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Valentina Fava

### EUROPEAN UNIVERSITY INSTITUTE MAX WEBER PROGRAMME

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#### Abstract

This paper examines the effects of the actions of the Council for Mutual Economic Assistance (COMECON) negotiation on the development of automobile production in Czechoslovakia between 1949 and 1965. It investigates the reasons that led to the failure of a closer integration of automobile production in the COMECON bloc; it explores which and whose needs oriented the decision-making process and considers which consequences the failure of a more integrative policy had on the Czechoslovak enterprise Skoda. The paper sheds light on a specific project, elaborated in 1949 by Czechoslovak specialists, that intended to ensure the national producer a leading role in the Comecon international division of labour. The specialists' effort to protect the national automobile industry was motivated by the relevance for the entire engineering sector of the hard currency revenues of export-led automobile production. The paper argues that the rejection of the Czechoslovak project and the Comecon failure to elaborate a coherent and technically affordable plan to establish a multilateral product specialization within the People's democracies, blocked for almost a decade the modernization of automobile production in Czechoslovakia. This determined the decline of competivness of Skoda products on capitalist markets and trapped the country's automobile industry in the "Fordism in one country" described by Abelshauser for the GDR.

#### Keywords

Czechoslovakia, COMECON, automobile industry, Fordism

#### COMECON Integration and the Automobile Industry: the Czechoslovak Case\*

#### VALENTINA FAVA

#### Max Weber Post-Doctoral Fellow (2007-2008) European University Institute, Florence, Italy

#### 1. Introduction

The case of the motor vehicle industry is emblematic of the difficulties of economic integration in the socialist bloc. It appeared the ideal sector to organize along the lines of product specialization, as originally envisioned by the Council for Mutual Economic Assistance (COMECON) which, beginning in 1949, was intended to become an international organization that, with integration and specialization as its guiding principles, would eliminate industrial autarchy and parallel investments in the Eastern European bloc. From this perspective, the motor vehicle sector would have enjoyed considerable advantages from the economies of scale that an intraregional division of work would have allowed.

However, as far as the automotive industry was concerned, COMECON integration meant above all trade agreements and some scientific and technical cooperation programs between governments: most of the member states kept producing their own complete vehicles and components, and after the 1960s many of them signed licensing agreements with Western producers. Thus, almost a decade after the first COMECON meeting an expensive partnership with the West, intended to assist small national producers, was given preference over a more ample collaboration and integration between the member states and, with rare exceptions, these same small national producers tended to produce components and systems internally.<sup>1</sup>

<sup>\*</sup> Earlier versions of this paper have been presented and discussed at the conference "Economics and integration in western and eastern Europe after the Second World War" held in Potsdam on 29th March-31st March 2007 and on November 29<sup>th</sup> 2007 at the research seminar organized by prof. Giovanni Federico on "Recent advances in economic history", European University Institute, Florence. I am grateful to the participants for their useful comments.

<sup>1</sup> *J. Laux*, The European Automobile Industry, New York, 1992, pp. 212-213 and *T. Bauer/ K. A. Soos*, Inter-firm Relations and Technological Change in Eastern Europe- The case of the Hungarian Motor Industry, in: Acta Oeconomica, 23, 1979, pp. 285-302; on the automobile industry in the Socialist countries see also Actes du Gerpisa, A' l'est du nouveau?, 39, 2005.

Drawing from the study of the Czechoslovak automobile industry, the present paper formulates some hypotheses about the motives that led to the failure of the COMECON project of intraregional division of labour in the automotive sector and its consequences on the development of the sector in the Soviet bloc.

The main thesis discussed in this paper is that the failure of COMECON to achieve greater industrial integration precipitated the new contracts with capitalist enterprises in the 1960s. In particular while the main stream historiography on COMECON integration concentrates on the years of Krutschev's leadership, after 1954, this paper attempts to demonstrate that the failure of the first COMECON negotiations between 1949-1954 undermined the possibility of success of upcoming cooperation agreements among COMECON members and condemned the automobile industry of the Soviet bloc to technological dependence on Western automotive technology. In this perspective, the Soviet delay in supporting a rational and technically affordable plan of integration at COMECON level not only prevented the introduction of mass production managerial practices and technology until the beginning of the 1960s but forced the satellites to sever traditional suppliers' relations with Western European companies without providing a viable alternative until the late 1960s.

Furthermore, the paper aims at challenging the assumption that the decision making at COMECON level concerning the automotive sector did follow any Soviet-led scientific and rational plan. It intends to demonstrate that the COMECON failure in promoting a division of labour in the automotive sector in the area was due to the failed implementation of a plan that was neither coherent nor technologically sustainable and was the result of the nationalistic tensions opposing the member states combined with the Soviet hegemonic ambitions.

The paper proceeds as follows: section two offers an overview on the mainstream literature dealing with the aims and results of COMECON activity. Sections three and four focus on the Czechoslovak economic bureaucracy's attitude towards COMECON integration and on the Czechoslovak proposal concerning the COMECON division of work in the motor vehicles industry. Section five describes the effects of the COMECON intervention on the Czechoslovak automobile industry. Finally, the sixth section of the paper provides some data on the Czechoslovak trade and production of automobiles from 1949 to 1965 in order to assess the short and medium term consequences of the rejection of the Czechoslovak proposal on Škoda's production and exports.

#### 2. COMECON studies and the "sovietization" paradigm. Some recent works.

COMECON was founded in January 1949 at the urging of the Soviet Union. It was the Soviet answer to the Marshall Plan and the creation of the OEEC. Its formal aim was to institutionalize the integration of the economies of Eastern and Central European countries, eliminating economic independence and parallel investments without violating the sovereignty of its member states (originally including Czechoslovakia, Bulgaria, Romania, Poland and Hungary; East Germany and Albania were admitted later).<sup>2</sup>

Its activity can be broken down into three stages: the initial years, 1949-1954, characterized by fruitless negotiation on scientific and technical cooperation and coordination of long-term planning, the years from 1954 and 1963, when Khrushchev expanded its role and gave it a permanent structure, but failed in his attempt to create a body with supranational powers able to make COMECON decisions effective, and the third stage, which began with the oil crisis of the early seventies and ended with its dissolution, in 1991, during which the COMECON countries were increasingly dependent on Soviet subsidies on the one hand and on Western credit on the other.

The economic integration between the COMECON member countries has been a favourite topic among Western scholars, and the literature seems to agree on its overall failure, or at least in underscoring the gap between the declared objectives and what the COMECON was actually able to achieve in its fifty years of existence.<sup>3</sup>

Particularly negative judgments have been directed at the issues of coordination of planning and product specialization. The division of long-term production plans among the member states was perhaps the most ambitious of the objectives COMECON attempted to realize and was the dominant topic of internal debate from the very first meetings, in 1949/50. After 1954 it became the object of a formal analysis and decision-making system known as a "coordination procedure", whose efficacy was however hampered by the practice of starting from the plans already approved by the single nations instead of from new guidelines. In fact, cooperation between countries proved more difficult, and all attempts to endow the COMECON with a planning body with supranational powers failed.<sup>4</sup>

A different verdict, although still not completely positive, has been given on the issue of the reorientation of trade flows within the COMECON area (intraregional trade). In any case, as has been pointed out, data alone are insufficient to distinguish the effects of the interventions of the COMECON from those of other factors, such as the impact of the embargo imposed by the West, the process of Western economic integration or even simply the various development policies in force in the member countries.

The reasons for the difficulties encountered by the COMECON have been discussed in depth.

A first series of problems was identified in the technical difficulties tied to the organization of foreign trade in planned economies, as well as the difficulties linked to a range of issues, including a lack of currency exchange mechanisms, inadequate price-

<sup>2</sup> On the institutional history of Comecon see the seminal work by *M. Kaser*, Comecon. Problemi di integrazione nelle economie pianificate, Milan 1976 [Comecon. Integration problems of the planned economies, London 1967].

<sup>3</sup> *A. Korbonski*, Theory and Practice of Regional integration: the case of Comecon, in International Organization, 24/4, 1970, pp. 942-977 and *Id.*, Detente, East-West Trade, and the Future of Economic Integration in Eastern Europe in: World politics, 24/4, 1976; in his first article Korbonski adopted the definition of integration given by M. Kaplan, 1957: "process by which separate economic systems have been developing a common framework for the common pursuit of some economic goals (growth and industrialization) and for the common implementation of some economic policies (coordination of national plans, specialization in production and maximization of regional trade)", p. 947. 4 *Kaser*, 1967, pp. 61-89.

setting mechanisms, as well as problems with coordination and difficulties concerning the negotiations required between the companies and the various ministries, all factors that made multilateral trade extremely complicated and drove the member countries to stipulate bilateral accords.<sup>5</sup>

The historical literature, however, has instead emphasized the political causes of the failure. There is a general consensus that the COMECON was mainly an instrument of Soviet foreign policy: integration was intended to help consolidate the relationship between Moscow and its allies, inducing the latter to revoke their economic ties with the West, which in 1949 were in most cases still quite close. Economic dependence on Moscow would have consolidated that policy and contributed to reinforcing the links between the Soviet Union and the nations of the Eastern bloc.<sup>6</sup>

Recently the debate on the economic Sovietization of the satellites during the period of the "peak of Stalinism" has further emphasized the political and artificial nature of COMECON, whose main aim, in the opinion of numerous scholars, was to centralize resources and exploit them for strengthening the Soviet empire.<sup>7</sup> In this perspective, during the initial stage of its existence, COMECON played a secondary role regarding Soviet objectives, which were more effectively furthered by "Soviet advisors" and local communists.<sup>8</sup> After Stalin's death, the institutionalization of COMECON played a more important role in Soviet politics. However, at that point, with the reform movements of the late 1950s and beginning of 1960s, the Soviet attempts to "defrost" COMECON cooperation met with resistance from elites and from the governments of the satellite countries.<sup>9</sup>

The emphasis on the modalities of Soviet domination and their imperialist quality has led to a situation where the economic integration of the Soviet bloc has become, in the last fifteen years, a rather remote object of study, since COMECON negotiations, especially between 1949 and 1954, were considered as a sort of theatre piece concealing the most fundamental political dynamics and economic transformation that were taking place elsewhere and were led by the Soviet advisors. However, in this way, it seems

<sup>5</sup> J. Wilczynski, The economics and politics of East-West trade: a study of trade between developed market economies and centrally planned economies in a changing world, London 1969; F. Holzman, Foreign trade under central planning, Cambridge 1976, pp.51-121.

<sup>6</sup> See Z. Brzezinski, The Soviet bloc: unity and conflict, Cambridge 1967; for the Czechoslovak case see K. Kaplan, Českonslovensko a RHVP (1948-1953), Prague 1995 and Id., Rada Vzájemné hospodářské pomoci a Československo, 1957-1967, Prague 2002

<sup>7</sup> A. Rees, The Sovietization of Eastern Europe in A. Rees/ P. Apor/ B. Apor, New Perspectives on Sovietization, Washington 2008.

<sup>8</sup> There is a wide debate on the role of Soviet advisors and the efficiency of the Sovietization process in promoting uniformity of Central and Eastern Europe see for example: See also *L. Bohri*, The Merchants of the Kremlin: the Economic Roots of Soviet Expansion in Hungary, working paper Woodrow Wilson International Center for Scholars, Washington D.C. 2000; *K. Kaplan*, Sovětšti poradci v Československu 1949-1956, Prague 1993; recently some scholars have started to look behind the "façade" of the imposed Stalinist uniformity, stressing instead both shortcomings and differences in the implementation of the Soviet model as well as the persistence of separate national traditions see *J. Connolly*, Captive University. The Sovietization of East German, Czech and Polish Higher Education, 1945-1956, Chapel Hill 2000; see also *S. Kott*, Pour une historie sociale du pouvoir en Europe Communiste: introduction thématique in: Revue d'histoire moderne et contemporaine, 2, 2002, pp. 5-23.

<sup>9</sup> Korbonski, 1976 and Holzman, p. 81. More recently *M. Kramer*, The early post-Stalin Succession Struggle and Upheavals in East Central Europe: Internal- External Linkages in Soviet Policy Making, in Journal of Cold War Studies, 1, 1, 1999; 1, 2, 1999, 1, 3, 1999.

extremely difficult, quoting Holzman, to understand the "rationality" behind the apparent "madness" that led the satellite countries to boycott the path to integration envisioned by the COMECON bureau after 1954.<sup>10</sup>

In this context, the analysis of the COMECON negotiations and their impact—even if perhaps indirect or mediated by the Soviet advisors—on the industrial policies and technical debate of the member states might offer a rather interesting perspective on the intra-bloc political and economic relations as well as the role played by the economic nationalism of the members in determining the failure of closer cooperation.

Two volumes collecting recent works on East-West economic relations during the Cold War tend to re-focus the debate on COMECON integration on the reasons behind the satellites' "unwillingness" to cooperate with each other which became more evident in the 1960s. These studies, principally focusing on the efficacy of the embargo and the actions of the Coordinating Committee for Multilateral Export Control (Cocom, created in 1949 by the US administration and the Western European governments to draw up the list of goods whose trade had to be controlled and limited for strategic reasons), as well as trade between the satellite countries and neutral nations, have shed light on the "cracks" in the Western alliance, emphasizing the permeability of the Iron Curtain and the persistence of traditional economic ties between countries finding themselves on different sides of the fence.<sup>11</sup>

These volumes invite scholars to open the "black box" containing the history of economic relations within the Eastern bloc and re-read the story of COMECON, this time not so much from the standpoint of Soviet hegemony and its ends, but with an eye to the conflicts provoked among the member nations and inside them by the plan of economic integration that was the *raison d'être* of COMECON itself.<sup>12</sup>

From this standpoint, the case of the Czechoslovak motor vehicle sector is a significant one, particularly in the first stage of COMECON's existence (1949-1954). In Czechoslovakia, the quite lively technical debate that accompanied the concrete implementation of the major decisions affecting the fate of the Czech industry gives a clear idea of the intricacy of the COMECON negotiation process and the different ways in which it impacted the industrial policies of the Satellite countries.

### 3. The engineering sector and the material basis of the Czechoslovak commitment to COMECON integration (1949-1954).

Among the original members of COMECON, Czechoslovakia was the most industrialized country, with the most modern engineering industry. Furthermore, the initial meetings of COMECON coincided with the launch of the first Czechoslovak

<sup>10</sup> Holzman, p. 62.

<sup>11</sup> *G. Adler-Karlsson*, Western economic warfare 1947-1967: a case study in foreign economic policy Stockholm 1968, see pp. 4-9 and *J. Van Brabant*, A reconstruction of the composition of intra-CMEA trade relations, Berlin 1974.

<sup>12</sup> Starting from the work of Adler- Karlsson see the many works presented in *J. Oyala/J. Eloranta*, East West Trade and the Cold War, Jyaksyla 2005 and in *A. Teichova/P. Franasczek (eds.)*, A gap in the Iron Curtain: Economic relations between neutral and socialist countries in Cold War Europe, Warsaw 2008 forthcoming.

five-year plan (1949-1953), which modified the equilibrium of the Czechoslovak industrial structure, tipping the balance in favour of the strategic industrial branches, especially heavy engineering.<sup>13</sup>

However, as Eduard Kubu and Dagmara Jajesniak-Quast show in their recent work, the Czechoslovak engineering industry depended heavily upon imports from the West for its raw materials, key metals, especially iron ore and some aluminium alloys, and mechanical equipment.<sup>14</sup>

In the first stage of COMECON's existence, these supplies, which were vital to the survival of engineering production in most of the People's democracies and especially the developed ones, Poland, Czechoslovakia and GDR, seemed to be increasingly threatened by the Western embargo launched in 1948, by the drafting of the COCOM list in November 1949 and by the political tensions that culminated in the Korean War (1950-1953). In addition, acquiring supplies from the West was made still more complicated by the dearth of hard currency available to the Czechoslovak Government.<sup>15</sup>

COMECON intraregional cooperation, opening up new sources (i.e. Soviet ones) of raw materials and permitting access to Soviet technology, seemed to offer a viable alternative to less and less affordable and reliable Western sources of raw materials and technology. This helps to explain the reasons leading the Czechoslovak government to strongly commit itself, as reported by Karel Kaplan, from the very beginning and up to the 1960s, towards promoting the closest cooperation possible between COMECON members, through forms of integration that combined a redirection of trade flows with a genuine division of labour on the international level.<sup>16</sup>

In addition, the persistence of Czechoslovakia's trade ties with the West was under increasing fire from Moscow, which insisted on a total shutdown in trade relations between its allies and the capitalist countries. In Czechoslovakia, this came to a head in 1951-1952, with the charges of "nationalistic deviation" or "sabotage activity" levelled at Rudolf Slánsky and his collaborators. They were accused, among many other things,

<sup>13</sup> V. Prucha, Sectoral changes in industry after World War II, Prague 1991 and A. Teichová, The Czechoslovak Economy 1918-1980, London-New York 1984, pp. 134-149.

<sup>14</sup> *B. Brom/E. Kubu*, The role of Czechoslovak trade with neutral countries in the period of escalating Cold War. The example of Swittzerland and Sweden 1949-1953 and *D. Jajesniak-Quast*, Permeating the embargo with Iron and Steel. Poland, Czechoslovakia, the GDR and the Neutral States in *Teichova et al (eds.)*, 2008. See also 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, Informace o zahraničním obchodě ČSR s kap. Staty za r. 1952 ve srovnání s r. 1950 a 1951, p. 16 [Notes on the Czechoslovak foreign trade with capitalist countries in 1951 in comparison with 1950 and 1949].

<sup>15</sup> SÚA, HR UV KSC, 43, 305, Informace o zahraničním obchodě ČSR s kap. Staty, p. 16; Statistics and information elaborated by the Czechoslovak government in the 1950s have to be carefully analyzed keeping in mind propaganda aims. The Economic Council of the Czechoslovak Communist Party reported that the percentage of imports from the capitalist countries in relation to the total percentage of imports decreased from 35% in 1949 to 24.6% in 1951; the percentage of exports to the capitalist countries decreased from 37% in 1949 to 20% in 1951; the authors of the documents stress, however, that the percentage of imports from Switzerland, Belgium, Finland, Denmark and Austria did not decrease as much as the percentage of exports to Switzerland, Austria and Finland.

<sup>16</sup> *Kaplan*, 1995 and 2002: for the motor vehicle industry and its military use see SÚA, HR UV KSC, 43, 306, and in particular Fabinger's notes on the hypothesis for the coordination of production plans in the motor vehicle industry sent to Frejka on February 21st, 1949.

of not having severed Czechoslovakia's economic ties with the West.<sup>17</sup> Some of them had been heavily involved in the first stage of COMECON negotiation: Josef Goldmann (1912-1984), Czechoslovak representative at the COMECON bureau; Ludvik Frejka (1904-1952), economist and head of the Presidential office; and František Fabinger, head of the export enterprise KOVO Czechoslovak National Enterprise for iron and steel products (Českonslovenské závody kovodelné a strojrenské narodní podnik).

The first COMECON meetings in Moscow and Sofia (April 1949- August 1949) were held in a climate of deep mutual diffidence: the Czechoslovak representative Josef Goldmann denounced the lack of any awareness of the *status quo* of the engineering industry in the other member countries, revealing a climate of general distrust and fear (he lamented that he was not free to leave Moscow or communicate with Prague). From the very beginning, he seemed aware that contrasting visions of integration, according to the different and, sometimes, opposing requirements of economic development in the member states, undermined the possibility of effective cooperation.<sup>18</sup> Between February and April 1949 there was an intense exchange of letters and documentation between Josef Goldmann, Ludvik Frejka, and František Fabinger.

The letters deal with the COMECON plans to coordinate production and the transfer of scientific and technical knowledge between its members. Goldmann updated his colleagues in Prague on the negotiation process, asking them for technical advice on the main topics discussed.<sup>19</sup>

The documentation confirms that there was an increasing fear of the effects of the embargo on Czechoslovak industry and this was pushing the Czechoslovak authorities on the one hand to look for trade agreements with some neutral countries (Sweden or Switzerland or Austria) and, on the other hand, to invest heavily in the COMECON project.<sup>20</sup>

COMECON integration at the time was seen by the Czechoslovak delegate and his colleagues as the main solution to the problem of the scarcity of raw materials: a careful coordination of planning would have made the COMECON sources of supplies available to Czechoslovak industry and led to a higher degree of industrial specialization. However, this could only occur if the coordination of planning successfully prevented the development of parallel engineering production lines in the other member states. If this did not happen, then integration, which involved the transfer of patents and technological expertise from Czechoslovakia to the other members for

<sup>17</sup> Rudolf Slánsky was secretary general of the PCC until 1951, sentenced to death in 1952 together with Frejka, a leading economist and head of the Presidential Office see: *K. Kaplan*, Komunistický režim a politické procesy v Československu, Brno 2001.

<sup>18</sup> SÚA, HR UV KSC, 43, 306: letters from Goldmann to Frejka, February 2<sup>nd</sup> 1949; March 2<sup>nd</sup>, 8<sup>th</sup>, 16<sup>th</sup>; April 6<sup>th</sup>, 15<sup>th</sup>, 16<sup>th</sup>, 1949. Frejka answers to Goldmann on March 19<sup>th</sup>, 24<sup>th</sup> 1949; Frejka report to the President, Klement Gottwald on April 19<sup>th</sup> 1949.

<sup>19</sup> SÚA, HR UV KSC, 43, 306: letters to Frejka from Fabinger, March 27<sup>th</sup>, 1949.

<sup>20</sup> SÚA, HR UV KSC, 44, 306, Přípravný materiál pro presidium HP v Požarech [Report prepared for the HR presidium in Pozarech Comecon] held on April 27<sup>th</sup>, 1949 in Moscow and also Zahraniční obchod Československa v privní poletí 1949 [Notes on Czechoslovak foreign trade in the first half of 1949]: the stress here is on the need to get rid of the material dependence on the capitalist countries as well as the to follow the example of Ussr; see also Informace o Československém zahraničním obchodě v roce 1950 [Notes on the Czechoslovak foreign trade in 1950] and Informace o zahraničním obchod ČSR s kap. Staty za r. 1951 ve srovnání s r. 1950 a 1951, p. 11: the growing difficulties in the export of the Czechoslovak motor vehicles towards capitalist countries were clearly attributed to political discrimination.

practically no return, threatened to make the raw materials needed by Czechoslovak engineering production scarce and costly and create dangerous competitors within the COMECON group itself.<sup>21</sup>

Goldmann and his colleagues were particularly afraid of Polish and Hungarian attempts to obtain technical help from Czechoslovakia without committing themselves to any limitations on their industrial and export plans. At the same time they were proposing to relegate the less advanced countries (Rumania and Bulgaria) to the role of mere suppliers of raw materials, iron ore, or exporters of semi-worked goods.

The Czechoslovak point of view towards the aims and methods of COMECON integration in the engineering sector was clear: in a situation marked by a serious shortage of raw materials, it could not be the industrialization or development of the backward (or rather nonexistent) engineering sectors of Rumania and Bulgaria which held the highest priority in the process of integration. Instead, integration should focus on ensuring that the advanced Czechoslovak engineering industry had a sufficient supply of raw materials to carry on its role—a role of clear leadership shared only with the Soviet Union—in the international division of labour.<sup>22</sup>

Membership in COMECON in the years from 1949 to 1951 appeared to provide an opportunity to solve the chronic problems faced by the Czechoslovak economy—i.e. a small domestic market and a lack of raw materials. At the same time, however, Czechoslovak specialists seemed to be aware that the COMECON international division of labour might instead turn into a mere transfer of patents and know-how from Czechoslovakia to the less developed member states, and that this in turn would have endangered some important and advanced production lines. One of these was national automobile production.

# 4. The promises of COMECON integration: from survival to COMECON leadership.

Although COMECON's activities reached their peak in the period following 1954, in the case of the Czechoslovak automobile industry, it was during the period from 1949 to 1954 that the die was cast for the "Fordism in one country" that would hobble it and mark its decline.

To understand how this happened, it is worthwhile reviewing briefly post war history and the main characteristics of Czechoslovak automobile production.

After the end of the Second World War, in 1945, the main companies producing automobiles in Czechoslovakia (Škoda, Tatra, Aero and Praga) were nationalized and a national enterprise for automobile production was founded, the AZNP (Automobilové

<sup>21</sup> SÚA, HR UV KSC, 43, 306: Especially see the document sent to Frejka from Fabinger dated March 29<sup>th</sup>, 1949 O vědecko- technické spolupráci [Concerning technical and scientific cooperation] and Návrh na nomenklaturu v dělbě výrobních programů [Project for the division of production plan]; on this point see the Soviet German 1962 specialization discussions: the "mistrust" that prevailed among the Germans towards the Soviets is echoed, though less explicitly, in the Czechoslovak documentation: *R. Stokes*, Constructing Socialism. Technology and Change in East Germany 1945-1990, Baltimore 2000, pp. 134-136.

<sup>22</sup> SÚA, HR UV KSC, 43, 306: O vědecko- technické spolupráci.

Závody, Národní Podnik- Automobiles Factories, National Enterprise). In perspective, automobile production in Socialist Czechoslovakia was supposed to be rationalized and progressively concentrated in the plants of the former Škoda factory in Mlada Boleslav. To this aim, in 1946-1947, the AZNP technicians had collaborated with an American engineer, Alexander Taub, devising an ambitious plan for the rationalization of motor vehicle production in Czechoslovakia. One of the main organizers was Frantisek Fabinger. The motto was "a people's car for a people's democracy", as the automobile sector and the mass production of motor vehicles were considered crucial for the country's industrial reconstruction. In this light, substantial investment would have made it possible to build specialized plants and purchase single purpose machinery.<sup>23</sup>

However, the first five-year plan, launched in 1949, did not provide the necessary resources and relegated the construction of a people's car to a time following the phase of the "building of socialism". At the same time, in 1949, the governance structure of the automobile industry changed and a new central directorate ČZAL (Československé závody automobilové a letecké - Czechoslovak motor vehicles and aeronautical factories) was set in charge of coordinating motor vehicle and aeronautical production.<sup>24</sup> From the "basis" or standpoint of reconstruction, the possession of an individual car became, in the official propaganda, a "senseless luxury", and the automobile industry was demoted in terms of resources allocation to the margins of the Czechoslovak economy.<sup>25</sup>

For a brief period—in 1951 ČZAL was dismantled—the technical experts of ČZAL looked to COMECON with hope, as it seemed to offer a chance to resolve the difficult situation into which the launch of the First Five Year Plan had plunged the Czechoslovak automobile production.<sup>26</sup>

<sup>23</sup> *V. Fava*, Tecnici, Ingegneri e Fordismo: Škoda e Fiat nelle relazioni di viaggio in America, in: Imprese e storia, 22, 2000 and also *A. Taub*, A people's technology. A report to dr. Ing. F. Fabinger, General Director of KOVO, Praha 1946, p. 8; Škoda Auto Archives, Mladà Boleslav (hence forth AŠA), AZNP/P, 4; Alexander Taub, an American consultant, used the term people's technology in the report written during his consultancy in 1946; he was comparing the possible development of the Czechoslovak automobile industry with the American General Motors, defined as "a mosaic of small and medium specialized enterprises"; this idea is mentioned (emended by any reference to the American producer) also in another document written by Czechoslovak specialists in 1949 see Státní Ustřední Archiv hence forth SÚA, Československé závody automobilové a letecké hence forth ČZAL, 64, 1949, Program vývojového oddělení pro vozidla [Program of the development unit for motor vehicles].

<sup>24</sup> The ČZAL was created in 1949 as a central directorate in charge of automotive and aeronautical production. However, in 1951 it was 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; these changes made the subordination of the motor vehicle sector to heavy engineering complete; finally, in 1955 motor vehicle production was again decentralized and a Ministry for automobiles and agricultural equipment (Ministerstvo automobilového průmyslu a zemědělských strojů) was created.

<sup>25</sup> On these aspects see: *V. Fava*, Between American Fordism and "Soviet Fordism": the Czechoslovak way towards mass production" forthcoming in *A. Rees et al*, New Perspectives on Sovietization; 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 [World of motors] between 1949-1950: see in particular 'Nemístní luxus'[a senseless luxury] in : Svět Motorů, 25 March 1950, p. 164.

<sup>26</sup> SÚA, ČZAL, 64, 22 June 1949, Program vývojového oddělení pro vozidla [Program of the development unit for motor vehicles].

The ČZAL experts developed a plan for increasing automobile production that was an interesting elaboration of Taub's plan in light of the "new situation" resulting from the Five Year Plan. In fact, it was believed possible that some of the benefits of modern production could be enjoyed by intervening solely on the organizational aspects outlined by Taub that were consistent with the principles of socialist rationalization (being unable to modernize in terms of plants and equipment).<sup>27</sup> This amounted to further centralizing the sector through the rationalization and standardization of production, improving worker productivity and concentrating production on just one or two car models.<sup>28</sup>

The first step - as announced in the development plan drawn up by the ČZAL - was to facilitate and assist the process of «natural selection» that had eventually resulted in other countries in the success of companies equipped with more «financial backing and technical experience» through the concentration of all of the country's automobile production in a single plant.<sup>29</sup> The point of reference was still the United States, to which in 1949 Great Britain was also associated: in the first case the market appeared to have been dominated by large companies for some time, in the second the sixty-three pre-war car manufacturers had by the end of the war merged into six groups that accounted for 90% of the cars produced in Great Britain, a concentration process undertaken in an attempt to acquire modern machinery and reduce prices. It was a strategy that led to results regarded as «astounding».<sup>30</sup>

The goal was to arrive at the end of the first Five Year Plan with a single national development plan for motor vehicles, which would permit the production of a sufficient quantity of models - built using common and interchangeable components and assembled units - to satisfy the various types of existing demand (including defence and export) in terms of cost, power and load capacity. The rationalization was also intended to be applied to the production of components: each of these (e.g. ball bearings, brake drums, gear shift boxes) was to be standardized and concentrated in one specialized plant. Only in this way, as the American example of General Motors showed, would it be possible to produce high volumes using modern methods.<sup>31</sup>

Finally, ČZAL aimed to do away with the semi-autonomous structure of the individual motor vehicle facilities, which still relied on in-house production, by choosing the most modern plant for each component and concentrating large-scale production there. Specialists viewed the "autarchic" nature of each single plant and the dispersion of resources implicit in the in-house production of machine tools and steel products as a serious threat, going against the trend in the international automotive industry, which was instead oriented towards the establishment of specialized plants and mass production.<sup>32</sup>

<sup>27</sup> This attitude in approach, on the one hand the Soviet technological model, and on the other the capitalist one can also be found in German rhetoric on socialist technology, but with a stronger emphasis on technological hardware than on organizational aspects, see *R. Stokes*, In search of a socialist artifact: Technology and Ideology in East Germany, 1945-62, in: German History, 15, 1997, especially pp. 223-227.

<sup>28</sup> SÚA, ČZAL, 64, 22 June 1949, Program vývojového oddělení.

<sup>29</sup> Ibid.

<sup>30</sup> Ibid.

<sup>31</sup> Ibid.

<sup>32</sup> Ibid.

The ČZAL plan was part of a larger design, involving the international division of labour envisioned by the COMECON.

Czechoslovak estimates showed that after the war, in all of the countries of the Eastern bloc, with the exception of the USSR, there were fewer commercial vehicles and automobiles in circulation than in Czechoslovakia, and that in addition, they were distinctly inferior to the Czechoslovak products in quality.<sup>33</sup> Moreover, the projected sales data showed that for the entire COMECON area, the market would not be able to absorb the production of even one large modern automaker.<sup>34</sup> There was an urgent need to establish a division of production programs among the people's democracies. According to the ČZAL technicians, the establishment of automobile plants in each country would not only be useless, but counterproductive. There were political and strategic reasons, too, to support concentration and selection of a small number of production sites: the armed forces needed a standardized industry whose production could be quickly converted into making military vehicles in large numbers if the need should arise. Production specialization was even envisioned for components.

The plan was to create a single, super-specialized facility for each component, leading to «mosaic-style production» that would include the entire COMECON area. The idea was to produce two types of car in Czechoslovakia: a lighter car with a 1200-1500 cc engine (but the ideal was the 750 cc engine of the people's cars) in the Škoda plant in Mlada Boleslav and a heavier model, the Tatra 6 cc, in the Tatra facilities in Kopřivnice and to extend assembly and the production of some less fundamental parts to the other COMECON members.<sup>35</sup>

For the Czechoslovak automobile industry, the stakes for the extension of rationalization and standardization to all of the plants in Eastern Europe were high: producing for the entire Eastern bloc would have meant having the necessary «market» size to absorb the volume of production that would justify the increased investment and the purchase of the single purpose machines required for mass production. If the enormous potential of the COMECON were to be utilized, an economy of scale over a vast area would become a reality.<sup>36</sup>

The specialists presented this project and the expertise accumulated in almost fifty years of motor vehicle production in Bohemia as the Czechoslovak "competitive edge", which would not only have justified the investments not provided for in the plan, but would also have established the role of Czechoslovakia as the industrial leader of the coalition together with the USSR.<sup>37</sup>

<sup>33</sup> SÚA, ČZAL, 86, Problematika výroby automobilů a motocyklů [Notes on the production of motor vehicles and motocycles], 1949; see also SÚA, HR, UV, KSC, 43, 306 Dodatek k tabulce sestavenì typů motorových vozidel, February 1949: according to this document in 1950, USSR would have produced 65.000 automobiles, Poland planned to produce 10.000 cars by 1955 but in 1950 would have produced no cars; Hungary was producing only the Prototyp Pente while the Czechoslovak production would have counted on 21.000 automobiles.

<sup>34</sup> SÚA, ČZAL, 86, Problematika výroby automobilů.

<sup>35</sup> Ibid.

<sup>36</sup> Ibid.

<sup>37</sup> ČZAL, box 83, Výroba automobilů v ČSR v ramci spolupráce s SSSR a zeměmi lidových demokracií [Motor vehicles production in Czechoslovakia according to the cooperation with the USSR and the People's Democracies], 12 April 1950; see also SÚA, Records HR ÚV KSČ, box 43, archival unit 306. Návrh formulace předběžného Československého stanoviska v otázce koordinace plánů výroby

The ČZAL specialists' attempt to support automobile production was motivated not only by the national prestige that producing a national automobile would confer on the country or by the clear technological "hubris" that lay at the basis of their ambition to become the industrial leader in the COMECON bloc.<sup>38</sup> In addition to nationalistic motivations and technological hubris, economic and technical factors played an important role: selling cars abroad was fundamental to achieving the targets that the ambitious five year plan had set for the Czechoslovak engineering industry as a whole.

In this perspective, the data reflecting the volume and the destinations of the exports of Czechoslovak automobiles tend to support the hypothesis that, at least at the end of the forties and during the 1950s, the main aim of producing automobiles in Czechoslovakia was to produce "goods that could be exported using few strategic resources".<sup>39</sup>

If we compare the available data on Czechoslovak automobile production and their total exports, we see that from 1949 to 1955, the percentage of total production devoted to export was 75%, on average. After 1956, a greater number of vehicles was made available for the domestic market but the percentage of exported cars remained greater than the percentage destined for export by the Western producers (figure n.1-2).<sup>40</sup>

If we look at the destinations, it comes out that the sharp fall in exports towards the capitalist countries during the first Five Year Plan was not compensated for by a corresponding increase in exports to COMECON countries, at least up to the 1960s. Instead, Czechoslovak exports of cars towards COMECON countries in the first years of the Cold War declined, clearly reflecting the lack of interest in mass motorization in the Socialist bloc (table 2-3, figure 3).<sup>41</sup>

automobilů a motocyklů [The current Czechoslovak point of view on the coordination of production plans for motor vehicle and motorbikes], 19 September 1949, p. 3.

<sup>38</sup> This idea of the Greek term "hubris" used by Stokes to refer to the attitude of the East German government pretending the country was able to compete in a race in a market it did not have the resources to win, works extremely well in defining the technocratic attitudes of Czechoslovak specialists both imagining post-war Czechoslovak automobile products as substitutes for German cars and envisioning a sort of alliance between industrial Czechoslovakia and the USSR in the COMECON bureau against the developing nations see *R. Stokes*, Constructing Socialism, p.134 and ASA, AZNP\P, 4, *A. Taub*, A People's technology.

<sup>39</sup> SÚA, ČZAL, 86, Problematika výroby automobilů a motociklů; concerning the data see: Skoda Auto Archives, Mlada Boleslav, hence forth, Aša, records Automobilové Závody, národní podnik/p hence forth AZNP/p, 4, Expedice vozů zahraničí od roku 1949 do r. 1955; Přehled exportů za rok 1961; Přehled vývozu závodu Mladá Boleslav v letech 1964-1974 [List of exports for the year 1961; list of exports from the Mladá Boleslav factory, years 1964-74]; tables 1, 2, 3.

<sup>40</sup> To have an idea about the significance of that data, and the volume of both 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, total production in Italy 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 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 year; see *ANFIA (Associazione nazionale fra industrie automobile in cifre* [Automobiles in numbers] Turin 1982.

<sup>41</sup> Laux, 1992: concerning the pace of the Soviet, Rumanian and German motorization see the contribution from *L. Siegelbaum*, The impact of Motorization on Soviet Society after 1945, in *M. Grieger/C. Kuhr Korolev*, "The Automobile revolution": Automobile and society since 1945, Corporate History department of Volkswagen AG, forthcoming in 2008. In the Soviet Union and most of the satellites, during the "building of Socialism" stage, the automobile was mainly destined to the

The Czechoslovak export data concerning cars mirror this situation: Hungary's share fell from 9.6% of total exports in 1949 to just six vehicles imported in 1955. Exports to Rumania went from 923 units in 1949 (less than 1%) to nine automobiles in 1955, while Poland's peak of 2,779 in 1950 (17.3%) bottomed out at just three in 1955. The USSR only imported five automobiles from Czechoslovakia between 1949 and 1955. Later on, the quota of cars sent to the USSR increased, but seldom exceeded 4% of total exports. On the contrary, the percentage of cars sold to the neutral countries (Austria, Finland, Sweden, Norway and Switzerland) increased from 8.9% of total exports in 1949 to 53% in 1955 (table 2; figure 3).

Thus, in those years, automobiles represented for Czechoslovak industry a particularly valuable item that could be exported in exchange for hard currency or bartered with embargoed goods through neutral countries. Due to the dearth of sources on foreign trade and to the extremely low production volume, and consequent total export of the sector, this can be only a little more than a hypothesis.<sup>42</sup> However, it suggests looking at the problem of the failed COMECON specialization agreement in the motor vehicle sector by moving beyond the motorization issue on its own, and looking instead at the very precarious situation of Czechoslovak foreign trade and the heavy engineering industry.

#### V. The Tatraplan and the threats of COMECON integration.

The proposal to create a single, large automobile manufacturer on the COMECON scale was soon rejected because it was considered impractical from a "political standpoint" and the Czechoslovak automobile industry did not receive the investments that its technicians had asked for.<sup>43</sup>

As far as the motor vehicle sector, there had been Soviet intervention since April 1950 through the Soviet advisors at the COMECON bureau, who intended to influence the drawing up of production programs and plans. Traces of this appear in the exchange of memos between the National Planning Commission (SÚP) and the ČZAL following the

representative needs of the institutions and the military purposes of the armed forces and the distribution process was completely disconnected from any form of market mechanism; motorization was considered a "weakness" of the capitalist system and was strongly opposed by the authorities, at least until the Sixties: this was also because available resources were to be used for more strategic purposes: the development of heavy industry and military weaponry; according to Siegelbaum's estimates, in 1975, the total number of cars produced in the USSR (1,200,000) was six times greater than in 1965. Also, the proportion of new cars assigned for sale to the population had more than doubled by 1975; used State-owned cars were sold, and this further increased the number of cars available to the population; by the mid 1970s there were more than 5 million private cars in the USSR (mainly in Russia and the Ukraine); Siegelbaum concludes that whereas in 1970 only two percent of households possessed a car, in 1975 it was 5, 10 by the 1980s and 15 by 1985. See also *W. H. Parker*, The Soviet Motor Industry in: Soviet Studies, 32, 4, 1980, pp. 515-541.

<sup>42</sup> I presented and discussed this hypothesis drawing both from quantitative data and qualitative sources in *V. Fava*, Motor vehicles vs. dollars: selling socialist cars in neutral markets. Some evidence from the ŠKODA Auto case in *A. Teichova et al*, 2008.

<sup>43</sup> SÚA, Records HR ÚV KSČ, box 43, archival unit 306. Návrh formulace předběžného Československého stanoviska v otázce koordinace plánů výroby automobilů a motocyklů [The current Czechoslovak point of view on the coordination of production plans for motor vehicle and motorbikes], September, 19<sup>th</sup>, 1949.

meeting of the planning commission in Prague on April 7, 1950, concerning the production of motor vehicles.<sup>44</sup>

The Czechoslovak representative on COMECON wrote down the Soviet suggestions regarding the two fundamental issues in the Czechoslovak debate on the transport vehicle industry: where to build a new truck production plant and what type of trucks to make there. The proposal to concentrate the production of heavy motor vehicles with load capacities of seven to ten tons for the entire COMECON block in Czechoslovakia had generated sharp dissent from the ČZAL and the selection of a suitable site had caused disagreement between the Ministry of Defence and the Ministry of Industry. There was also the related issue of what kind of automobile to produce if it became necessary to produce only one model in one factory, and this was also a delicate point, affecting the balance between the various production units coordinated by the ČZAL, Tatra and Škoda AZNP.<sup>45</sup> The Soviets seemed to particularly like the Tatra 600 project to be produced in the Škoda factory while the Czechoslovak technicians supported the production of both models in two different plants, the Škoda, 1200 cc, and the Tatra 600: the Škoda car could fulfill the demand for standard cars from the COMECON countries while the Tatra car seemed ideal for the representative aims of the institutions, including the Soviet ones. The Škoda cars could be assembled in other COMECON countries, but the main parts had to be produced in Czechoslovakia. In the envisioned division of labour, Poland would specialize in the production of 1300 cc cars under a Fiat license while Hungary would specialize in the production of very small vehicles  $(0.5 \text{ cc}).^{46}$ 

However, in November 1950, the National Planning Commission (SUP) announced the launch of the Tatraplan: the Czechoslovak motor vehicle industry was assigned production of a large truck, with a load capacity of seven to ten tons, and that of the Tatra 600.<sup>47</sup> However, since the original Tatra plant, in Kopřivnice, was to be devoted to the construction of the T128 military vehicle, the production line for the Tatra 600

<sup>44</sup> On the "Tatraplan" 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].

<sup>45</sup> *K. Kaplan*, Sovětští poradci, p. 46 note 61; there is still a dearth of studies concerning the activity of the Soviet advisors in Czechoslovakia and Kaplan's interpretation is still the most legitimate: according to Kaplan there were two advisors for delegation represented at the COMECON, they knew everything about the activity of the delegation, the content of the correspondence with their governments too; they were active in the organization of the division of production plans and elaborated, and emended the proposals of the delegates according to the Soviet interests; according to Kaplan their influence on Czechoslovak economic policies between 1950 and 1953 was enormous; their suggestions arrived directly to the Planning Commission in Prague and were transmitted with the point of view of the Minister or general director to the Economic commission of PCC; a second group of advisors went to Czechoslovakia after the end of 1951.

<sup>46</sup> SÚA, HR ÚV KSČ, 43, 306 Zpráva Čsl. delegáta v býro Rady hospodářské vzájemné pomoci, February, 1949 [Report of the Czechoslovak delegate at the Comecon bureau].

<sup>47</sup> In 1950, Czechoslovak production included the Tatra 600, 2000 cc, produced in the Tatra facilities in Koprivnice with craftsmanship methods, but particularly innovative for the times because it was equipped with an air-cooled rear motor, and the Skoda Tudor 1102, 1100 cc, produced at the Skoda factory in Mlada Boleslav, according to criteria based on mass production; the 1949 production volumes were respectively 1.500 units for Tatra 600 and 15.000 for Tudor.

would have to be moved from Kopřivnice to Mlada Boleslav, where Škoda automobiles had until then been produced.<sup>48</sup>

The transfer of the production lines did not prove feasible from either a financial or a practical standpoint: producing the Tatra required quantities of lightweight metal alloys that were in scarce supply and badly needed for other strategic production.

The transfer contract specified the ceding of machinery and material (steel alloy) from Tatra to Škoda, but these were used by Tatra for military production and were thus never transferred. On the other hand, the machine tool department at Mlada Boleslav could not produce them because it was already making machine tools for the T128. The outcome of all this was a collapse in production and the hasty reconstruction of the S1200 lines in 1952.

The issue generated complaints and dissatisfaction among the local authorities in Mlada Boleslav, the party and the trade union. However, direct responsibility for the changes in production plans was foisted off on the Czechoslovak government and its representatives involved in the Slánsky trials.<sup>49</sup>

In the second half of the 1950s, the planners' attitude towards motorization and automobile production began to change. In 1955, with the creation of a Ministry of Motor Vehicles and Agricultural Equipment, automobile production received the funding that sector specialists had been asking for since 1947. In the following years, a new factory was built and a new model of automobile, the Škoda 1100 MB, which first went into production in 1963, was developed.<sup>50</sup>

It is significant that in order to build the new plant and to reorganize production, the 1949 ČZAL plan was adopted. The specialists had "won" their battle against the decisions made by the COMECON, Škoda production had survived and the country was back on the road to motorization and mass production, abandoned almost twenty years before.

However, compared to 1949, the specialists had considerably scaled down their objectives: the Czechoslovak automobile industry was no longer seen as the substitute of the German one, with plants resembling a European version of General Motors. Until 1970, the size of the plants and the production volumes at Škoda were in line with those of a small local manufacturer.<sup>51</sup>

Furthermore, the supply problems caused by the planning and the continual shortages of plastic and raw material, as well as the inadequacy of the equipment, slowed down the construction of the new plant and favoured internalization of parts production. In this way, the Czechoslovak automobile industry maintained a high degree of vertical

<sup>48</sup> SÚA, ČZAL, box 86, Rámcové předpoklady pro výrobu vozů Škoda 1200 a T 600, v Automobilových závodech n.p. Ml- Boleslav.

<sup>49</sup> K. Kaplan et al., Komunistický režim a politické procesy, pp. 136-142.

<sup>50</sup> 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] and *J. Kožíšek/ J. Králik*, L&K - Škoda : 1895-1995, Prague, 1997, pp. 116-126 and *M. R. Cedrych/L. Nachtmann*, Škoda. Auta známá i neznámá. Prototypy i seriové automobily vyráběné od roku 1934, Škoda, Prague, 2003, p. 141. 51 Table n. 1.

integration until the seventies: most of the mechanical units were produced in series, corresponding to the number of vehicles the same enterprise intended to make.<sup>52</sup>

In addition, after 1965, the darkest misgivings of 1949 had become reality: the Czechoslovak automobile industry had lost its technological leadership among the member countries and would have to prepare to face competition on its home ground. After all, while the modernization of Czechoslovak automobile production lagged, the USSR, Poland and Rumania had negotiated licensing agreements and turnkey deals with Western firms.<sup>53</sup> In 1965, the Soviet government signed the so-called "Deal of the Century"- an agreement with Fiat: the Italian company was to provide technical aid and technology to build a huge plant, the VAZ, on the Volga River, which would produce 660,000 cars annually.<sup>54</sup> In the same year, Poland, whose tradition of licensing agreements with Fiat dated back to the interwar period, signed a new contract with the Italian firm to produce the Fiat 125, with a capacity of 70.000 units a year. In 1966, the Rumanian government signed an agreement with Renault for the construction of the Dacia plant.

Only Bulgaria and Hungary decided to specialize: following the Soviet-Hungarian specialization agreement, stipulated in 1964, Hungary abandoned car production and specialized in the production of Ikarus buses and some car parts for the entire COMECON, while Bulgaria specialized in electrical equipment, especially industrial forklifts.<sup>55</sup>

There was a final important attempt to coordinate German and Czechoslovak efforts concerning automobile production in the latter half of the 1950s. Unfortunately, after almost ten years of negotiation, it was abandoned. The Škoda documentation is, however, quite fragmentary, and the story of what happened and, above all, of why this plan failed, has still to be reconstructed. In any case, the East German producers also looked for cooperation with capitalist firms: while Trabant production of the P50, a 500 cc two cylinder vehicle, topped 100,000 units in 1970, in 1966, the Wartburg launched the model 353, 991cc, which was the result of a cooperation in body-making between the East German producer and French and West German firms and also of the introduction into the productive process of Western multi-purpose machinery.<sup>56</sup>

<sup>52</sup> See for developments *T. Bauer/K A. Soos*, Inter-firm relations and technological change and *A. Havas*, Changing patterns of Inter- and Intra-regional Division of Labour: Central Europe's Long and Winding Road in *J. Humphrey/ Y. Lecler/ M.S. Salerno (eds.)*, Global Strateges and Local Realities. The Auto Industry in Emerging Markets, Basingstokes, 2000, pp. 235-261.

<sup>53</sup> G. Maxcy, The Multinational Motor Industry, London, 1981, pp. 165-178.

<sup>54</sup> *S. Zhuravlev*, Between the Past and the Future. A History of the Togliatti automobile factory. Autovaz 1966 – 2005, Moscow, 2006.

<sup>55</sup> Laux, pp. 205-216.

<sup>56</sup> *W. Abelshauser*, Two Kinds of Fordism: On the Differing Roles of the Auto-mobile Industry in the Development of the Two German States, in *H. Shiomi/ K. Wada (eds.)*, Fordism Transformed, the Development of Production Methods in the Automobile Industry, Oxford 1995, pp. 290-291.

# 6. The Czechoslovak automobile industry in the 1960s and the new challenges of COMECON integration.

The reconstruction of how COMECON policies exercised an impact on the development of the motor vehicle industry in the 1960s is heavily limited by the dearth and fragmentation of the documentation dealing specifically with COMECON and trade. In the Czechoslovak case, however, export data and documentation available in the Škoda archives help to advance some hypotheses on the effects of policies aiming at the reorientation of trade flows, a reorientation that became the real focus of COMECON's actions in the automobile sector from 1954 on.<sup>57</sup>

Although the division of production plan among COMECON members had been realized only partially, as far as the reorientation of trade is concerned, from the 1960s onwards, the data reveal a gradual re-direction of Czechoslovak exports towards the COMECON countries, with East Germany becoming the first Czechoslovak partner, followed by Austria and in the late seventies by Hungary and Rumania. This trend became more significant after 1965 and in particular after 1973 (figure 3).

Was it the effect of the Soviet attempt to re-launch COMECON integration and re-direct trade flows? In the case of the automobile industry, it is still extremely difficult to answer this question unequivocally due to the incomplete nature of the data and related archival material.

The trade redirection towards Eastern and Central Europe did reflect the greater commitment of the member countries towards integration, but it could also be the result of changes in their attitudes towards motorization and of the widening of the overall Eastern European production and market (figure 3-4). Just to give an indication of this: Czechoslovak production increased from 24,463 units in 1950 to 154,454 in 1972, while Soviet production increased from 64,600 units in 1950 to 730,100 in 1972.<sup>58</sup>

In addition, we should consider the fact that the events occurring in the period 1949-1955, and, subsequently, the difficulties caused by the shortage of materials that characterized the planned economy, profoundly undercut the competitiveness of Czechoslovak automobiles in an increasingly demanding Western marketplace.

The technical debate over the modernization of the automobile production in Czechoslovakia that took place in the years between 1955 and 1963 was almost entirely dominated by the problems involved in exporting to the capitalist countries and in the deteriorated quality of the Škoda products.

As has been shown elsewhere, the planners, though generally not very inclined to give heed to complaints from the technical experts, were especially sensitive to claims from Motokov, the enterprise in charge of foreign distribution. Especially with respect to the design of the new automobile, the interventions carried out during the late 1950s and 1960s were often the result of technical problems reported by foreign distributors.<sup>59</sup>

<sup>57</sup> Research on these issues does present some limitations: the data from the Czechoslovak Ministry of Foreign Trade is unavailable, as well as that for Motokov, the agency that handled the exporting of automotive products, and the data available only reflect complete vehicles, not automobile components or the machinery needed to produce them.

<sup>59</sup> See table 1 and W. H. Parker, The Soviet Motor Industry.

<sup>60</sup> V. Fava, Motor vehicles vs. dollars.

Despite ideological considerations and COMECON efforts, for the Czechoslovak technicians developing new car models, the COMECON automobile "market", for most of the period considered in this paper, remained "second best". In this light, the trade data also mirror the Czechoslovak tendency to continue exporting to the neutral and capitalist countries, at least as long as the capitalist markets showed themselves to be receptive to Czechoslovak products.

After the late 1950s in Czechoslovakia it is possible to note a polarization in the manner in which problems related to industrial development and foreign trade in the motor vehicle industry were addressed: while the official propaganda backed closer cooperation with COMECON members, the debate at the ministerial and technical level still focused on how to make Czechoslovak goods of sufficient quality to be able to compete on international markets. Just before the invasion of Czechoslovakia, between 1966 and 1967, the new Škoda's technicians' projects related to the introduction of marketing departments and branded service stations: both of them seemed to be necessary to sell cars on the capitalist market.<sup>60</sup>

#### 7. Conclusions

In the 1950s, the development of the automobile industry encountered many difficulties in each of the socialist European countries and, at the end of the decade, the Eastern European automobile industry was almost completely dependent on Western technology. While Western producers were introducing automation and improving the ratio between weight and petrol consumption, in the Soviet Union and in Czechoslovakia, producers were counting on generic machinery, intensive use of scarce and semiskilled manpower and Taylorist measures to foster order and hierarchy and, finally, models which were heavy and expensive to run.

This paper argues that the uneven fate of the socialist automobile sector depended on the contradictions that characterized the first stage of the COMECON negotiations (1949-1954).

In trying to contribute to an understanding of how this happened, the paper argues that, in 1949, a technically affordable and ideologically coherent COMECON project of product specialization and coordination of productive plans in the automotive sector did exist but it was rejected by the COMECON bureau.

The paper sheds light on the reasons that led to the rejection of this plan. From the documentation available, it seems that COMECON policies towards the automobile industry were determined less by an ideological condemnation of the individual motorization than by the urgency of the Soviets to cut relations between the satellite countries and the West (including Yugoslavia), as well as the conflict between the member nations, whose integration programs had contrasting aims. However, according to this study, once the Czechoslovak plan was rejected, the COMECON bureau proved incapable of elaborating an alternative technically affordable project to organize the division of production plans in the automotive sector.

<sup>61</sup> Ibid.

The fate of the automobile industry in the COMECON area was thus not determined by a strategy following a coherent political vision but by contradictory, "day by day" and often technically unsustainable measures. The failed implementation of the Tatraplan represents a quite clear example of it: the transfer of the Tatra production lines to the Skoda plant led to the collapse of automobile production- a consequence unintended but well anticipated by the Czech specialists - and stimulated the strong resistance of workers, trade unions and specialists. After a few months, the Tatraplan was cancelled and the factory went back to the old organization of production.

However, despite its discontinuity and lack of long and short term perspective, the COMECON intervention did hamper the further development of automobile production in Czechoslovakia. The Tatraplan, combined with the introduction of the planned economy, the emphasis on heavy industry and the introduction of Soviet management methods, contributed to the creation of an enormous gap in the development of the Western automobile industry and that of socialist Europe. Despite the existence of facilities and plans to re-construct the industry, in Czechoslovakia, research as well as technical modernization were blocked for more than a decade (1949-1963). The introduction of mass production and automation technology lagged behind, trapping the Czechoslovak automobile industry in the "Fordism in one country" described by Abelshauser in the Eastern German case.<sup>61</sup>

<sup>64</sup> *Abelshauser*, p. 292; there is another component of the idea of "Fordism in one country" that is not tackled here, and that has to do with the Fordist "pay compromise", but this goes beyond the scope the present contribution.

| Year | Czechoslovak | Czechoslovak       |
|------|--------------|--------------------|
|      | Production   | Automobile Exports |
|      | (Units)      | (Units)            |
| 1948 | 17.971       | 7.074              |
| 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 n.1: Czechoslovak automobile production and exports (1948-1972)

Source: Statistická Ročenka Republiky Českosovenské (1957-1973).

Figure n. 1: Production / Exports (%) (1948-1972)



Source: Statistická Ročenka Republiky Českosovenské (1957-1973).

Figure n. 2: Czechoslovak automobile production and exports (%)



Source: Statistická Ročenka Republiky Českosovenské (1957-1973)



Figure n. 3: Destinations of the Czechoslovak automobile exports per group of countries (1959-1955 and 1964-1973)

Source: ŠKODA Auto Archives, Aša, AZNP, 55, Expedice vozů zahraničí od roku 1949 do r. 1955; Přehled exportů za rok 1961.