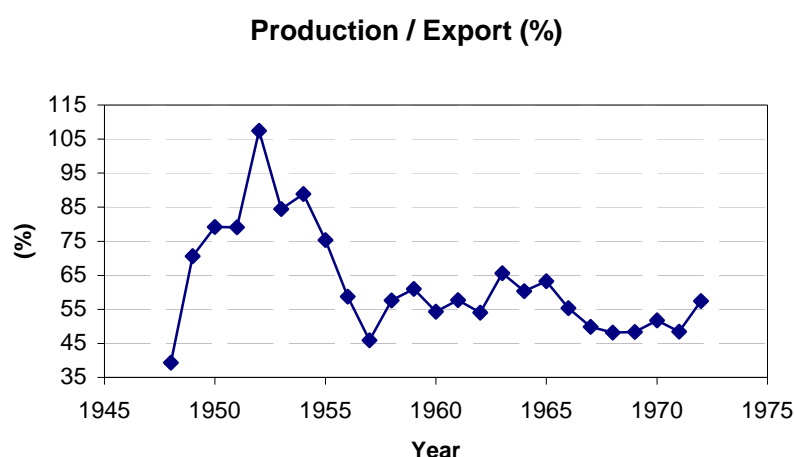


Figure 1. Production/export (%)

Total production and export 1948-1972

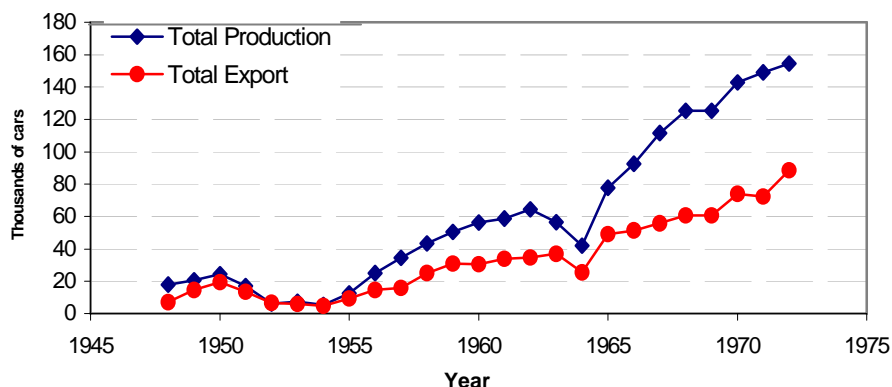


Figure 2. Total production and export 1948-1972.

It is also possible to reconstruct, albeit with some gaps, the destination of the Škoda – AZNP automobile exports for the periods between 1949 and 1955, for the year 1961 and from 1964 to 1978 (annexes n.1-2).²⁰

The sharp fall in exports towards the capitalist countries during the First Five-Year Plan was not compensated for by the raise in exports to the CMEA countries, at least up to the 1960s. The quotas pertinent to the neutral countries appear instead to become relatively significant.

According to Škoda data, the percentage of cars sold to the neutral countries on the total exports increased from 8,9% in 1949 to 53% in 1955 while the percentage of cars sold to the CMEA countries (including Yugoslavia) fell from 38.9% in 1949 to 2.9% of 1955.

The picture becomes even clearer if we look at the data for each country: between 1949 and 1955, AZNP sent only 9 vehicles to the United Kingdom, while those destined for

¹⁹ See Annex 1.

France decreased from 77 units in 1950 to 2 in 1955. Data from other countries are just as noteworthy: exports to Holland fell from 2,200 automobiles in 1949 (18.9%) to only 20 in 1955 (0.9%), then returned to 3-4% of total Škoda exports after 1961 and the launch of Škoda MB1000 in 1964.

A similar collapse in car imports from Czechoslovakia concerned Belgium, another traditional export destination: in 1949 it imported 1,534 cars (13%); that decreased to 278 units by 1954 (5.4%); in 1955 imports rose again to 1,012, reaching 2,521 by 1961 (8.7%), but decreased again to less than 4% after 1964.

Concerning exports towards the CMEA countries: Hungary's share fell from 9.6% in 1949 on total exports to 6 vehicles exported in 1955. Exports to Romania went from 923 units in 1949 (less than 1%) to 9 in 1955, while Poland's peak of 2,779 in 1950 (17.3%) had bottomed out at just 3 in 1955. The USSR only imported 5 automobiles between 1949 and 1955. Later on, the quota of cars sent to the USSR increased but seldom exceeded 4% of total exports.²¹ After 1955, among the CMEA countries, East Germany became the largest market for the Czechoslovak cars, rising from an average of 13% of total exports in the years between 1955 and 1961 to an average of 28% between 1968 and 1978.

The Finnish data needs to be scrutinized closely, as Škoda's exports rose from 157 in 1949 to 1,677 in 1955 (27% of total Škoda exports). The Swedish and Norwegian cases register a different pattern: Škoda's exports to Sweden fell from 1,165 automobiles in 1950 (%) to only 604 in 1951, then increased to over 1,000 in 1952 (15%) and fell again in 1953-54. Conversely, Norwegian imports of Škoda cars showed a steady positive trend, increasing from 364 units in 1952 to 817 by 1955. Exports to Austria (only 296 in 1949, 610 in 1955, but up to 1,163 in 1961) and Switzerland (174 in 1949, down to 79 in 1955 to 197 in 1961) are on the whole minor, but aside from a few oscillations, consistent.

However, by 1961 the situation appears to have partially changed (even if the Škoda data refers only to three models in production, the Octavia, Touring Sport and Super), with a total volume of 28,929 vehicles exported by AZNP out of a total of 33,954 exports for all vehicles exported by Czechoslovakia that year. Concerning Škoda's markets: Finland (14%) took first place, with East Germany (13.6%) next, then Poland (10.9%), Belgium (8.7%, non-assembled vehicles), Norway (6.6%), West Germany (5.6%), the U.K. (5.2%), Hungary (5.1%), Holland (4.6%), Austria (4%) and Switzerland (2.5%).

Although, many capitalist countries re-entered the picture and the percentage of cars exported towards the CMEA countries increased consistently, topping 30% of Škoda exports, in 1961 the neutral countries still absorbed a significant part of Škoda exports (8059 cars, representing 27.8% of total Škoda exports).

The data for 1961 and 1965-1973 show that the years of isolation were over, and that there was a new impetus in exports towards traditional markets, even in Western Europe, such as Belgium, (absorbing in 1965 4% of Škoda exports while in 1973 only 1%) and Holland (5.9% in 1965 decreasing to 1.3% in 1973), as well as to the U.K. (from 4.3% in 1965 to 10% in 1973), France (5% in both 1965 and 1973) and West Germany (11.7% in 1965 and 3.2% in 1973).²²

²⁰ For the problems of the Cmea division of work in the automotive sector see SÚA, Výroba automobilů v ČSR v rámci spolupráce s SSSR a zeměmi lidových demokracií and also SÚA, Records HR ÚV KSČ, box 43, archival unit 306.

²¹ See Annex 2.

However, it must be said that, for this final period of time, if we take into consideration the overall size of the automobile markets in the capitalist countries, Škoda exports towards Western Europe were still almost irrelevant.

The quota of exports to the neutral countries dropped from the 23.6% of total Škoda exports in 1965 to 3.3% in 1973, while in the same period of time, the percentage of cars destined to CMEA countries jumped from 39.3% of total car exports to 66.2%.

To summarize, over the First Five-Year Plan, the steadiest partners were clearly the neutral states, however, after 1961, their market quota decreased, becoming by 1973 almost irrelevant.

While the principal reasons for this slide can certainly be ascribed to the growing emphasis on CMEA integration as well as the new East-West economic relations, an examination of the correspondence between the AZNP, Motokov and the foreign dealers may help us understand exactly what was lacking in Škoda's organization and products and how the planners tackled Škoda's problems.

4. The automobile as an export item: the contradictions of the Czechoslovak strategy

The data previously analysed raise the issue of the role and the fate of the automobile industry in the industrial policy of the Czechoslovak government during the 1950s.

The issue of mass production of automobiles was not one of the priorities of the initial Five-Year plans. In 1949, according to the Communist Party line, automobile individual possession was a superfluous luxury and a waste of resources, and automobile production was intended to become a strictly marginal industry. In terms of resource allocation, there was a clear contrast between the 1949-1953 plan and the 1946-1947 Škoda projects – the idea of linking the country's industrial recovery to the modernization of the automotive facilities and the production of a 'people's car'.

If mass motorization was not an option, the survival of the Czechoslovak automobile production was considered important to increase road-based transportation, to stimulate the growth of related manufacturing industries as well as to provide vehicles to the army.

Finally, the export of cars could be a source of hard currency with which to finance strategic industries. In this perspective, the Czechoslovak automobile industry, which was created, 'strongly addressed towards exports', needed to vigorously pursue its vocation.

Consequently, despite the lack of resources, the concentration and specialization of automobile production were considered objectives to be achieved as soon as possible, if not through technological improvements, at least through organizational ones.²³

As the ČZAL technicians reported in 1949, the course of action undertaken was not free of inherent contradictions and weaknesses: to keep products competitive on the international markets, the revenue from the sale of the automobiles should have been

²² The ČZAL was created in 1949 as a central directorate in charge of automotive and aeronautical production. However, it was soon dismantled and automotive production was overseen directly by the Ministry of Industry, in the ČZAV (Československé Automobilové Závody) [Czechoslovak factories for the production of motor vehicles] branch; finally, in 1955 light engineering production was again decentralized and a Ministry for the automobiles and agricultural equipment was created.

reinvested in the modernization of the Škoda facilities and the expansion of production instead of being used for other purposes and sectors.²⁴

The relationship with the neutral countries, which continued to trade with Czechoslovakia and constituted a significant source of strategic raw materials, had an important function in revealing the limits of the planners' strategy for the automobile industry. Starting in 1952-1953, a real 'annus horribilis' for Škoda automobile production, the Mladá Boleslav automaker and Motokov were inundated with complaints from the foreign resellers.²⁵

As evidenced in the letters from the dealers, the raising export difficulties for Škoda, aside from the embargo and the refocus of exports, were due to the serious production defects of the Škoda cars, the lack of repair assistance and the unavailability of spare parts.

During the second half of the 1950s, according to the Second Five-Year Plan directives on East- West trade (1956-1960), the Czechoslovak planners began to explore courses of action that could break the vicious circle caused by the lack of investment, and make the Czechoslovak product competitive again.²⁶

The export of motor vehicles remained a necessity and a priority for the Czechoslovak automobile production. On the one hand, western capitalist markets were gradually beginning to reopen to exports, and this generated interest in the potential for building assembly plants in Austria and Belgium as bridges to take advantage of the emerging European Common Market. On the other hand, the pressing need to obtain hard currency with which to fund imports of foodstuffs, in addition to products for the chemical and steel industry products, including foreign machinery, became more insistent by the day.

In this context, plans for the development of the sector between 1955 and 1960, it was stressed that large-scale automobile production was particularly desirable for Czechoslovakia, because it restricted the export of raw and semi-finished materials, favouring instead the export of what was considered to be the product of a labour intensive sector.

It was, however, necessary to lower production costs while increasing the volume of production, by creating a vehicle whose reliance on foreign primary components would be reduced to a minimum (from 20% in 1957 to 10% in 1960).²⁷

The result of this initiative was the reconstruction of the Mladá Boleslav plant, finished in 1964, and the launch of the Škoda MB1000, which was intended as the confirmation

²³ The debate about the future of automobile production emerges from the Minutes of the meeting of the Technical board of the AKRCs Czechoslovak Automobile Club published on Svět Motorů between 1949-1950: see in particular 'Nemístní luxus' in Svět Motorů, 25 March 1950, p. 164.

²⁴ This was the outcome of the Ministry of Heavy Industry decision to replace the Š1102, which had been made at Mladá Boleslav until that point, with the Tatra 600 and of the abrupt transfer of the Tatra production lines from Koprivnice to Mladá Boleslav in 1951. The experiment did not last and in 1953 Tatra 600 production in Mladá Boleslav was terminated and the production of the Š1200 restored but the transfer had an enormous cost and caused the collapse of the Czechoslovak automobile production. See SÚA, ČZAL, box 86, Rámcové předpoklady pro výrobu vozů Škoda 1200 a T 600, v Automobilových závodech n.p. Ml- Boleslav, v roce 1951 a 1952, Ml. Boleslav, 14 November 1950 [Considerations on the production of the Škoda 1200 and T 600 car in the automobile factories in Mladá Boleslav].

²⁵ SÚA, MAP, 200, Návrh perspektivního plánu oboru osobní automobily od roku 1956 do roku 1975 [Ideas for the future plan concerning automobile production from 1956 to 1975].

²⁶ SÚA, MAP, box 94; Aša, AZNP, box 26, 1956.

of the opening of a new stage of Czechoslovak automobile production, including a new approach to exports.²⁸

Also in this new phase, the relationships with foreign dealers illustrates some of the limits of the new 'lidový vůz', Škoda MB 1000, and the contradictions inherent to the Czechoslovak industrial policy.

5. Grievance letters from neutral countries

The first grievance letters regarding the deteriorating quality of Škoda vehicles were received in August and September 1953. They came mostly from Austria, Finland, Norway and Sweden, and concerned everything from the body work, the electrical systems, the transmission, the clutch and the brakes to the finishing of the doors and interiors of both Š1200 (produced from 1952 to 1956) and T600 models (produced in Mladá Boleslav from 1951-1952). Tarbruck, the Austrian dealer, even lodged an official protest with the Czechoslovak embassy in Vienna.²⁹

The discontent concerning the defective quality of the products was irrefutable, as it referred to aspects that had already been signalled by the Škoda technicians to the planners. Since 1947, they had been asking for new machinery and an overall modernization of the Mladá Boleslav plant.

In this first phase, the response of the authorities was to blame the quality of work and work organization at plant level, stressing the inadequate application of the new socialist management practices and quality control. However, neither the introduction of the dispatching system, the expansion of the OTK, nor disciplinary measures were able to solve the problems. On the contrary, the recalls increased with the launch of the new car, the Š440.³⁰

In 1958, in Sweden alone, there were 4,333 recalls, with problems pertaining to nearly every aspect of the Š440, which had little to do with the particular climatic conditions of the Scandinavian region, as the local representatives ironically stressed.³¹ Furthermore, during a meeting with dealers in 1965, Tarbruck's Austrian founder unleashed a diatribe that made it clear how little had changed since the first official recall back in 1953.

While initial complaints had mostly referred to the technical quality of the Škoda vehicles, by the early 1960s, the foreign dealers' criticisms focused on Škoda's lack of competitiveness in areas such as aesthetics, marketing and technical assistance abroad.³² These letters were not underestimated by the Czechoslovak authorities as evidenced by the Central Committee of the Communist Party multiple resolutions concerning the

²⁷ Kožíšek and Králík, *L&K - Škoda : 1895-1995*, pp. 116-126 and Cedrych, *Škoda. Auta známá i neznámá. Prototypy i seriové automobily vyráběné od roku 1934*, p. 141.

²⁸ SÚA, Úřad předsednictva vlády - tajná spisovna [Office of the President of the Government- secret documents] hence forth ÚPV-T, box 48, 14 September 1953.

²⁹ Concerning the measures taken to improve discipline and decrease the number of defective pieces see Aša, AZNP, box 1, 27 April 1953. For the details concerning the Š440 that was intended to be a "transition" product see Cedrych, *Škoda. Auta známá i neznámá*, p. 120.

³⁰ Aša, AZNP, 8a, Zápis z aktivu s delegaty Motokovu ze zahraničí a zastupci Motokovu se zástupci AZNP, 11 December 1958 [Minutes of the meeting of the AZNP members with the Motokov delegates].

³¹ Aša, AZNP, boxex 8 and 8a, Zápis z konference techniků zahraničních zástupců o voze Škoda 1000 MB pořádané v AZNP Mladá Boleslav, 14- 15 March 1966 [Minutes of the foreign technical members' meeting concerning the *Škoda 1000 MB* vehicle] and Zpráva o opatřeních k zavedení prodeje vozu Škoda 1000 MB na vybraných kapitalistických trzích, 8 April 1964 [Report on the conditions for the launch of the Škoda 1000 MB on selected capitalist markets]and Problematika trhu a cenová politika v nových podmínkách řízení, 6 June 1967 [Problems concerning market and prices definition according to the new management methods].

issue, as well as the copious flow of correspondence between the production ministries, Motokov and the Mladá Boleslav factory. The attention paid to these letters was the result of both apprehension about the possible commercial repercussions and fear for their political consequences, as the production defects could be traced to acts of sabotage or political disobedience on the part of the workforce and in that way easily exploited by anti-Soviet propaganda.³³

Furthermore, those recalls were taken into account not only because they came from partners which had never interrupted relations and exchanges even during the years of greatest political tension, but also because they resonated clearly with the grievances originating from the sector's technical personnel.³⁴

The criticisms of the foreign dealers affected the Czechoslovak automobile industry in three ways:

1) The letters of grievance contributed to underscoring the design defects of the Škoda Š1200, T600 and Š440, and were also useful in explaining some of the difficulties of the Škoda MB1000. Furthermore, the letters appeared to guide and set in motion the interventions to modernize the production facility of Mladá Boleslav, finding a convergence with the needs expressed by the technical personnel in the automobile sector.

The largest part of the complaints concerned particular aspects of the Š440, which were gradually resolved, but only in part. The Š440 was rushed into production due to a governmental resolution of 7 May 1954, expressing the need to put a small vehicle of Czechoslovak production on the market. It was decided to utilize chassis that would have over 70% of their parts in common with the Š1200, which would enable a rapid change of product without stopping the productive cycle. The Š440 was designed to be produced until 1960 and had good performance characteristics and fuel consumption, as well as the space and design aesthetics to be competitive with other vehicles in its class. However, even during the initial planning stages there were serious limitations, in particular with regard to the weight and suspension. The weight was around 150-180 kg more than those of other vehicles in its class, which was in part due to the separation of the chassis and the body and the use of heavier steel and tyres, and in part to the design of the vehicle itself, which was based on the Š1200.

The letters of grievance drew a series of resolutions from the Czechoslovak Communist Party, the ministries and the company itself, all aimed at resolving the problems.³⁵

Between 1956 and 1960, a plan was formulated to restructure the automobile industry, but it was not until 1964, with the construction of a new plant, that they were implemented, resulting in the production of the MB1000, the first Czechoslovak people's car. The initial interventions were aimed at rationalizing and mechanizing the existing plant by introducing an assembly line, single-purpose machines and by partially re-equipping some departments.

In particular, the plans concentrated on re-equipping the body-shops, which had already been pronounced obsolete in 1946 and 1956 by the technicians at Mladá Boleslav, and

³² SÚA, ÚPV-T, box 1012, 16 April 1957; 14 December 1957.

³³ Aša, AZNP, box 8, Oborová Konference pro osobní automobily, 30-31 March 1956 [Sectoral conference concerning automobile production].

³⁴ SÚA, MAP, box 93, Zpráva o kvalitě vozů Š440, 9 December 1957; box 95, Zpráva o kvalitě vozů Š440, 30 June 1958 [Reports on the quality of the Š440 vehicle]; SÚA, ÚPV-T, box 1012, Informace k materiálům pro PB ÚV KSČ o nedostacích našich exportních automobilů Š440 a nákladních automobilů Š706 [Information on the material for the political committee of the Communist Party concerning the shortcomings of our Š440 and Š706 for export], 13 April 1957.

had been the object of complaints from the dealers from 1953 onwards.³⁶ These decisions had some positive results, but were unable to completely eliminate the problem: the 1956 Swedish recalls were halved, but there was still much to do.

It was not until June 1957 that a design for a new facility, executed by the Projecta Praga, was submitted. The new plant would transform the 'America' facilities, founded in 1928 and further expanded without an overall plan after WWII in response to the production needs, into a modern factory complex. The aim was to reduce production times and costs, reaching production volumes equal or at least comparable with those achieved in the rest of Europe.³⁷

The new production facility, and more importantly, the new Škoda MB1000, represented a step forward but a serious recall problem resurfaced in the second half of the sixties.

2) Motokov's growing difficulties in selling Škoda products abroad led the exporter's questioning of the organization of exports as it had been conceived in the early fifties. Gradually, a two-pronged strategy emerged: foreign dealers were involved in developing techniques and improving the quality of Škoda products, while an in-house effort with the same objectives was also launched. To this end, Motokov first elaborated a series of questionnaires regarding the quality of Škoda products, which was distributed to the export organization, the foreign dealers and the technicians at Mladá Boleslav. Periodical meetings were then held, with the participation of delegates from Motokov, technicians from AZNP and several foreign representatives.³⁸

With regard to AZNP, over the years of the 'New Course', the grievance letters became one with the demands of the production company for a re-decentralization of the economic decision-making process, and in particular, of the relations between production and export. In 1955, in response to a questionnaire from the Ministerstvo automobilového průmyslu a zemědělských strojů, MAP (Ministry of the Motor vehicles and the Agricultural Equipment), Mladá Boleslav stressed the need to return to the practices of the pre-1950 period, re-establish contacts with the dealers, begin travelling again in order to foster direct and personal relationships, which alone 'permitted [the company] to keep up with the foreign competition, staying up-to-date on technical progress, the transfer of information and patents', including the 'positive effects from the psychological point of view on the foreign representatives and their clients'. The contacts with the foreign dealers could not continue to be filtered by Motokov, passing only through the recall department, nor could Mladá Boleslav continue to be the scapegoat. On the other hand, the company itself and the workers' collectives had frequently complained of organizational inefficiencies that could impact negatively on product quality.

In addition, the same questionnaire underlined the difficulty in organizing a foreign service of technical assistance and creating assembly plants without a direct relationship between the producer and the foreign distributors. This appeared to be the first step to take in order to improve Škoda's export prospects.

From this standpoint, back in 1955, a project had been drawn up to apply the experience acquired in the neutral countries and Belgium (regarding the network of technical assistance), extending it to other countries. The plan also envisaged utilizing these

³⁵ Aša, AZNP, box 8, Oborová Konference.

³⁶ Aša, AZNP, boxes 26 and 34, especially: III etapa plánu royvoje a specialisace pro osobní automobily 1955-1960 [Third stage of the development and specialisation plan for automobiles].

³⁷ Aša, AZNP, boxes 8 and 8a.

traditional friendly states as beachheads to gain access to new markets and overcome customs barriers and political discrimination.

In 1955 Škoda had a technical assistance service only in Belgium, Austria and Switzerland. Mladá Boleslav underlined how important it would be to be able to send its technical teams to the foreign dealers, to provide equipment and organize complete service stations in other countries. Furthermore, it was deemed opportune to promote the construction of assembly facilities abroad in order to gain ground on the international competition. Austria and Belgium were considered the most favourable locations, the first for exports towards neutral states and the second towards the capitalist countries.³⁹

Hence if the experience of the relations with Austria, Switzerland and Belgium was to be taken as exemplary by the company for the reorganization of exports in Europe, the interventions of the foreign dealers from the neutral countries in the debate which accompanied the reorganization of the export appear particularly interesting.

In 1954, Motokov sent out a first questionnaire to the dealers collecting suggestions on how to improve the foreign distribution of Škoda products and on the principal defects of the current structure. Following this up, in 1958 a conference was called, with the participation of partners from several other countries, with the slogan: 'the experiences of foreign workers as an input to eliminate production defects and improve commercial techniques for the export of Czechoslovak motor vehicle'.⁴⁰ Finally, in 1965, the interventions by the president of Tarbruck and of the Finnish representative shed light on those deficiencies still creating problems, both in the quality of Škoda products and in the organization and management of exports.⁴¹

Letters from Sweden (in 1958) and Austria and Finland (in 1965) drew attention to the need for Motokov to pay more attention to the specificities of the individual export markets and to the marketing strategies to be used in these states. The Swedish delegate underlined how an improvement in quality and a competitive price were no longer sufficient, that greater attention must be given to consumer buying habits and that targeted advertising campaigns were also needed. In particular, the complaint pertained to how Škoda underestimated the importance of small annual changes in its product line, the colour range and other such 'details'. In any case, he stressed, Škoda's drop in sales was not attributable to political reasons, at least not in Sweden, but to the diminishing esteem for Škoda vehicles which had been taking place since 1952. This was in part due to the qualitative problem of the vehicles and the defects with which they were delivered to the dealers, and also to the lack of spare parts and technical assistance. Similarly, in 1965, the Finnish delegate complained of the quantity of defects found during the warranty period, the impossibility of sending the automobiles back to Czechoslovakia for repairs and the unwillingness on the part of Škoda to adequately reimburse the Finnish service stations for the repairs undertaken.

3) The letters presented the authorities with the indisputable limitations of the coordination between ministries and with the problems of supply in the socialist

³⁸ Aša, AZNP, box 55. See also SÚA, MAP, box 200, Návrh perspektivního plánu oboru.

³⁹ Aša, AZNP, box 8a, Zápis z aktivu s delegaty Motokovu ze zahraničí a zástupci Motokovu se zástupci AZNP.

⁴⁰ Aša, AZNP, box 8, Pracovní konference generálních zástupců vozů Škoda, 1-10-1965: Diskusní příspěvek p. Ing. Kalia z Finska, pp. 42-43, and Diskusní příspěvek, ing. Prainer and F.M. Tarbruck, pp.10-14 [Working meeting among dealers of Škoda cars: discussion insights from ing. Kalia from Finland, ing. Prainer and Tarbruck].

planning system. There were over a hundred interventions between 1955 and 1958 concerning planning, organization and production at the Mladá Boleslav plant.⁴² These did bring about some improvements, but on the whole the production problems at Škoda remained unresolved, not only in terms of automobile design, but more importantly, in terms of the deficiencies of the production process and in the planning coordination. What emerged quite quickly as the main source of the problems that beset the quality of the vehicles had to do with the inability to guarantee steady supplies and the lack of coordination between the ministries and the companies. While one could create new warehouses to store motor vehicle or rebuild and modernize the facilities for producing bodies, as well as purchase new machinery for finishing the vehicles, it was far more complicated to ensure continuous production and a steady supply of components from other companies, sometimes governed by other ministries.

While some of the problems - the stiffness of the clutch, the presence of water in the boot, the excessive consumption of oil at high speeds on foreign motorways or the poor functioning of the hand brake - could be solved through project-based interventions, others, regarding the electrical and electromechanical equipment, the frequent damage to the springs and the Gufaro rings and the peeling of the paint, could only be resolved through drastic changes. The cause of such defects was to be found in the poor quality of the components, complicated by difficult relations between Mladá Boleslav and its suppliers, which neither the company nor the MAP were unable to control. The quality of the materials and of the steel depended on the Ministry of the Steel Industry and the Ministry of Mining, while the problems with the tyres and the paint reflected the grave limits of the Czechoslovak chemical sector. In order to present a competitive product on the European markets, it would have been necessary to import, aside from machinery, which was not worth producing in-house, semi-worked chemical and steel products not available in Czechoslovakia or the other CMEA countries.

The difficulties facing each ministry were worsened by the nature of the 'cooperation' between companies and ministries, as well as between the various ministries involved in the production of motor vehicles. There was a lack of planned coordination between AZNP and many suppliers (more than 100), who answered to different ministries. Predictably, the relationships between AZNP and its suppliers were marred by continuous disputes over the quality of the goods and delays in delivery. Moreover, cooperation was made more difficult by long and costly transportation and other onerous production costs.⁴³

⁴¹ SÚA, MAP, box 96, 1957–58 and box 94.

⁴² See Aša, AZNP, box 8, Porady Ředitelů, 1952-1968 [Meetings of the managers]: for a more detailed analysis see SÚA, fond Ministerstvo všeobecného strojírenství (MVS).

These were the types of problems that failed to be resolved.

6. Conclusions

This paper has established three avenues for research necessitating further examination: the internationalisation of Škoda as a growth strategy; the automobile as an export item in the socialist system; the grievance letters and neutral state markets as technological learning tools, especially for experimenting with marketing techniques.

A few tentative and partial conclusions can be drawn, which need to be integrated with documentation from the neutral states and from participating companies, as well as documentation from the Czechoslovak Ministry of Foreign Trade. Although the absolute volume of Czechoslovak motor vehicle exported to the neutral countries during the fifties and sixties is not so significant, from the point of view of technical relationships, exports permitted Škoda, however tortuously, to continuously verify the competitiveness of its products, locate technological bottlenecks and learn new marketing techniques. This permitted it to maintain foreign contacts with capitalist markets and producers around the world, even during the years of greatest isolation. Overall, the neutral countries contributed important input to Škoda and especially to its decision-making bodies, which stimulated modernization and the expansion of production facilities and kept the company's personnel up-to-date in technical and marketing know-how. However, the socialist planning system did not always permit the suggestions to be enacted and thus enable the problems Škoda faced to be resolved.

Annex n. 1

Main destination of Skoda Auto (AZNP) exports 1949-1955 ; 1961

Country	1949	Country	1950	Country	1951	Country	1952
Holland	2.200	Holland	3.142	Finland	2.205	Sweden	1.176
Poland	2.178	Poland	2.779	Poland	1.337	Poland	520
Belgium	1.534	Belgium	1.559	Australia	890	Belgium	488
Hungary	1.127	Sweden	1.165	Belgium	780	Austria	449
Romania	923	Canada	1.107	Hungary	661	Finland	418
Brazil	490	Australia	982	Holland	642	Hungary	378
Australia	462	Romania	718	Sweden	604	Norway	364
Sweden	382	Hungary	531	Brazil	460	Denmark	344
Austria	296	Finland	308	Romania	303	Brazil	266
Bulgaria	209	GDR	291	Austria	263	Holland	217
Swisse	174	Brazil	288	Swisse	177	Romania	213
Finland	157	Austria	246	GDR	146	Bulgaria	161
Yugoslavia	93	Swisse	164	Albania	104	GDR	148
Canada	71	Denmark	82	Bulgaria	79	Australia	65
GDR	69	France	77	Denmark	26	Albania	56
France	48	Albania	17	France	6	Swisse	44
Denmark	31	Bulgaria	13	Germany	3	Germany	15
Norway	31	Italy	1	Italy	2	France	6
Italy	2	Germany	0	Canada	0	UK	6
UK	2	Norway	0	Norway	0	Canada	2
USA	1	UK	0	UK	0	Italy	0
Albania	0	USA	0	USA	0	USA	0
	0	Yugoslavia	0	Yugoslavia	0	Yugoslavia	0

Country	1953	Country	1954	Country	1955	Country	1961
Finland	1.265	Finland	1.085	Finland	1.677	Finland	4.061
Belgium	775	Norway	506	Belgium	1.012	GDR	3.963
Norway	682	Belgium	278	Norway	817	Poland	3.167
Austria	551	Austria	199	Austria	610	Belgium	2.521
Sweden	379	Denmark	185	Denmark	302	Norway	1.928
Romania	298	Brazil	172	Brazil	222	UK	1.928
Poland	280	Sweden	155	Australia	148	Germany	1.624
Denmark	208	Holland	121	Germany	130	Hungary	1.493
GDR	167	Hungary	101	GDR	106	Holland	1.332
Hungary	110	Poland	101	Swisse	79	Denmark	1.295
Swisse	96	Australia	93	Yugoslavia	34	Austria	1.163
Holland	86	Swisse	69	Holland	20	Sweden	720
Albania	83	DDR	64	Albania	17	Canada	353
Australia	72	Bulgaria	51	Romania	9	France	291
Bulgaria	35	GDR	18	Canada	8	Bulgaria	220
Germany	25	Canada	5	Hungary	6	Italy	188
Italy	20	France	1	USA	4	Swisse	187
France	4	Romania	1	Poland	3	Australia	180
Canada	2	Italy	0	France	2	Romania	80
Brazil	1	UK	0	Bulgaria	1	USA	34
UK	0	USA	0	UK	1	Brazil	20
USA	0	Yugoslavia	0	Italy	0	Yugoslavia	11
Yugoslavia	0	Albania	-	Sweden	0	Albania	-

Source: ŠKODA Auto Archives, AZNP, box 55, Expedice vozů zahraničí od roku 1949 do r. 1955 [Automobiles sent abroad from 1949 to 1955]; Přehled exportů za rok 1961 [List of exports in the 1961].
Material provided by Mgr. L. Nachtmann, head of ŠKODA Auto Archives.

Annex n. 2

Main destination of AZNP products (1964-1971)

Country	1964	Country	1965	Country	1966	Country	1967
GDR	1.486	GDR	10.268	GDR	12.165	Yugoslavia	11.632
Yugoslavia	1.052	Austria	5.503	Hungary	4.271	GDR	11.178
Belgium	503	Germany	4.994	Austria	4.077	Romania	3.523
Holland	357	Holland	2.525	Germany	3.319	Austria	2.632
Austria	305	Yugosl.	2.521	Yugosl.	2.081	Hungary	2.350
Germany	207	Poland	2.495	Bulgaria	1.807	Germany	2.136
Finland	183	France	2.124	Finland	1.685	Belgium	1.811
France	143	Belgium	1.959	UK	1.624	Bulgaria	1.715
Swisse	62	Norway	1.890	Poland	1.597	UK	1.703
Sweden	59	UK	1.854	France	1.502	Poland	1.426
Italy	49	Finland	1.492	Belgium	1.465	Norway	1.191
Norway	40	Hungary	1.243	Holland	1.437	Finland	867
UK	6	Sweden	838	Norway	948	Holland	831
Canada	2	Denmark	604	Denmark	551	Denmark	422
Denmark	2	Italy	334	Italy	335	France	420
Hungary	2	Swisse	322	Sweden	329	Italy	406
Poland	1	Bulgaria	187	Swisse	207	Swisse	213
Albania	0	Australia	65	Australia	129	Australia	113
Australia	0	USA	4	Romania	5	Sweden	31
Brazil	0	Romania	3	Albania	2	Albania	4
Bulgaria	0	Albania	0	Brazil	0	Brazil	2
Romania	0	Brazil	0	Canada	0	Canada	2
USA	0	Canada	0	USA	0	USA	0

Country	1968	Country	1969	Country	1970	Country	1971
Yugoslavia	13.836	GDR	17.499	GDR	20.189	GDR	17.094
GDR	12.759	Yugoslavia	13.117	Yugosl.	16.137	Yugosl.	12.550
Romania	4.761	Poland	4.764	Hungary	6.309	Poland	7.048
Hungary	4.056	Germany	3.266	Romania	4.076	Hungary	5.566
Germany	3.362	Hungary	1.955	Germany	3.422	Germany	3.398
Austria	2.551	Romania	1.924	Poland	3.027	Romania	3.001
France	2.034	France	1.846	Austria	2.787	UK	2.551
Poland	1.804	Austria	1.769	Belgium	1.895	Austria	2.329
Belgium	1.595	Holland	1.623	Holland	1.687	Bulgaria	2.105
Holland	1.511	Finland	1.556	Finland	1.558	France	1.901
Bulgaria	1.289	Belgium	1.535	UK	1.294	Italy	1.736
Norway	670	Norway	1.176	Italy	1.175	Holland	1.719
Finland	632	UK	684	France	948	Finland	1.252
Italy	580	Italy	616	Norway	633	Belgium	1.060
Denmark	516	Swisse	210	Sweden	300	Norway	686
UK	362	Denmark	204	Bulgaria	200	Denmark	215
Sweden	335	Sweden	83	Denmark	171	Sweden	177
Swisse	188	Australia	16	Swisse	128	Swisse	77
Australia	40	USA	3	Australia	51	Canada	40
Canada	2	Albania	0	Albania	1	Australia	11
Brazil	1	Brazil	0	Brazil	0	Albania	2
USA	1	Bulgaria	0	Canada	0	USA	2
Albania	0	Canada	0	USA	0	Brazil	0

Source: Škoda Auto Archive, AZNP, box 55, Přehled vývozu AZNP Mladá Boleslav v letech 1964-1974 [List of the AZNP Mladá Boleslav exports from 1964-1974]. Material provided by Mgr. L. Nachtmann, head of ŠKODA Auto Archives.