

Prof. Boris Shpotov, Institute of World History, Russian Academy of Sciences,
Moscow, Russia. E-mail: shpotovb@mail.ru

Business without Entrepreneurship: the Ford Motor Company and the Soviet Industrialization, 1920-1930s

The Ford Motor Company (FMC) early activities in the Russian Empire (1909-1917) took form of classic penetration into foreign automobile market: sales through authorized dealer, responsible for advertisement campaign, participation in exhibitions and races, competition on principle “the highest quality for the lowest price”. At that time Russian automobile industry was in embryo, mainly because of absence of necessary materials, like special steel and rubber, electrical equipment, precise tools and technologies, already used in the West. Demands of the rich buyers and of the Government (including city magistrates) were promptly satisfied by importation of foreign vehicles.

In the market economy *business* is inseparable from *entrepreneurial* ideas and initiatives, supported by investors and managers¹. An excellent example gave the Russian Singer Company in the beginning of the XX c. Running large factory of sewing machines near Moscow included variety of activities – recruiting and managing workforce, advertising and selling, relations with community, officials and Tzarist Government. The company felt responsibility not only for making profitable work, but also for its adaptation to economic, social, cultural and legal conditions of the host country². Unlike Singer, FMC had no direct contacts with the Russian customers, workers or officials. Ford dealers in several cities of the Russian Empire had less duties, for they conducted only trade, but they had to be inventive and entrepreneurial in advertising campaigns, rendering better service, keeping contacts with individual and corporate clients and Government men, and making favorable image of Ford Motor Company and its products.

The difficulty *Model T* met in Russia was strong competition of flamboyant and more powerful European cars preferred by the ruling elite. Middle and lower classes used horse carriages, street cars, trains and steamboats. Nevertheless, during World

War I lack of cars and trucks became evident because their inflow from Europe, Germany first of all, was stopped. Vehicles from the United States took the first place in imports. Although *Fords* weren't in great demand, in 1916 business promised better perspectives in case of creation of a Russian Ford Company, with assembly plants instead of car imports. Initiators of the idea were FMC manager Gaston Plantiff, who visited Russia, and mechanical engineer Nikolai S. Lavrov, the first Russian who witnessed Ford's assembly line in action and became ardent propagandist of Ford methods in Tzarist, and afterwards in Soviet Russia³.

The Communist Revolution and bloody civil war in Russia (1917-1921) buried for a long time the idea of opening Ford branch in Russia. Instead, it marked new era in Ford-Russia relations, which can be called business *without* entrepreneurship. It should be noted that the full-scale business *with* entrepreneurship, which involved marketing, community relations, etc. was started only in the beginning of XXI century in post-Soviet Russia, when Ford automobile plant in small city Vsevolozhsk, the Leningrad region, started to give production (the first model was *Ford Focus*).

Ford-Soviet trade

In 1920s, foreign companies which established business relations with the USSR, belonged to two groups. Those who obtained concession rights were admitted to make capital investments, and those who remained only suppliers, sold goods to the state purchasing organizations.

The former left little space for entrepreneurial actions. Concessionaries invested capital into extracting and lumber industries, mines, transportation facilities, communal enterprises, fisheries etc., not becoming their owners and remaining temporary users and managers. Their profits, labor relations, financial and political behavior remained under the strict state control. They were to transfer convertible currency to the state bank to change for gold rubles, the only legal tender in the Soviet Union, to borrow ruble loans at the state bank and get permission to repatriate profits in hard currency after the state inspection of their accounting books. It was not all: the state bank often answered negatively – “We have not enough *valiuta* (hard currency) for you – wait!”

After 1922, FMC each year received Soviet orders for cars, trucks and tractors. The Soviet economic and political system was of administrative type, and in absence of notable domestic motor industry, was introduced state system of purchasing abroad and centralized distribution, by quotas, between civil authorities, armed forces, construction sites, peasant cooperative associations, etc. Henry Ford hated any state interference and even slight control over his business, and his “right hand” Charles Sorensen shared the policy of boss. After repeated proposals to take concession for building a tractor or automobile plant in the Soviet Union, FMC sent in 1926 a group of managers to learn – would it be profitable or not.

The delegation stayed in Russia for several months to explore economic, political, living and legal conditions, and its opinion was unanimously negative (building any plant on the Soviet soil would be “nothing short of madness”). The Company would invest money, but after launching production be obliged to supply Russian market for fixed price. Working conditions would be controlled by Soviet labor union, while Henry Ford was fiercely disposed against unions in his American plants. The Soviet concession rules left no space for entrepreneurial manoeuvre. Besides, the omnipotent Government could confiscate the enterprise, while FMC was helpless in absence of diplomatic relations between USA and USSR. The delegation also collected facts of barbarous treatment of *Fordson* tractors (storage under the sky, inaccurate transportation, bad repairs) and of difficulties in managing concession enterprises in the Soviet Union⁴.

At this juncture FMC decided to maintain trade contacts without any risky investments, and sell to Soviets what they needed. Ford delegation recommended some promotional means, like establishing Company’s trade agent in Russia, spare parts depots, mechanics schools, issuing posters popularizing Ford products. However, FMC refused to prolong one-year credit, given in December, 1925, for selling tractors. 12,000 *Fordsons* were shipped to the Soviet Union for 75% payment in the United States, and remaining 25% were to be paid in 10 months after their delivery. But FMC was on the eve of hard time: changing basic model and replacement of unprofitable tractor business from the United States to Cork, Ireland. 1927-1928 was the period of temporary slowdown in FMC-Soviet relations. Leadership in tractor supplies was

overtaken by the International Harvester Company of Chicago, which offered generous credit terms.

The Soviets tried to enlarge supplies without spending hard currency by making counterfeit production. The famous machine-building factory in Leningrad, former Putilovskii Zavod, tried to copy *Fordson* tractors under Russian trade mark “Red Putilovetz” but inexperience in mass production turned these attempts back to handicraft level and resulted in poor quality of “iron horses”⁵. The Soviet copies looked exactly like original *Fordsons*, but often stopped in the field and could not be repaired because of low quality of steel. Russians did not know secrets of making some special sorts of steel, which was noticed by Sorensen, who visited the USSR in August 1929⁶.

In 1931, the Soviet state corporation *Autostroy*, responsible for building the Nizhny Novgorod (later Gorki) auto plant, ordered and purchased Ford-made presses and other special heavy tools. Pieces of equipment which seemed to be easily copied in the Soviet Union, were bought as single units and carried to the USSR “according to general purposes”⁷. It meant, for forgery. However, buying patents did not guarantee perfect quality of product. A good part of Soviet Ford cars, although licensed, was not satisfactory for years, and high-quality steel had to be imported from Germany and the United Kingdom until satisfactory metal could be supplied by Soviet plants.

After the decline in *Fordson* tractor imports mass automobile became the new *idée fixe* of the Soviet political and economic officialdom. It was new Ford car – *Model A*, launched to American auto market in 1928. The first Five-year plan stimulated gigantic Soviet jump towards industrialization and acquiring the advanced Western, mostly American, technologies. Unlike Tzarist bureaucracy, the Soviet leadership fully understood significance of modern know-how in modern world.

The Soviet engineers carefully studied Ford’s mass production methods. In the beginning of 30s, realization of technical assistance agreement of May 31, 1929 constituted the new field of business operations. Their relative simplicity contained, however, some peculiar features, specific for the relationship between capitalist firm and the Soviet economic system.

The Soviet leaders were eager to acquire Ford technology to build modern automobile industry. FMC wanted to earn “easy money” by selling technology that currently possessed. The bargain seemed convenient to both sides: the USSR received Ford-type plants and was to buy out 72,000 Ford cars and trucks in 4-year credit as reward to the Company. It made certain consensus, but further events created much discord. The Soviet program of forced industrialization was extremely ambitious, hundreds of large modern enterprises were to be built during the first Five-year plan (1928-1932). Dispersed state financing could not provide enough resources for each, including automobile factories. Lack of supplies and trained people disrupted work. Increasing shortage of hard currency prevented normal accomplishment of the FMC-USSR agreement. The Soviets ceased payments, in 1933 Ford advisors left the newly built factories, while the Russian personnel was unable to keep imported equipment in working conditions. That disturbed the USSR automobile industry till the end of the 30s.

In the fall of 1928 the Soviet Government and *Amtorg*⁸ were preoccupied about the choice of basic model and a company, capable of providing license and taking concession or rendering technical assistance to production. The main potential contractors were Ford Motor Company and General Motors. Both the *Ford A* and the new *Chevrolet* seemed attractive. The whole matter was kept under control by the supreme Communist Party’s organ – the Politburo, governed by Stalin. Negotiations with FMC started on September 7, 1928.

How Ford gave birth to the Soviet Mass Automobile

The first Soviet proposal involving technical assistance in building a plant producing from 12,000 to 25, 000 units per year, and for auto parts purchases in reward, was rejected as too small to interest the company. The counterproposal called for the establishment of a Russian branch with an annual output of 150,000 autos, capitalized by selling parts to the Government. The plant was to be Ford property, with priority on its output to the state, and disposing of any additional output in the Russian market at the Company’s discretion. The second Ford proposal included a special extra charge, from 10% to 25%, on the automobiles sold in Russia, to be invested in the new

plant, and the right of the Government to eventually purchase the plant. The Soviet delegation rejected special charges, and the 150,000 units per year were also rejected to prevent a “Ford monopoly” in the Soviet Union⁹. However, the negotiations were resumed in Spring, 1929, when the Soviet Government finally decided to build large auto factory with annual capacity of 100,000 cars and trucks without foreign capital and governance – completely state-owned and state-governed enterprise¹⁰.

FMC was chosen as one of the biggest and most promising American partners, while General Motors missed the chance. Professor Mira Wilkins neatly compared FMC-Soviet relationship to a “marriage by convenience”¹¹, in the sense of mutual pragmatic interests. The “wedding proposal” came from the USSR. The “marriage”, however, lasted about four years, although the technical assistance agreement, concluded in May 31, 1929, was to be expired by June 1, 1938.

The Soviet Union, after spending tremendous sums in hard currency for buying necessary tools and basic knowledge of mass production technology, initiated “divorce”. In August, 1931, Joseph Stalin ordered to save currency by breaking relations with the US companies, and replace orders to European firms, who offered liberal credit terms, and to the Soviet plants. In the fall of 1932, the Politburo decided to cease relations with Ford. FMC position remained unshaken, but the Soviet enterprises worked poorly not only the first months, but years after their start-up. It was caused by economic, managerial and organizational malfunctions, common to all Soviet system. If not premature “divorce”, the Ford specialists could continue all possible help in mastering new equipment three years more.

The FMC specialists had but one task – to assist in starting-up the factory as advisors and coaches, without administrative powers. The same situation took place at every Soviet construction site or newly-built enterprise. Every American manufacturing system, including that of Ford, could work effectively in other country only at strict observance of all rules and norms: uninterrupted inflow of raw material, skillful engineering, good factory management, disciplined and well-trained workforce, etc. In the USSR such conditions were absent.

FMC could earn \$33,000,000 for rather simple, not innovatory, service in technical assistance, for 4-year credit (1929-1933). It was the price of 72,000 knocked

down models A and AA to be shipped to the USSR. FMC reward was buying its products, and the Soviet Union had the right to choose knocked down or other automobile production made by the Company¹². The state administrative body *Autostroy*, which was direct partner of FMC, got designs, layouts, patents and licenses of the famous American company, as well as technical devices for the assembling plants (dies, jigs, fixtures etc.), and received cars and trucks for assembling or immediate use. In addition to general agreement of May 31, 1929, the *Autostroy* concluded on April 7, 1931, agreement about purchasing Ford equipment for the Nizhny Novgorod auto plant by Soviet orders.

In 1929 FMC thought about new models, and selling about 2,4% of annual production of A and AA to the USSR was easy. FMC was to sell them with minimal premium, like to the best dealer, for the production costs plus 10% overheads plus 12% for freight and delivery to American port. However, the *Autostroy* and *Amtorg* tried to impose their own “rules of the game”. Till May 31, 1933, when the payments were to be completed, the Soviet debt to FMC increased to almost \$ 17,000, 000, and by February 1935 FMC received only \$ 928,000. FMC delivered to the sea port of New York only production actually paid, but on those operations lost, as Ford treasury had shown after World War II, \$ 578,000 (Soviet payment did not cover sums calculated for freight and delivery to the sea port)¹³.

As for the plant equipment, *Amtorg* refused to pay for extra hours, spent by FMC on its testing in 1931, according to *Autostroy* requirements. It was unique machinery unknown in the USSR, and *Autostroy* men wanted to have additional guarantee in its workability before shipping to Russia. The Soviet purchasers insisted that testing was a part of normal production process and could not be calculated as extra work, which greatly increased charges, while FMC argued that the Company never tested tools before installing them at her American plants. If a tool was defective, it was immediately replaced by good one. But Soviet industry could not afford itself such generosity, and in the long run *Amtorg* paid to FMC the necessary sum.

Charles Sorensen who was in charge of FMC foreign relations, wrote to the *Amtorg* head, Piotr Bogdanov: “We feel that we have been extremely liberal in

carrying out this work, doing not only a good job, but not overcharging for it. Furthermore, we feel that you have benefited in many ways which never will show in the accounts”¹⁴.

In Soviet Russia, the FMC men were invited technicians with temporary duties. They helped to launch plants and equipment, not feeling obliged to understand what would they do to attract customers or to maintain the community relations, as the Russian Singer Company administration did. Some visitors from Ford left reminiscences about their voyages to Communist Russia, full of critical remarks on the Soviet-Russian style of doing, weak discipline (frequent absenteeism, smoke-breaks, etc.), inability to work in team, frequent inaccuracy and bungling. After inspecting several large plants, Sorensen noted: “Anything that meant mass production seemed to have the Russians stumped. I saw similar evidences in an airplane factory and a motor-truck plant in Moscow. In the higher field of engineering, like turbine building, they did a pretty good job... But since that day I never felt particular concern about the Russian competition in the Ford products field”¹⁵.

When the main auto factory in Nizhny Novgorod started work in January, 1932, the assembly plant No. 1 in the same city began to carry out various auxiliary operations: coloring, completing motor vehicles, repairing, etc. Tasks varied 2-3 times per month. It was a fever work, which compelled the administration to hold additional labor. At reduction of tasks, the plant held up to 50% unnecessary workers, while unexpected increase created shortage up to 50%. The inexperienced newcomers tore off work skilled neighbors to get instructions and explanations. When the program diminished, the labor force was reduced, and the staying workers were bound to carry out several operations, including new to them, to master which took one or two months. Transition to making a new production “broke all work done earlier”, and it was necessary to start from the very beginning, complained the plant administration in its report for 1932¹⁶.

Similar troubles occurred at No. 2 assembly plant in Moscow. Its work entirely depended on the shipments of Ford parts. In 1931 the plant’s capacity was used on the average of 56%. Dependence on deliveries created sudden fluctuations of the production program and necessity of hiring excessive labor. For February, 1931 the

enterprise was stopped because of absence of parts to assemble. Only in August the monthly plan was completed under strict Government order to provide additional trucks for harvesting, but next month the operations again dropped down. In the fall the financing of the plant was reduced from 4 million of gold rubles to 1,5 million. Such fluctuations did not allow check the conformity of the technological process, designed in America, to Russian conditions, to find bottlenecks and other obstacles. Neither it was possible to maintain a uniform rhythm of work in all shops to lower costs of the assembling¹⁷.

One American expert wrote in 1932, that the value of this plant's excellent facilities was discounted badly by lack of attention to details, particularly in the handling of materials and the disposal of incoming crates and boxes. "Some of the mechanical operations indicated a greater regard for numbers than for quality". He summarized difficulties, common to all Soviet automotive industry: floating labor, lack of experienced supervisory and technical personnel, shortage of materials, inadequate transportation, muddleheaded thinking, etc.¹⁸

Ford engineer Nilkanth Chavre, employed to the GAZ as a gauging and inspecting specialist, reported to the American consul at Riga, Latvia, that the *Autostroy* adopted Ford methods entirely. However, the Gorki plant, able to produce at least 1,200 trucks per day, with lowered daily production to 500 trucks during the first two years, actually gave 75 trucks per day, of which about 30 were in running conditions. The unfinished trucks remained for some days in the yard of the plant. When their quantity in the yard became too great, the trucks were taken to the assembly plant No 1, about six miles distance, to be stored there until such time as the necessary parts to complete them could be obtained. Most of them lacked electrical and body equipment. Mr. Chavre named major causes for non-fulfillment of the plan: poor transportation facilities, which delayed the receipt of raw materials, and lack of uniformity of the parts received from other plants. The steel was for the most part purchased from Germany and to some extent from England. Some was supplied from the Russian steel mills, but it was generally not uniform in quality. "In some cases the Russian steel was absolutely unusable..."¹⁹.

The engineer stated the slowness with which Russian labor could be trained. Within two days he could train the average inexperienced employee hired in a Ford plant in the United States well enough so that he could do his task accurately, and could increase his productive power without further teaching. “The Russian laborer is difficult to train since he generally comes to the factory from the farm with absolutely no experience with mechanical devices. It requires days to train him properly and it is difficult to discipline him. If he is given some instruction while at work on a production line, he is likely to take out a note book, make notes on the instruction, and then to sit down to study them, being more concerned with his own education than he is with the orderly routine of production of the plant. Furthermore, he may question any orders given to him, and may, if unsatisfied with the reasons advanced in support of the order or advice, do a little experimenting of his own”. Ford engineer compared Russians to a group of children playing with their first mechanical toys. They smashed them, run them improperly, and generally made a mess of things, but he regarded the Russian experiment in industrialization as a schooling period. He noted, that they would eventually outgrow their childish inquisitiveness over theoretical points and their desire to experiment, and will learn to produce according to proper industrial methods²⁰.

Conclusion

The Stalin’s program of forced industrialization imposed crucibles and extraordinary tasks, which made the Soviet government to seek ready technical and technological solutions in the West. The Ford-Soviet relations in 1920-30s were, certainly, very substantial business. FMC was motivated by “easy money” for rather simple service – making technological project of what the Company already had: assembling plants and large full-cycle factory layouts to produce a car similar to FMC model of 1928 (A and AA). The Soviets needed national mass vehicle of Ford type, and attached it great economic and (typically for socialism!) political importance. The Soviet automotive production was the state-owned and state-run enterprise. The American company made no capital investments to the Russian auto industry, had no rights to manage plants, and all her role was selling know-how (technical assistance

and advisory functions according to best Ford practices. In economic relations with capitalist world the Stalinist leadership demonstrated rigid pragmatism dictated by national interests and communist ideology. The Soviets felt free to cease payments, to break agreement before its expiration, to make artefact products.

In the same time the Soviet manufacturing industries was to absorb totally new know-how. Its efficient employment demanded high-quality raw materials, non-stop supplies, trained and disciplined workers, knowledgeable factory management. By the crucial moment of Ford know-how introduction the Soviets had prepared no adequate “soil” to successful implantation of the new technologies, and not enough trained people to run the new machinery. The Soviets had no alternative but extraordinary administrative pressure to mobilize material and human resources (including the *GULAG* convicts). Unseen in history tempo of modernization became a mix of advanced know-how and conservative resistance, Communist enthusiasm and energy and traditional bureaucratism, courage and bungling on the “labor front”.

However, the progress was evident. The Soviet industries made great jump by the beginning of the World War II. Four automobile plants: in Gorkii, Moscow (two plants) and in Yaroslavl gave in total more than 200,000 vehicles in 1938-39, and GAZ factory was the national leader. But Soviet mass production wasn't flexible: the Government invested tremendous money into basic Ford-design model production and respective equipment which could not be replaced in two or three years. Only slight remodeling was possible. Pre-war GAZ cars and trucks with features of *Ford* remained practically unchanged till the beginning of 1950s. All of them were used for various state purposes.

¹ Joseph H. Boyett, Jimmie T. Boyett. *The Guru Guide to Entrepreneurship. A Concise Guide to the Best Ideas from the World's Top Entrepreneurs*. John Wiley & Sons, Inc. New York, 2001.

² Irina V. Potkina, “Transnational Corporation “Singer Company” in Russia”, in *Firms, Community and the State in the History of Russian Entrepreneurship. Reports at the International Scientific Conference in Saint-Petersburg, Russia, December 8-10, 2006*, Saint-

Petersburg Univ. press, 2006, pp. 171-174 (in Russian).

³ Boris M. Shpotov, “Ford in Russia, from 1909 to World War II”, in Hubert Bonin, Yannick Lung and Steven Tolliday (eds.), *Ford, 1903-2003: The European History*, Paris, P.L.A.G.E., 2003, vol. 2, pp. 505-509.

⁴ Shpotov, “Ford in Russia”, pp. 512-513.

⁵ Yves Cohen, “The Soviet Fordson. Between the politics of Stalin and the philosophy of Ford, 1924-1932”, in *Ford: The European History*, vol. 2, pp. 542-543.

⁶ Charles Sorensen, *My Forty Years with Ford*, New York, W.W. Norton and Co. Inc., 1956, p. 203.

⁷ *The Russian State Archives of the Economy*, Moscow, Russia (hereafter *RSAE*), RG. 7620, Inv. 1, F. 766, p. 3-4 (RG – Record Group, Inv. – Inventory, F. – File). In Russian.

⁸ The Amtorg Trading Corporation, or Amtorg, established in May, 1924, was formally independent, but, in fact, Soviet-governed commercial agency with branches in the United States and in the USSR. One of its functions was making payments to the American companies which rendered technical assistance to the Soviet industries.

⁹ Barbara M. Kugel, *The Export of American Technology to the Soviet Union, 1918-1933, including the Ford Motor Company-Soviet Government Relationship, 1918-1933*, M.A. thesis, Detroit, Michigan, 1956, pp. 57-60.

¹⁰ In 1930, the planned capacity was enlarged to 140,000 cars and trucks per year.

¹¹ Mira Wilkins and Frank E. Hill, *American Business Abroad. Ford on Six Continents*, Wayne State Univ. press, Detroit, Michigan, 1964, p. 208.

¹² The Soviets bought a part of automobiles assembled, a part in disassembled state, and, besides, 193 Lincoln cars.

¹³ Allan Nevins, Frank E. Hills, *Ford: Expansion and Challenge, 1915-1933*, New York, Charles Scribner's Sons, 1957, p. 682-683. The authors erroneously believed that Russia completed its contract for 72,000 units.

¹⁴ *RSAE*, RG. 7620, Inv. 1, F. 766, p. 158 (in Russian).

¹⁵ Sorensen, *My Forty Years with Ford*, p. 203.

¹⁶ *RSAE*, RG. 7620, Inv. 1, F. 554, pp. 52-54, 57-58 (in Russian).

¹⁷ *RSAE*, RG. 7620, Inv. 1, F. 491, pp. 1-13 (in Russian).

¹⁸ Walter L. Carver, “Amo and Nizhni-Novgorod Plants Lead Soviet Vehicle Plans”, in *The Automotive Industries*, March 12, 1932, pp. 419, 421.

¹⁹ Alexander E. Carleton, American Consul in Riga, to the Department of State, December 7, 1932, "Memorandum on the Plant "Autostroy", near Gorki (Nizhni Novgorod), Russia", The United States National Archives, College Park, MD, USA, Microfilm Publications, Records of the Department of State relating to Internal Affairs of the Soviet Union, 1930-1939 (hereafter NAMP), Microcopy T-1249, Roll 72, Doc. 861.797/31, pp. 2-6.

²⁰ Carleton, Memorandum, pp. 9-10.