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## Industrial Policy in Relation to Automobile Production after the Founding of Czechoslovakia: A Case of Support for an Emerging Sector

Oldřich KRPEC – Vladan HODULÁK\*

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### Abstract

*The economy of Czechoslovakia (CS) was traditionally strongly specialized in production and export of light consumer goods. Nevertheless, heavy industry was promoted by strongly protectionist trade policies in 1920s. As our empirical study shows, the CS automobile industry never become internationally competitive and heavy protectionist measures were a necessary condition for its existence. However, behind the protective wall the industry was able to develop production capacities, substitute imports of components, and even export to some extent to less demanding markets in Europe. The paper is therefore a contribution to the economic history research of development of such “strategic” industry in clear contradiction with comparative advantage and implications of economic theory. As such, It is another example of rejection of international division of labor which contributed (in long-term) to fundamental restructuring of national industrial structure.*

**Keywords:** trade policy; infant industry, protectionism, Czechoslovakian trade policy, automobiles

**JEL Classification:** F13, F14, F52, N74

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### Introduction

The automobile industry is one of the most well-known economic sectors in today's Czech Republic (CR), and the nation's economy tops world comparisons of the production and export of automobiles relative to the population. In 2014, 1.247 million automobiles were produced in the CR, a comparable figure to the United Kingdom (1.528 million) or France (1.5 million). If we look at the production of vehicles relative to population, the CR, with 118 vehicles per 1,000

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residents, is one of the most productive nations in the world, second only to Slovakia (with its 183 per 1,000 residents), and well ahead of South Korea (with 82 vehicles per 1 000). After the establishment of Czechoslovakia (CS) in 1918, however, major production of automobiles in the country did not exist, and the new economy had no clear path forward in this sector. The Czechoslovak economy was focused considerably on light industry and consumer goods (textiles, glass, leather, and ceramics, as well as foodstuffs such as the sugar and spirit industries) and churned out a massive production surplus relative to domestic demand (e.g. Kubů, 2000, p. 204). After the collapse of the Austro-Hungarian Empire (with its 55 million consumers), 65 – 70% of its former industrial capacity stayed in CS (with its population of 13 million) – and this meant an urgent need to maintain and develop export markets (Lacina, 1990, pp. 146 – 147, 169). Throughout the 1920s, CS maintained a significant trade surplus from the export of industrial goods (especially light industrial and consumer goods) (see Kosta, 1999). The country's foreign debt was sustainable, and it maintained a solid rate of economic growth. With its industrial base, the high percentage of industrial goods produced for export, an active balance of trade in industrial goods, and this manageable level of debt, the country far surpassed other countries of central, eastern and south-eastern Europe (Lacina, 1995, p. 289).

At the beginning of the 1920s, however, it was not at all clear what the general character of trade policy of the new state would be after it emerged from the command-and-control regulations of the wartime economy. Czechoslovakia's first Minister of International Trade, Rudolf Hotowetz, was a backer of relatively liberal trade policies, which meant in this case the need to maintain and expand the close trade relations the new country had with the traditional markets for typical Czechoslovak industrial goods (the Balkans, the successor states of the Austro-Hungarian Empire, and some countries of Western Europe). In 1921, this was, however, replaced by a highly protectionist policy (especially in the industrial sector) and a path toward significant structural transformation of the Czechoslovak economy. This included minor support of the interests of the most important sectors of CS industry – maintaining access in key markets (particularly neighboring countries and the Balkans) for light industry in the production of consumer goods. The competitiveness of CS light industry was nevertheless weakened by the remarkable deliberate strengthening of the Czechoslovak crown (CSK) during 1922, which nearly tripled in value vis-à-vis other key currencies. Hotowetz's liberal trade policy was scrapped in 1921, and replaced with a policy of high tariffs on industrial goods to protect less-developed or newly emerging heavy industry (heavy machinery, chemicals, energy) which were largely focused on the domestic market. There can be no doubt this policy was influenced by the fact that the majority of light industry was located in areas of Czechoslovakia

with a significant German-speaking population and was associated with German capital in the context of the domestic economy. Heavy industry, on the other hand, was primarily established in Czech regions and under the control of Czechoslovak capital – a dominant role was played by the Živnostenská banka, chaired by Jaroslav Preiss. Czech capital and heavy industry thus also had strong personal links with nationalist political movements (represented by the National Democracy party, including Ministers of Finance Alois Rašín, Augustin Novák, and Bohdan Bečka, and Ministers of Industry Ladislav Novák and Jan Dvořáček). In light of this, it is easy to see why the arguments of national prestige and of economic security (with the goal of self-sufficiency in modern and strategic sectors of industry, and the establishment of sectors with a national-defense role) dominated the discourse about trade policy. The overall protectionist character of the CS economy was definitively confirmed with the imposition of high agricultural tariffs in 1926, which had important repercussions not just for the economy, but also for diplomacy; relations worsened with traditional trade partners as well as with closely-aligned countries that had exported their agricultural products to CS (Yugoslavia, Romania, and Hungary).

It was the substantial increase in tariffs on automobiles in August 1921 and the resulting debate however that meant a decisive step in the shift to a protectionist trade policy – a policy of support for an emerging sector focused on the domestic market. The increase of tariffs on the import of automobiles led directly to the fall of Hotowetz as Minister of International Trade and Minister of Industry, and his replacement by Ladislav Novák, who was a manager at Živnostenská banka and a member of the National Democracy party. The unusual importance of the automobile tariff in CS trade policy is emphasized by the fact that it became the only case of an *ad valorem* tariff (given as a percentage of the value of the import) as opposed to a *specific tariff* (based on a specific amount levied per unit of production, typically 100 kg).

This paper is the result of research on the economic and political process behind the tariff, and the results of the imposition of high import tariffs on automobiles as an example of an “infant industry policy”. Our research confirms that from a political and economic point of view, this became a crucial moment in the formation of a highly protectionist trade policy of the Czechoslovak state. In a wider academic context, it is in our view interesting that the shift to this particular trade policy was undertaken by an economy with characteristics (such as advanced industrialization, a significant trade surplus in the industrial sector, dependence on imports of raw materials, low government debt and a high rate of GDP growth) that we would have expected to give it a relatively liberal character. This question has only been tangentially discussed in the literature up to this point,

and mainly in connection with the development of the auto industry in the general context of Czechoslovak economic history. Lacina (1990, pp. 175 – 176) examined the clash between National Democracy and Minister Hotowetz, drawing on work by Peroutka (1936). Olšovský and Průcha outlined the evolution of tariff policy and its shift toward the interests of heavy industry, and noted the establishment of the automobile tariff (Olšovský and Průcha, 1968, pp. 72 – 73). Průcha et al. explicitly mention the importance of the auto tariff for the further development of trade policy (Průcha et al., 2004, p. 226). In somewhat more recent contribution, Jakubec discussed (among other things) the capabilities of the CS automotive industry, with its lower level of technical development, low degree of mass production, average quality, and high cost, and its implications for the domestic market as well as its lack of price competitiveness abroad (Jakubec, 1995, p. 325).

Our research of this remarkable episode in the history of the Czechoslovak economy focuses on extensive use of primary sources, especially on foreign-trade statistics of the Czechoslovak Republic, stenographic minutes of the debates on trade policy in the Chamber of Deputies of the National Assembly, parliamentary records, records from committee meetings, relevant laws and their explanatory documents, and research of available data on the comparison of typical products, their prices, impact on trade flows, etc. The goal of this text is thus to answer the following questions: What were the main arguments for the imposition of high tariffs on automobiles, and how were these tariffs supported? And what was the competitive position of the CS auto industry and how dramatically did these tariffs affect it?

We feel that this specific case of protectionist “infant industry” policy from the 1920s serves as an interesting episode in the context of Czechoslovak economic history, as well as in the wider international discussion of “infant industry” and trade policy more generally. The importance of studying this case also lies in the fact that the automotive industry has served as a 20th century icon – as a bellwether of economic development, economic independence, and national prestige – and its development has been thoroughly investigated in individual countries and from many angles (for example, the USA vis-à-vis Germany; the role of “national champions” in France; its key role in “late industrializers” in Japan, Brazil, and South Korea; and the auto industry as a main avenue of economic integration into the international economy in the case of Central Europe).

### **Automobiles and their Production in Czechoslovakia**

According to available data, the number of automobiles relative to population in 1926 CS was incomparably lower than it was in northern and Western Europe and North America (Table 1). In the context of “Mitteleuropa,” it was significantly

lower than in Germany and Austria, but somehow comparable with the larger economies of southern Europe (i.e. Italy and Spain). On the other hand, the concentration of automobiles was markedly higher than that of other countries of central, eastern, and south-eastern Europe.

**Table 1**  
**Automobiles in Selected Countries (December 1926)**

	Population (thousands)	Automobiles	Passenger automobiles	Number of Inhabitants per automobile	Number of Inhabitants per passenger automobile
Czechoslovakia	13,807	24,610	16,880	561	818
UK	45,578	1,042,801	768,558	44	59
France	41,050	891,000	585,000	46	70
Italy	40,186	138,117	104,882	291	383
Yugoslavia	13,986	8,555	6,600	1,635	2,119
Hungary	8,520	9,291	6,712	917	1,269
Germany	64,393	319,000	218,000	202	295
Netherlands	7,679	69,094	43,094	111	178
Poland	27,509	18,754	13,576	1467	2,026
Austria	6,643	20,600	12,400	323	536
Romania	13,760	16,700	11,900	824	1,156
Spain	22,977	135,415	121,710	170	189
USSR	169,269	21,103	9,610	8,021	17,614
Sweden	6,097	99,220	77,000	62	79
Switzerland	3,988	51,560	41,800	77	95
USA	120,971	22,137,334	19,293,112	5.5	6.3
Canada	10,107	828,918	734,848	12.2	13.8
Argentina	11,282	222,610	20,500	51	550
Brazil	32,234	81,100	60,800	398	530
China	485,552	18,928	16,012	25,653	30,324
Japan	62,361	42,727	27,989	1,450	2,228
Australia	6,304	365,651	304,255	17	21

Sources: League of Nations: *Annuaire statistique international* 1925; Maddison (2003).

Between 1910 and 1919, 4,200 passenger vehicles and light trucks, 2,840 commercial vehicles, and 44 buses were produced in CS. By 1922, another 1,500 passenger vehicles and light trucks, 1,050 commercial vehicles, and 7 buses were produced (Table 2). In 1922, records indicate that 9,929 motor vehicles were registered in CS; 4,632 had been produced domestically, and 5,297 were of foreign origin. Passenger vehicles totalled 4,928, of which 2,272 were produced on CS territory. 2,877 motorcycles were also registered; 1,432 of these were of Czechoslovak origin (Table 5). The increased production of autos over the course of the 1920s was remarkable: while in 1921 about 400 vehicles were produced, by 1924, this figure had increased to approximately 2,000. The peak figure, in 1926, (when 5,500 vehicles were produced) was influenced by the

neutral position of CS regarding the Ruhr crisis.<sup>1</sup> Domestic automobile production peaked in 1929, with 10,200 passenger cars and light commercial vehicles (Sdružení automobilového průmyslu [Automotive Industry Association], 2013; Statistická příručka ČS, 1925, p. 311; 1928, p. 216; 1932, p. 183).

Table 2

**Approximate Data on Automobile Production in Czechoslovakia** (units)

	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
Passenger cars and light trucks	400	400	700	1,300	2,000	2,800	5,500	3,400	9,100	10,200	7,700
Commercial vehicles	450	300	300	350	450	900	1,800	1,900	3,600	5,200	4,000
Buses	1	0	6	4	0	1	200	150	400	300	250

Source: Sdružení automobilového průmyslu (2013).

If we look at the main companies comprising the basis for the CS auto industry, it is possible to identify three main brands. The CS industrial firm *První Českomoravská továrna na stroje v Praze* (which was renamed to ČKD after a merger) primarily built vehicles under the Praga brand; Tatra vehicles were built by another key industrial consortium, Ringhoffer-Tatra. In the early 1920s, the most important automobile producer in Czechoslovakia was Laurin & Klement. This firm was the only one out of “Big Three” that actually specialized in passenger automobiles. In contrast to its competitors, which were able to cover losses from auto production with other products (such as locomotives, train cars, machines, and weapons), Laurin & Klement had major problems with maintaining their volume of production and sales. For this reason, the company merged with a major rival, from the consortium run by Živnostenská banka (which controlled both Praga and Tatra), the Škoda Works (underwritten by French capital).

While 54% of domestically produced passenger cars were Laurin & Klement products in 1922, this percentage declined rapidly – to 29.6% in 1926, and 19.8% in 1930 (under the brand Škoda). Praga took over first place among domestic producers – from 21.3% in 1922, its market share increased to 37.1% by 1926, and 40.7% by 1930. Tatra also grew significantly. In 1922, only 5.3% of domestic automobiles registered in Czechoslovakia were from this company; by 1926, this figure had climbed to 23.3% and in 1930, this was 28.4%, which bumped Škoda/Laurin & Klement into third place (Statistická příručka, 1925, p. 312; 1928, p. 216; 1932, p. 183).

<sup>1</sup> During the Occupation of the Ruhr from January 1923 to August 1924, CS not only shunned participation in sanctions against Germany, but also stepped in to replace German exports to the countries of Central and Eastern Europe.

Table 3

**Available Prices of Common Vehicles of the 1920s**

(Power measured in kW; prices in USD according to the exchange rate of years for which data exists; USD/kW provided for price/performance comparison)

Model and Year	Power in kW	kg	Price in USD	USD/kW
<i>Czechoslovakia</i>				
Praga Alfa 3 série (1922)	13.2	970	1,590	120.5
Tatra 11 (1923)	9.0	680	1,200	133.3
Laurin & Klement A/100 (1922)	14.7	–	1,858	126.4
Laurin & Klement 210 (1923)	22.0	–	2,416	103.9
Tatra U (1924)	48.0	–	5,000	104.2
Laurin & Klement 450 (1925)	51.5	–	4,740	92.0
<i>United States</i>				
Ford Model T Sedan (1922)	16.6	540	595	35.8
Ford Model T Runabout (1922)	16.6	500	290	17.5
Chrysler B-70 (1924)	50.7	1,400	3,000	59.2
Ford Model A (1927)	29.8	1,270	500	16.8
<i>United Kingdom</i>				
Austin 7 (1924)	7.7	360	700	90.9
<i>Germany</i>				
Opel 4 PS (1924)	8.8	590	1,125	127.8
Opel 4 PS (1929)	14.7	–	500	34.0
Wanderer W8 (1925)	14.7	–	1,000	68.0
<i>France</i>				
Renault 40 CV HD (1921)	45.6	1,300	3,040	66.7
Renault 10 CV GS (1920)	17.7	670	1,360	76.8
<i>Italy</i>				
Fiat 505 (1922)	22.4	1,550	1,588	70.9
Fiat 510 (1922)	34.3	1,550	2,083	60.7

Note: CSK rates from December 1922 and June 1925; Reichsmark rate from December 1924; GBP rate from June 1924; Franc rate from June 1921; Lira rate from June 1922 (according to Federal Reserve 1949).

Sources: Národní technické muzeum (1995), pp. 457 – 458, 463,470; Remek (2012), pp. 63 – 64, 71; Pavlůšek (2013), pp. 37 – 40; Todt (1926); Heinz and Klement (1931); Margolius and Henry (2015); Rosenkranz and Stojen (2013); Štechmiler (1957); Štílec and Mocek (1986); Šuman-Hřebly (1991); Gauld (1974); American Automobiles; The People History; Hatry and Le Maitre (1980); Bellu (1979); Lees-Maffei and Fallan (2013), p. 212; Oswald (2011), p. 292; Les voitures automobiles anciennes; Wyatt (1981).

In the case of commercial vehicles (including buses), Praga led the way in Czechoslovakia throughout the 1920s. The company produced 48.5% of all vehicles of this type registered in 1922, and climbed to 54.9% in 1926, and declined only slightly, to 52.1%, in 1930. Laurin & Klement and Tatra basically started the decade at the same point (with 24.7% and 26.9% of total production); by 1926, Laurin & Klement had gained the upper hand (26.1% compared to 19.0%), and in 1930, the company's share had increased even more, with 35.7% compared to Tatra's 9.3% (*Statistická příručka ČS*, 1925, p. 312; 1928, p. 216; 1932, p. 183).

The following data makes it clear that the CS automobile industry was in no way prices competitive (Table 3). As our analysis of the discussions surrounding industrial policy vis-à-vis auto production will demonstrate, however, none of the actors involved doubted this fact. Indeed, they never made international competitiveness a priority for the domestic market. The prices of comparable vehicles produced abroad were significantly lower for the entire period under study, not only for Germany and France, but also Italy. Our research further reveals that the most competitive player in the 1920s by far was the US auto industry. The high customs duties of European auto producers were thus clearly directed against the Americans. In this context, it is thus also necessary to evaluate the arguments of CS officials, who called for a reciprocal level of tariff protection of the domestic market on the European level. Since the CS automobile industry was unable to succeed on the foreign market in any producer countries, the tariff levels of these other countries were de facto irrelevant. Nor would such level of protection prevent vehicle imports from abroad, particularly from the USA. This was behind policy of import permits from the 1920s (referred as administrative regulations of imports). Shipping costs, on the other hand, apparently did not create much of a hurdle to imports. Rail transit costs for auto imports from Germany totaled approximately 8,000 CSK for 1922; Shipping costs from Italy that same year were similar; from France they were around 12,000 CSK, and from the USA about 30,000 CSK (Horák, Chamber of Deputies, 6 August 1921; Findlay & O'Rourke, 2007, pp. 382 – 383).

### **Czechoslovak International Trade Policy Regarding Automobiles**

After the First World War, Czechoslovakia inherited a very strict system of administration from the Austro-Hungarian Empire for the regulation of international trade. After November 1918, commerce was regulated by the Commission for Import and Export, followed (in February 1919) by the establishment of syndicates that required any firm involved in international trade to become a member; these syndicates decided what would be economically appropriate to export, and what was possible to import. The goal was to limit competition among domestic companies as well as their protection from international competition. It is necessary to point out here that this period was characterized by a high volatility of exchange rates, which made some exports extremely lucrative (for example, the export of raw materials and foodstuffs to countries with “hard” currencies) and some imports exceptionally competitive vis-à-vis domestic products (in cases of imports from countries with rapidly weakening currencies). Direct control of international trade by the interested parties themselves was a source of bitter

criticism, which led to the founding of the *Úřad pro zahraniční obchod* [Office for International Trade] in 1920, with ministerial authority under the supervision of Rudolf Hotowetz, the Minister of International Trade. Hotowetz's goal was the liberalization of international trade, including the elimination of administrative hurdles and the preparation of a relatively liberal tariff regime (Lacina and Hájek, 2002, p. 48). There is no reason to think that protectionism of the auto industry as an emerging sector would be ruled out by this relatively liberal version of CS trade policy. However, it was the clash over the introduction of high tariffs on automobiles that led to the defeat of Hotowetz's liberal conception of trade policy and to the fall of its main proponent. The high *ad valorem* tariffs on automobiles were pushed by industry lobbyists, who were supported by a major nationally-oriented consortium of Czech capital managed by *Živnostenská banka* (led by Jaroslav Preiss and with political support from Karel Kramář and Alois Rašín). The goal of this group was the establishment of prohibitively high tariffs on the import of products from sectors such as heavy equipment, machinery, and chemicals. These goods – in contrast to those of light industry, which the Czechoslovak economy had traditionally supplied – had no ambition to become competitive internationally and were for all practical purposes marketed for sale on the domestic market, which had been divided up among the largest industrial firms (most of which were managed by that same group from *Živnostenská banka*, acting in concert with *Eskomptní banka*, the second-largest Czechoslovak bank). Liberalization of trade, and by extension liberalization of trade in automobiles – was understood as the gradual elimination of the administrative control of trade (this process took place in most cases up to 1925, with a few cases occurring until 1928; see Průcha, 2004, pp. 102, 226; Olšovský & Průcha, 1968, p. 334), and high tariffs in principle had the same effect – to compensate for liberalization. The main industry which was to use high tariffs to protect itself from international competition was the auto sector.

For the most part, the main goal the government had when revising the tariff schedule (which took place without any input from a leftist-oriented parliament) was to compensate for the fall in the Czechoslovak crown. This meant dealing with the successor (and at that point still valid) Austrian customs laws and the tariff schedule from 1906, which contained specific tariffs – i.e. amounts were levied as a specific amount (after April 1920, in CSK as a general rule) per 100 kg of goods. Devaluation of the currency thus reduced the effective amount of the customs duties substantially. As a result, in the two years of 1919 and 1920, the government administration increased customs four times, to create approximately the same level of protection as the original Austrian customs duties did. This, however, was not completely effective, and led to the introduction of automobile

tariffs in December 1920, which were levied at an amount of 45% of the vehicle price, and subsequently increased to 65% of the price at the end of 1921. In the case of passenger vehicles, another 12% tax was added on luxury imports, which was added to all vehicles in this category (Table 4).

Using the sources available – especially stenographic records from meetings in the Chamber of Deputies, memoranda about the legislation, and minutes from committee meetings – we have attempted to map the discussion surrounding these policies.

Minister of International Trade Hotowetz reacted to the proposals submitted by the CS industrial interest groups by submitting draft legislation on auto tariffs. The introduction of this tariff was conditioned on the elimination of administrative regulations and the establishment of a relatively liberal tariff policy. In the explanatory memoranda about the legislation (Sněmovní tisk 1066; Stenographical report of the Proceedings of the Chamber from 6 November 1920; see also Hotowetz, Chamber of Deputies, 6 November 1920), the minister acknowledged that the customs duties from the Austro-Hungarian tariff schedule from 1906 had become inappropriate in light of the drastic transformations after the First World War. The current specific tariffs amounted to about 7 – 11% of the price of automobiles, and were thus substantially lower than those imposed by other countries, where the auto industry was considerably more advanced. Hotowetz admitted that the current policy of CS was to restrict the import of passenger vehicles, so imports were only allowed with a fee of 25% of the price of the car (according to Law 418 of June 1920). The minister stressed the importance of the auto industry, which in his understanding was tied not only to general economic reasons, but also to issues such as national security and independence. If the sector requested protection against foreign competition, it was reasonable to provide it; furthermore, the country's economic partners could not see it as terribly unfair, when they themselves had tariffs of 45% of the vehicle price – such as was the case for France, which was seen as a leader and a reference for this sector.

This position was supported by the Committee for Industry, Business, and Trade (Sněmovní tisk 709; Chamber of Deputies, 14/12/1920), which stated in reports by Robert Klein (Social Democratic Worker's Party) that the auto industry had gradually been developing, and that the automobile was already in that time a matter of extreme importance. CS automobiles faced international competition, and the success of the industry depended on answering these foreign competitors. Moreover, there were already 10,000 workers employed in the industry as well. For these reasons, the sector deserved general support as well as protection against foreign competition. Deputy Klein also pointed out a particular

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problem of chassis frames and wheel rims, which up to that point CS firms had to import. In these cases, it was necessary to allow the most inexpensive imports possible – it was not possible to follow France’s strategy of tariffs on automotive parts (where such products were made domestically), as the domestic Czechoslovak firms lacked the ability to manufacture them. In a speech in the Chamber (Klein, Chamber of Deputies, 17 December 1920), Deputy Klein argued that if other countries had a 45% tariff, while Czechoslovak industry had 7% protection, it was only natural that domestic firms would be unable to compete.

From this perspective, it is interesting that the French customs duties were cited in light of the substantially lower prices of American automobiles. If, as we discuss later, CS industry had substantially higher costs than that of Western Europe, we should expect that keeping the industry afloat would have required administrative limits (quotas) to complement the high tariffs.

The topic of protection of the automobile sector was also discussed in relation to the ratification of trade agreements with Italy (in March 1921) and France (in January 1921 and August 1923). The treaties contained agreements on the number of auto imports (1,000 yearly in the case of Italy and 1,200 passenger vehicles annually in the case of France). German Deputies in particular (Karl Kostka (German Democratic Party), Josef Böhr (German Christian-Social Party), Chamber of Deputies, 17 December 1920; Kostka and Rudolf Fischer (German Social Democratic Party, Chamber of Deputies, 19 June 1922) fiercely criticized the agreements, especially the ones with France, for making unnecessary concessions that would hit the domestic auto industry. While in the context of annual quotas it would not be possible to regulate imports administratively, it would be possible to establish high tariffs as a way to reduce the negative side effects of the trade agreements for domestic industry (Josef Patzel, German National Socialist Party, Chamber of Deputies, 17 December 1920).

Another step in the development of tariff policy in the area of the auto industry was a bill on auto tariffs by Ladislav Novák and Bohdan Bečka from the National Democratic Party (Sněmovní tisk 2831), which was introduced in the Chamber in August 1921 (Chamber of Deputies, 6 August 1921). The Deputies proposed a huge increase in customs duties to 90% of the value (autonomous duty) with the possibility of using trade agreements to reduce them to 65% (negotiable tariff). They argued that an important and established industry which had proven its prowess at every opportunity had not been protected from imports from abroad to an extent comparable to other countries. They especially drew attention to imports from Austria, (whose competitiveness had accelerated the fall of Austrian Krone) from which half of the goods on the domestic market originated, at a time when CS industry was contracting. The Deputies’ bill was

supported by a report by the Budget Committee (Sněmovní tisk 2679), which justified the bill with France's 65% increase in auto tariffs in that country. In such a situation, it would be logical to prohibit imports, but quotas in the trade agreement made that impossible. The Budget Committee found that the bill was well-founded in its call for increased protection of an emerging domestic industry against more advanced, stronger competition from abroad (where more favourable conditions reigned). It supported a single tariff schedule of 65% of the value and supplemented the bill with a duty on motors, which were the most valuable part of a vehicle. This would also protect existing firms against the rise of other domestic firms, which often started out in production work by assembling imported components. During the proceedings of the Chamber (Chamber of Deputies, 6 August 1921) Deputy Jan Černý (Social Democratic Workers) noted that the production capacity of the CS auto industry was 3,000 vehicles annually, but domestic demand was only at the level of about 1,000. CS would thus have to export 2,000 vehicles, even though the Minister of International Trade was allowing imports from abroad under trade agreements. Deputy Černý admitted that domestic cars were still considerably more expensive – as a result of more expensive iron and higher labour costs.

Therefore, it wouldn't do to look only at the interests of consumers for inexpensive goods; domestic production should not become a business that suffered in terms of employment. For this reason, he supported the introduction of tariffs at the "French" level. According to Deputy František Horák (CS Traders' Party), the goal of CS industry was not only to achieve self-sufficiency, but also to export goods successfully (Chamber of Deputies, 6 August 1921). For this reason, it would be necessary to establish economic competitiveness. He also felt, however, that the auto industry at the time was able to compete on quality, but not on price, which was still almost twice as high as the other major producing countries. Higher production costs had a variety of causes, from the need to purchase raw materials (from abroad) to higher wages and high taxes, to employment practices.

Yet another important aspect of the discussion on auto import tariffs was a successful amendment to the customs laws by Deputy Pavel Blaho and his fellow members of the Agrarian Party (Sněmovní tisk 3712), in which the deputies attempted to reduce or eliminate vehicle tariffs – especially agricultural equipment, but also including commercial vehicles – to keep prices low for CS farmers (Chamber of Deputies, 9 June 1922). The later law on high fixed customs on agriculture (109 from June 1926), however, had already included high specific tariffs on commercial vehicles and trucks (1,400 – 1,900 CSK), but were considerably lower for agricultural equipment.

We will discuss the results of these increased tariffs on the competitiveness of imported automobiles on the CS market in another part of this text. In connection with later developments of tariff policy, we only note here that the stabilization of the CSK's exchange rate created space for a re-evaluation of the advantages of using *ad valorem* tariffs for CS production, and in 1926 the *ad valorem* tariff was repeated. The *specific* duty could – among other things – better focus on specific types of imported vehicles. As we will explain later, American vehicles represented the strongest competition at this time, characterized by a relatively low price per kilogram, and as such were the subject of the most severe specific tariffs.

Table 4

**Examples of the Development of Customs Rates – Automobiles 400 – 1800 Kg**  
(Item number 553b; specific tariffs per 100 kg)

Applicable Customs Regulation	Rate
<b>Autonomous duty tariff schedule of 1906</b> (Austria – Hungary)	120 gold pieces and 120 in Austrian Krone
<b>Tariff schedule of 1919</b> (379/1919)	120 in francs and 120 in CSK
Surcharge 150% (18 September 1918) <b>Regulation by the Ministry of Finance 340/1918</b>	180 in gold pieces and 180 in CSK
Surcharge 200% (28 January 1919) <b>Regulation by the Ministry of Finance 44/1919</b>	240 in gold pieces and 240 in CSK
Foreign currency fee 500%, 300%, 100%. <b>Executive Order 26 April 1920</b>	1,200 CSK
Foreign currency fee 900%, 600%, 200%. <b>Executive Order 6 November 1920</b>	2,040 CSK
Foreign currency fee: Product of basic coefficients and factors 1, 3, 5, 7, 13, 16. <b>Executive Order 21 May 1921 (193);</b>	+25% surcharge under the auspices of the Ministry of International Trade
For automobiles <b>Law 688/1920</b> from 22 December 1920	500 – 2500 kg; tariff 45% of the price
Foreign currency fee: Product of basic coefficients and factors 1 – 30. <b>Executive Order 19. December 1921 (460);</b>	Without respect to vehicle weight 65%
For automobiles <b>Law 351/1921</b> from 12 August 1921	+12% luxury tax.
<b>Law 109</b> from 22 June 1926	Autonomous tariff: automobiles up to 1,000 kg: 2,300 CSK per 100 kg; over 1000 kg: 2,700 CSK per 100 kg; Surcharge of 25% of the price of automobiles in which the price of the <b>chassis</b> was more than 80,000 CSK.  Tariff according to international treaties: 45% of the value.

Source: Authors.

One thing that is quite illustrative about the character of the legislative process is the development following the government's draft bill submitted to the Parliament, which called for a levy on passenger vehicles of 280 CSK per 100 kg for passenger vehicles under one ton, and of 340 CSK per 100 kg for passenger vehicles over one ton. After an amendment to the customs laws was passed which introduced high agricultural tariffs (109, from June 1926), the specific tariff applied to passenger automobiles was 2,300 and 2,700 CSK. We understand this outcome to be the result of negotiations between industrial and agricultural groups in the process of introducing these extremely controversial agricultural tariffs in 1926. This is important regardless of the fact that the majority of imports from the most significant importer countries occurred under a regime of preferential tariffs of 45% (treaty-based) of the value of the goods according to international treaties and the application of most-favoured-nation clauses.

### The Czechoslovak Market and International Trade in Automobiles

The number of automobiles in Czechoslovakia in the 1920s rapidly and continually grew. From our perspective, it is interesting how much of the vehicles in service during individual periods were domestically produced. It serves as an indicator of the effectiveness of the policy of support for a domestic industry, which is a key goal of trade policy.

Table 5

#### Available Data on the Number of Automobiles in Czechoslovakia (units)

	1922	1926	1928	1930
Motor scooters and three-wheelers	2,877	14,933	20,006	32,531
Passenger Vehicles	4,928	16,880	25,111	41,020
Commercial Vehicles	1,932	6,400	10,100	19,025
Autobuses	126	676	1,377	2,579
Total	9,929	39,543	59,409	100,474

Sources: Statistická příručka (1925), p. 311; 1928, p. 216; 1932, p. 183.

The data provided here shows that from the years 1922 to 1930, the share of domestically produced vehicles on Czechoslovak roads increased from 45% to 66% (Table 6). The data does not show more specific specialization regarding passenger vehicles and trucks, because at this time, these categories most often differed according to the type of vehicle chassis produced by the same firms. As the data below (Tables 6, 8, and 9) shows, however, the share of domestically produced commercial vehicles grew more quickly (from 48.6% in 1926 to 65.3% in 1930) at the end of the 1920s than that of passenger cars (from 57.3% to 66.4%), which correspondingly reduced the share of commercial vehicle imports.

Table 6

**Share of Domestic and Foreign Vehicles in Czechoslovakia (units)**

	1922		1926		1930	
	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign
Motor scooters and three-wheelers	1,432	1,445	2,710	12,223	3,755	28,776
Passenger cars	2,272	2,656	9,673	7,207	27,247	13,773
Commercial	804	1,128	2,963	3,437	11,955	7,070
Buses	93	33	475	201	2,154	425
Total	4,632	5,297	16,107	23,436	46,193	54,281
Percentage of CS automobiles (passenger and commercial vehicles and buses)	45.4%		54.7%		66.0%	

Source: Statistická příručka (1925), p. 311; 1928, p. 216; 1932, p. 183.

The same statistics also allow us to get an impression about the origin of vehicles at that time (Table 7). At first, products from Austrian and German firms predominate (a noteworthy share of which were already in use on Czechoslovak territory at the time of the Republic's founding), but in the following period, major increases in the numbers of French, Italian, and American-made vehicles occur. US-made vehicles eventually become the most common of all foreign brands, both in the commercial segment as well as in the passenger car segment. The minimal number of British automobiles reflect their relative lack of competitiveness in the categories this paper focuses on (passenger cars and commercial vehicles); however, Britain was the largest exporter of motorcycles to CS at this time.

Table 7

**Foreign Automobiles by Country of Production (units)**

	Produced 1920 – 1922	1922		1926		1930	
		Passenger	Trucks and buses	Passenger	Trucks and buses	Passenger	Trucks and buses
Austria	539/321	804	713 + 18	1,094	1,103 + 24	1,126	1,259 + 76
Germany	338/112	1,078	212 + 10	1,383	298 + 15	1,789	835 + 40
France	28/23	255	60 + 2	1,702	186 + 7	2,917	455 + 18
USA	0/0	159	14 + 1	1,342	1,502 + 135	4,508	3,776 + 255
Italy	112/7	157	52 + 1	1,388	293 + 18	3,025	577 + 34
Great Britain	0/0	17	4 + 0	86	1 + 0	164	48 + 0

Source: Statistická příručka (1925), pp. 311 – 312; 1928, pp. 316 – 217; 1932, p. 183.

Using such sources, we have attempted to assemble data on imported (passenger and commercial) automobiles in CS in the 1920s (Table 8). In spite of inconsistent methodologies of presentation of data at the time (and as a consequence, the data were difficult to compare), we have attempted to make a qualified estimate of imports up to 1926 (after which there are records on import levels). For our perspective, it is clear that the most significant importer was Austria in

the first years of the Republic, followed distantly by Germany. After 1923, imports from Italy and France rose considerably, at the expense of Austria and Germany (which was especially hard hit by the Ruhr Crisis). We see the results of the ratifications of trade treaties with France (in January 1921) and Italy (in March 1921), which contained contingency obligations on the CS side. One such contingency was the number of units of a given type of good that were required to be allowed in. Such goods thus “only” required the existing import duty (importers were also exempt from paying for an import permit). The liberalization of international trade after 1925 – in this context – meant scrapping the previous system of authorization and a shift to a more “free market” policy for imports, in which only an autonomous or a treaty-based duty was imposed upon them. This change in trade policy was bound up with a markedly higher amount of imports from the United States, which benefited from their absolute advantage in competitiveness.

Table 8

**Imports of automobiles to Czechoslovakia –**

estimates on the basis of the analysis of available data (passenger/commercial) (units)

Exporting Nation	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
Austria	142/20	220/184	177/117	107/134	61/-	131/49	144/40	257/111	-/21	162/14	72/29
Germany	78/15	140/18	120/79	73/55	43/-	48/-	81/49	305/53	409/71	469/29	369/24
Italy	-/-	40/5	72/-	68/-	211/78	295/152	655/64	661/38	539/-	438/-	364/-
France	-23	-/-	28/-	54/-	162/17	253/-	938/66	471/66	238/-	201/-	116/-
USA	-/-	-/-	-/-	25/-	78/16	230/123	646/777	806/275	1 115/12	725/14	637/-
Great Britain	-/-	-/-	-/-	-/-	-/-	28/-	44/-	-/-	-/-	100/-	37/-
Belgium	-/-	-/-	-/-	-/-	-/-	-/-	65/111	/304	-/-	33/-	102/-
Canada	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	94/-	80/-	

*Method:* Up to 1925 export estimates of automobiles are based on the known amount of foreign vehicles by country in the year 1922 and 1926, and the volume of imports (in kg) in individual years (in categories with varying definitions) and typical weights of vehicle in the given period (given in italics).

*Data source:* *Zahraníční obchod republiky Československé* (1920), pp. 66,142; 1921, pp. 95 – 96, 212; 1922, pp. 109, 237; 1923, pp. 255 – 257; 1924, pp. 312 – 315; 1925, pp. 241 – 243; 1926, pp. 180 – 181; 1927, pp. 228 – 230; 1928, pp. 211– 214; 1929, pp. 221 – 223; 1930, pp. 214 – 217.

When it comes to the export of automobiles (passenger and commercial), it is possible to state that while exports gradually increased, they nevertheless only accounted for a small share of CS auto production (Table 9). In 1925, CS producers turned out a total of 3,700 vehicles (see Table 2), but only 238 of these were exported. By 1929, CS production culminated in 15,400 vehicles; 711 were exported. Looking at the countries where Czechoslovak exports were directed to, it becomes obvious that continued to be heavily focused on its traditional markets of central and south-eastern Europe. In the initial years, the majority of exports went to Austria, but eventually Poland became the most important export

destination. In addition to these, CS automobiles were shipped to a lesser extent to Yugoslavia and Hungary. The ability to establish a foothold in the markets of Western Europe or the USA was minimal.

Table 9

**Automobile Exports from Czechoslovakia –**  
estimates on the basis of the analysis of available data (passenger/commercial) (units)

Importing Country	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
Austria	52/29	45/14	7/	15/2	9/-	7/8	131/11	220/33	91/7	122/15	91/27
Germany	6/3	-/-	5/	4/2	53/1	57/24	51/13	26/5	6/2	17/1	10/6
Poland	-/9	1/5	23/	67/2	31/5	104/5	54/6	295/4	493/11	425/22	306/51
Yugoslavia	5/5	10/3	22/	-/-	1/-	4/6	4/9	27/20	25/11	49/16	152/66
Greece	8/-	-/-	-/-	-/-	-/-	-/-	-/-	2/-	1/-	-/-	-/-
Italy	6/4	1/-	-/-	-/-	-/-	4/-	-/1	-/1	-/-	1/-	1/-
Great Britain	3/-	-/-	-/-	-/-	3/-	-/-	1/-	-/-	-/-	-/-	-/-
France	-/-	-/-	-/-	2/-	-/-	1/-	1/-	2/-	2/-	3/-	2/-
USA	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
Spain	-/-	-/4	-/-	-/-	-/-	-/-	-/-	-/-	1/-	-/-	1/-
Hungary	-/1	10/-	4/	11/1	9/-	5/-	11/2	39/9	71/4	23/1	19/2
Romania	-/1	8/-	-/-	-/-	-/-	5/-	3/45	27/2	38/4	15/1	-/1
The Netherlands	-/-	-/2	-/1	-/-	33/-	-/-	3/-	-/-	1/	-/-	-/-
USSR	-/-	-/-	-/-	-/3	2/-	5/3	5/-	14/-	7/8	-/-	-/-

*Data source:* Zahraniční obchod republiky Československé (1920), pp. 66,142; 1921, pp. 95 – 96, 212; 1922, pp. 109, 237; 1923, pp. 255 – 257; 1924, pp. 312 – 315; 1925, pp. 241 – 243; 1926, pp. 180 – 181; 1927, pp. 228 – 230; 1928, pp. 211 – 214; 1929, pp. 221 – 223; 1930, pp. 214 – 217.

### The Development of the Domestic Sector and Its Competitiveness in the Context of Trade Policy

Using the data we have collected, we can make a few general conclusions about the relationship between foreign trade patterns and the development of the CS auto industry. The number of imported vehicles generally stagnated between 1920 and 1925, which was undoubtedly a consequence of the trade policies discussed above. It is important to keep in mind that at the same time, domestic production of passenger cars mushroomed from 400 units in 1920 to 2000 units by 1924 (Table 2).

The Ruhr Crisis (1923 – 1924) also helped to precipitate the fall in imports in 1923, and CS producers took advantage of the crisis to increase exports. However, in 1925, auto imports to CS began to rise and in 1926, imports rose even more quickly. The aforementioned liberalization of trade policy was a major reason for this.

In this section, however, we want to focus more granularly on analysing the structures of automobile imports and exports (Table 10).

Table 10

**Value of Exports and Imports by Type of Product in the Automotive Sector –**  
development of the position of CS industry in the international division of labour (in thousands of CSK)

	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
Imports – Automobiles	21,632	25,025	25,670	17,067	24,054	44,271	120,457	129,021	98,432	82,384	66,166
Exports – Automobiles	9,258	6,324	4,091	4,730	8,504	12,690	15,801	33,698	37,859	36,715	39,117
Imports – Chassis	–	–	7,453	5,424	12,901	18,126	–	–	26,001	26,643	24,083
Exports – Chassis	–	–	193	469	756	2,700	–	–	19,072	19,026	22,703
Imports – Parts	–	–	2,682	872	1,868	3,265	4,598	5,662	8,447	9,148	10,457
Exports – Parts	–	–	690	452	1,456	1,870	2,132	4,627	5,156	4,970	6,154
Imports – Motors	–	5,281	4,266	6,754	7,675	18,255	20,232	2,361	2,700	3,996	4,251
Exports – Motors	–	1,779	1,554	992	1,146	984	602	585	332	585	460
<i>Imports of automobiles as a percentage of imported components</i>	–	–	178%	130%	107%	111%	–	–	265%	207%	171%
<i>Exports of automobiles as a percentage of imported components</i>	–	–	28%	36%	38%	32%	–	–	102%	92%	101%
<i>Imports of automobiles as a percentage of automobile exports</i>	234%	396%	628%	361%	283%	349%	762%	383%	260%	224%	169%

Available data on trade volume are provided in trade values according to average values in 1921. Data from the years before the revaluation of the CSK (1920 – 1922) are adjusted to 1929 values (according to USD exchange rate).

Data sources: Zahramiční obchod republiky Československé (1920), pp. 66,142; 1921, pp. 95 – 96, 212; 1922, pp. 109, 237; 1923, pp. 255 – 257; 1924, pp. 312 – 315; 1925, pp. 241 – 243; 1926, pp. 180 – 181; 1927, pp. 228 – 230; 1928, pp. 211 – 214; 1929, pp. 221 – 223; 1930, pp. 214 – 217.

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From the data, it is clear that a large share of imports had the character of components, which confirms the hypothesis that domestic production was to a great extent characterized by domestic Czechoslovak assembly of foreign parts. Generally, it is possible to say that the import of components was most important in the first half of the 1920s, but then it had a tendency to level off. This trend was most important in the case of imports of motors (an understandably crucial element of automobiles), which fell off dramatically in terms of absolute value. This trend can also be illustrated by the exports of chassis from CS, which had more or less offset the value of the imports of this component by the end of the 1920s.

All this together means that CS industry over the course of the 1920s developed its capacity to produce components and substituted imports with their own domestic production. While in 1924 the value of imports of automobiles and auto components were almost equal, by 1928, the value of imported automobiles was 265% of the value of imported parts. Another indicator that we can use to evaluate this transformation of the position of the CS auto industry in the international division of labour was the gradually increasing value of auto exports compared to the value of imported components. While in the first half of the 1920s the value of automobiles exported from Czechoslovakia was only about one-third of the value of the parts imported from abroad, by the end of the 1920s, these figures had evened out. One final indicator which the data reveals – and demonstrates the development of the CS automobile industry – is the shift in the relative shares of imported and exported automobiles. The largest discrepancies in value of imports over exports occurred in 1922 and 1926; the smallest in 1929 and 1930. At the beginning of the 1920s, we can see a major imbalance of imports over exports as an effect of the low production of CS industry; in 1926, this comes as a result of the relative liberalization of CS trade policy. However, by the end of the decade, domestic production capacity becomes stronger – in spite of a complicated situation in the global economy, exports continue to gradually increase, while imports fall noticeably in the last years of the business cycle (1928 and 1929). We can thus state that the CS auto industry – obviously in the context of CS trade and economic policy and their priorities – was successful. Domestic production capacity developed behind a protective shield, resulting in the substitution not only of foreign-produced vehicles with domestic ones, but also of key foreign-made vehicle components, which were also produced on Czechoslovak soil.

All foreign vehicles were to a certain extent price competitive with CS products (Table 11).

Table 11

### Competitiveness of Selected Foreign Automobiles on the CS Market –

estimate of prices of foreign vehicles (in USD) after shipping costs (estimated in USD) and tariffs according to various individual tariff regimes (price without shipping/price including shipping); price comparison with direct competitors produced in CS

Model and year <sup>1</sup>	Price in USD	Shipping in USD	With the spec. tariff (June 1921) <sup>2</sup>	With the spec. tariff (June 1921) and the 25% luxury tax	With the spec. tariff (November 1921) and the 25% luxury tax	With the 77% tariff (1922 – 1926)	With the autonomous specific tariff (from June 1926)	Treaty-based tariff of 45% (from 1925)
Ford Model T Sedan (1922)	595	368	752/1,120*	901/1,269*	859/1,227*	1,053/1,421**	1,648 (219%)/2,016***	863/1,231*
Ford Model T Runabout (1922)	290	368	435/803*	560/928*	520/888*	513/881**	841 (290%)/1,209*	421/789*
Chrysler B-70 (1924)	3,000	368	3,406/3,774*	4,156/4,524**	4,019/4,387**	5,310/5,678***	4,122 (30%)/4,490 + 750 (25%)*	4,350/4,718**
Ford Model A (1927)	500	368	868/1,236*	993/1,361*	944/1,312*	885/1,253**	1,518 (204%)/1,886 *	725/1,093*
Austin 7 (1924)	700	121	804/925*	979/1,100**	951/1,072*	1,239/1,360***	946 (35%)/1,067**	1,015/1,136**
Opel 4 PS (1924)	1,125	98	1,296/1,394*	1,577/1,675***	1,531/1,629***	1,991/2,089***	1,128 (36%)/1,324*	1,631/1,729***
Opel 4 PS (1929)	500	98	–	–	–	885/983*	–	725/823*
Wanderer W8 (1925)	1,000	98	–	–	–	1,770/1,868***	–	1,450/1,548**
Renault 40 CV HD (1921)	3,040	159	3,417/3,576*	4,177/4,336*	3,800/3,959*	5,381/5,540***	4,082 (34%)/4,241 + 760 (25%)*	4,408/4,567**
Renault 10 CV GS (1920)	1,360	159	1,554/1,713*	1,894/2,053***	1,842/2,001***	2,407/2,566***	1,817 (34%)/1,976***	1,972/2,131***
Fiat 505 (1922)	1,588	159	2,038/2,197*	2,435/2,594***	2,314/2,473**	2,811/2,970***	2,830 (80%)/2,989***	2,303/2,462**
Fiat 510 (1922)	2,083	159	2,533/2,692***	3,054/3,213***	2,933/3,092***	3,687/3,846***	3,325 (80%)/3,484***	3,020/3,179***

\* significantly lower price than that of a directly competing product; \*\* comparable price to that of a directly competing product; \*\*\* higher price than that of a directly competing product. Average price per unit in the given year is used to calculate the amount of the specific tariff; in cases where such information was not available, it is estimated analogously to the method used in Table 8.

<sup>1</sup>The Ford Model T (Sedan and Runabout) serves as a direct competitor to the Praga Alfa and the Laurin & Klement 210; Chrysler B-70 competed with the Tatra U and the Laurin & Klement 450; the Ford Model A as a competitor to the Laurin & Klement 210; the Austin 7 as a competitor to the Tatra 11; the 1924 Opel 4 PS as a competitor to the Tatra 11; the 1929 Opel 4 PS and the Wanderer W8 as competitors to the Praga Alfa and the Laurin & Klement A/100; the Renault 40 CV as a competitor to the Tatra U and the L&K 450; the Renault 10 CV as a competitor to the Laurin & Klement A/100 and the Laurin & Klement 210; the Fiat 505 as a competitor to the Laurin & Klement 210; the Fiat 510 as a competitor to the Laurin & Klement 210 and the Tatra U.

<sup>2</sup> USD/CSK exchange rate of June 1921. In other cases, the exchange rate from 1929 is used (from 1923 fixed rate – gold standard) (according to the Federal Reserve 1949).

Source: Authors.

With the exception of a single vehicle, this was the case after the imposition of the specific tariff (in 1921). Even after tacking on a 25% surcharge on the cost of the imported product (by authority of the Minister of International Trade), the majority of foreign vehicles – according to our research, six out the ten models on the market at that time – were still competitively priced. After a fall in the value of CS crown (which effectively reduced the tariff) between June and November 1921, 7 out of 10 in our study were competitive. We see the reduction in the level of protection as a result of the falling crown as one of the reasons for the switch to an *ad valorem* tariff (at a rate of 65% plus a 12% luxury tax on passenger cars), which was exceptional in the CS tariff schedule. After the establishment of this tariff, only four foreign models out of 13 were competitive (we can calculate this tariff even without knowing the weight of the vehicle). After a substantial jump in the value of the CS crown – from 1.038 US cents in June of 1921 to 2.955 cents in 1923 (the average value for this year, which was largely stable for the rest of the 1920s), there was a return back to the specific tariff; combined with the exchange rate, this presented a difficult hurdle for foreign producers – even higher than the 65% (resp. 77%) *ad valorem* tariff (only four competitive vehicles). A critical aspect of this was that this specific tariff had the greatest effect on relatively inexpensive cars (with their lower price per kg), which meant American cars in particular; American exports at that time were quickly rising. However, bilateral trade treaties with the largest exporting nations (France, Italy, Austria, Germany, the United States, and the UK) caused duties to fall to 45%.<sup>2</sup>

Under these conditions, four models (three of which were American-made) were clearly more competitive, as well as another five foreign models that were able to offer comparable prices to those of CS producers.

## Conclusions

The CS automobile industry serves as an example of a strategic, state-supported industry whose creation and protection did not have the production of internationally competitive goods on the world market as a primary goal. The goal was to produce automobiles to an adequate standard; the government, the public, and key interest groups were all prepared to accept the higher costs from domestic producers relative to foreign competition. Sales thus had to take place in an insulated, protectionist market, at a price that covered the costs of domestic producers and allowed them to generate income for additional investment. Exports abroad

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<sup>2</sup> This occurred especially as a result of the application of most-favored-nation principle in the treaty with France from 17 August 1923, which created a 45% tariff on France's automobiles in particular.

thus meant a welcome bonus for firms, domestic consumers, and the government – income from foreign entities allowed relatively lower-priced sales to domestic consumers as well as reducing the costs of protectionist policies. To create conditions that made it possible to export from Czechoslovakia to countries with better-than-average commercial and political relations, foreign policy played a significant role (using government loans to importing countries, sales as an aspect of international negotiations). As our empirical evidence shows, the CS auto industry never achieved international competitiveness, and protection of the domestic market was in no way limited to a certain period of time. In our view, primary sources from the time indicate that support for the automobile industry was understood to be completely natural, as an obvious obligation of the state; this was not a subject of conflict among individual interest groups (consumers/producers; export-oriented industry/industry competing with imports). When evaluating the effects of these trade and economic policies, we arrive at the conclusion that the CS auto industry managed to substitute domestically-made products to a certain extent (albeit at a significantly higher price). At the time, this was understood as a one of the symbols of CS industrial and technical prowess as well as its economic and political muscle. It is only a slight simplification to state that international competitiveness of this industry only occurred 70 years later (in the 1990s), and under completely different economic and political conditions (in particular, as a result of the integration of international production chains and the free movement of capital). The Czechoslovak example of trade policy supporting the creation and protection of the automobile industry is thus another case of the exceptional position of this industry in national as well as international commerce in the 20th Century. It therefore corresponds to the context of development in other countries, including the largest producers. After all, the German car industry, for example, only became internationally competitive in the 1960s, Japan in the 1980s, Korean in 1990s, Italian and French struggling throughout. In all cases, this only happened after decades of consistent support and protection from the state, fundamentally characterized by protectionist and restrictive trade policy – strongly supported by policymakers, national industry as well as general public.

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