

OIL AND THE ROMANIAN STATE

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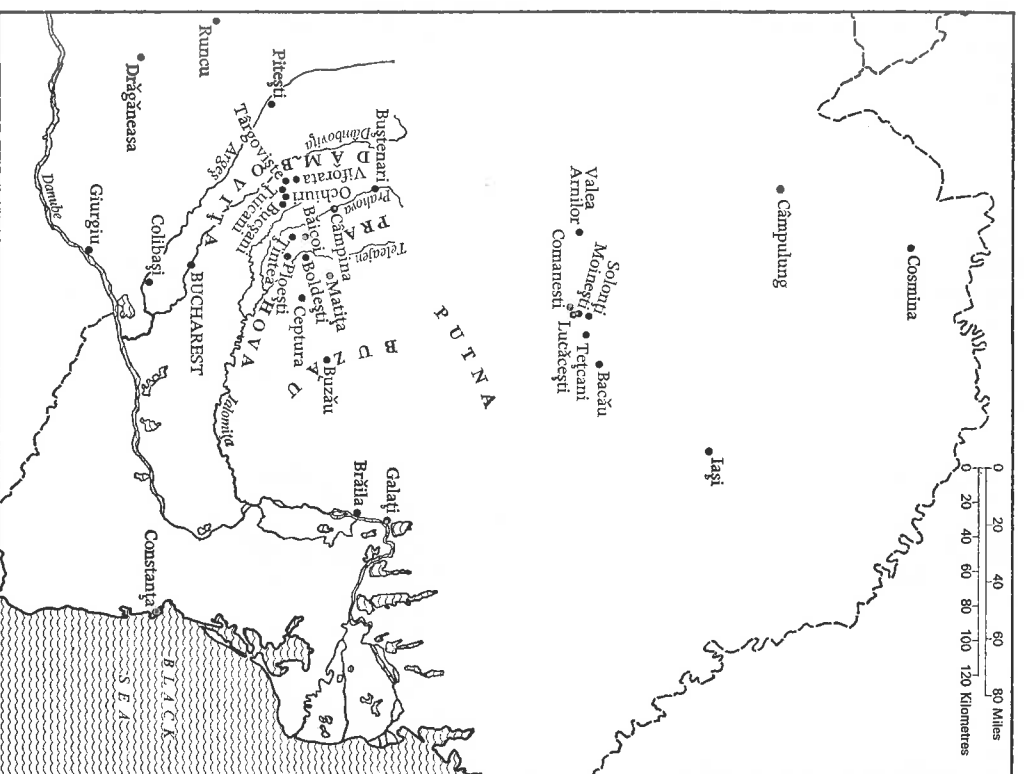
CHAPTER I

The Genesis of the Romanian Oil Industry

The beginnings of the world oil industry

THE manufacturing processes of the oil industry are determined by the physical fact that its raw material, crude oil, is, in its natural state, a mixture, the constituents of which can be separated because they boil at different temperatures. Although crude oil had been known and used since antiquity, the exploitation of the world's resources on a large scale depended on the strict analysis of its composition and developments in engineering and metallurgy. These were achieved only in the nineteenth century, during which research into the molecular structure of organic compounds,¹ and specifically into the nature of crude oil, established that it consisted of compounds of hydrogen and carbon (hydrocarbons)² in series. By 1890 all crudes were discovered to contain three major types of hydrocarbons, classified as paraffins, naphthenes, and aromatics. The varying proportions of each in any given crude determined its quality and, to some extent, the treatment necessary to make it marketable. Thus crude oil containing predominantly naphthenes required to be specially refined in order to yield kerosene of an equivalent quality to that obtainable by simple treatment from crude oil consisting mainly of paraffin hydrocarbons.

The processes and techniques by which the results of this progress in organic chemistry were commercially applied were borrowed: the common basic method of treating oil in the laboratory and in the refinery was distillation, a process, taken over from the production of alcohol, by which the component parts of a



MAP 2. Romania: oil-producing areas

¹ For the background of chemical analysis, see R. J. Forbes, "The Chemists and the Composition of Petroleum", in *More Studies in Early Petroleum History 1860-1880*.

² Crude oil also commonly contains impurities, mainly sulphur and traces of chlorine, oxygen, and nitrogen. For a discussion of the various series, see A. N. Sachanen, "Hydrocarbons in Petroleum", in *The Science of Petroleum*, vol. v, pt. I.

liquid mixture are separated by evaporation and condensation.¹ Similarly, the means of extraction, drilling, was adopted from quarrying and from boring for water and salt. The first drillings specifically for oil took place in Hanover in 1857, Ontario and Pennsylvania in 1859, Galicia, 1862, Romania, 1863, Alsace, 1870, and Baku, 1871. In all these areas, by reason of the greater depth which could be penetrated, drilling eventually displaced reliance on natural seepages and on the digging of pits or galleries as a means of exploiting resources of petroleum. Various systems were employed: their effectiveness depended largely on the type of strata to be penetrated. In America the drilling tools were generally suspended from a cable of rope or steel, which described a reciprocal movement. The Canadian system was basically the same except that the cable was replaced by poles; it came to be adopted in modified form in Galicia and Romania. Free-fall drilling was practised in Baku:² the essential feature of this technique was that the bit was raised and allowed to fall freely, at a rate of 20/40 strokes a minute. Towards the end of the century, rotary drilling made its appearance and eventually superseded all other forms. It incorporated the water-flush method, whereby water was forced through hollow rods to assist the action of the bit and carry upwards the disintegrated material, but, for the lack of suitable steels for bits, its use was at first restricted to soft geological formations.

The search for oil was usually concentrated in areas where seepages had already indicated the presence of oil deposits, or known beds of salt their likelihood.³ As a result of geological observations in Burma (1855) and the United States (1861) it was

¹ When crude oil is distilled, the most volatile constituents are separated first, and condense as gasoline: they are followed by components with higher boiling points, yielding, in order, kerosene, gas oil, lubricants, waxes. The residue varies with the type of crude oil, and provides fuel oil and bitumen. For the development of the distillation process, see R. J. Forbes, *A Short History of the Art of Distillation*; Sir Boyerton Redwood, *A Treatise on Petroleum*, vol. ii; and W. Miller and H. G. Osborn, "History and Development of Some Important Phases of Petroleum Refining in the United States", *The Science of Petroleum*, vol. ii.

² On developments in Baku, see Sir Boyerton Redwood, "The Russian Petroleum Industry", *Journal of the Society of Chemical Industry*, vol. iv, no. 2 (28 Feb. 1885), and A. Beeby Thompson, *The Oilfields of Russia*.

³ For a brief account of the development of geological prospecting methods, see E. de Golyer, "Historical Notes on the Development of the Technique of Prospecting for Petroleum", in *The Science of Petroleum*, vol. i.

demonstrated that deposits occurred in anticlinal structures. This correlation enabled prospecting to be carried on in areas where no obvious surface traces of oil were to be seen. The anticlinal theory was first systematically applied to the search for potential oil-bearing strata in 1883 and was gradually extended to embrace other geological formations with which oil was associated, such as domes, faults, monoclines, etc. It became the foundation of prospecting.¹

Notwithstanding these developments, success in finding oil remained very much a matter of chance, and flush production, followed in many cases by the rapid exhaustion of the particular oil-bearing strata through wastage of underground gas pressure, characterized many early oilfields. This trend was encouraged in the U.S. by the legal arrangements governing extraction; oil deposits were held to belong absolutely to the surface owner, who felt himself compelled rapidly to exploit his subsoil resources which, as fugacious material, under the "rule of capture", would otherwise accrue to adjacent landowners or lessees.²

The technical improvements mentioned above in extracting oil from the ground and treating it necessitated improved methods of disposal both of crude oil to refining centres, where these were not situated on the fields, and of products to markets. Wagons trains over existing roads proved inadequate. Teamsters' charges varied with distance and road conditions, and wide fluctuations in freights encouraged oil-producers to seek alternative means of transport, viz. rail tank-cars and pipelines. The first cars—merely wooden vats mounted on flat-topped trucks—appeared in America in 1865, but were followed three years later by specially constructed vehicles, the use of which extended to Russia and Germany in 1886. Pipeline development was inhibited by the considerable problem of leakage until in 1865 van Syckle successfully transported crude oil through a wrought-iron line over a distance of five miles from the producing field to a railway. This successful

¹ That is, of "surface" geology—the analysis of the substrata by geophysical methods took place only after 1924.

² The oil rush in Pennsylvania consequent upon the drilling of Drake's well is the first and classic example: for a graphic account, based on contemporary records and journalism, see P. H. Giddens, *The Birth of the Oil Industry*; Williamson and Daun, *The American Petroleum Industry, 1859-1899*; *The Age of Illumination*, pp. 375-7, and Appendix E: *The Legal Framework of Crude Oil Production* also discusses this aspect.

demonstration encouraged further investment in long-distance lines and, after the opposition of the railway companies had been overcome, the first trunk-line was constructed in 1874 from the producing fields to Pittsburgh—a distance of sixty miles. By 1900, 18,000 miles of pipeline were being operated in the United States. In Russia gathering-lines from fields to refineries were pioneered by Nobels, but the first long-distance line, completed in 1889, was laid merely to overcome the technical inefficiency of the Baku-Batum railway.

The high cost of barrels in relation to the price of kerosine in Baku occasioned the first tank steamer designed specifically for the transport of oil, which enabled the Russian oil trade to expand beyond the Caucasus and Persia to the main Russian centres—Moscow, Warsaw, and St. Petersburg—and eventually into the European oil market. Transatlantic traffic in oil began in 1861, but the problem of safe storage of the barrels and the difficulty in obtaining wharf-side labour to handle the cargo made this method of transport very expensive. Ultimately, barrels were replaced by bulk cargoes, initially in sailing ships and, after 1886, in specially designed tank-steamers, to serve those markets where sales justified the erection of bulk-storage and handling facilities. These marine developments emphasize the fact that from the first the oil business was primarily an export trade. Production was greatest in the United States, and from 1866 until the late 1880s, in spite of expanding internal demand, the greater part of United States kerosine output went abroad,¹ principally to Europe.

The economic incentive to the exploitation of petroleum resources on an industrial scale was provided by an increase in demand, following the industrialization of North America and north-west Europe, for a cheap illuminant and for lubricants. Traditionally these needs had been met by the use of whale- and rape-oil and tallow, but the depletion of the whale population and the need for longer voyages to new areas caused a rise in price sufficient to encourage the search for a cheaper substitute.²

¹ For statistics of exports, see Williamson and Daun, *The American Petroleum Industry, 1859-1899: The Age of Illumination*, Appendix D.

² In 1856, in the American market the higher-quality whale-oil was priced at U.S. \$2.25 a gallon, rape-seed oil \$1.50, kerosine \$1; other substitutes varied from 63 to 87¢—see Kendall Beaton, "Dr. Gesner's Kerosene", section iv, *The Business History Review* (Mar. 1955).

Similarly, the mechanization of industry and transport increased the demand for lubricants¹ beyond the existing sources and at the same time created a demand for a lubricant which would not break down in the more exacting operating conditions of machinery.

Crude oil was found to yield products meeting these requirements: kerosine ousted whale-oil and other vegetable illuminants and remained a rival to gas and electricity as a source of light; petroleum-based lubricants virtually eliminated rival forms of lubricants. Refining operations therefore concentrated on the production of the kerosine fraction and the heavier distillate which, treated with sulphuric acid, yielded lubricating oils. All other products ran to waste or were burnt. The stress on kerosine production created a particular problem in Russia, since Baku crude had only a small yield of kerosine and left a large volume of residue. After 1870 the latter was generally pulverized with steam and was found to be suitable for burning in boilers. This new fuel (*mazout*) was used for Caspian steamers and Russian railways, and as an industrial fuel. Largely through difficulties of burner design, the introduction of fuel oil as a combustible into the United States took place only in the 1890s. After that period the invention of the internal combustion and compression-ignition engines created a demand for fractions hitherto wasted—gasoline and gas oil. In consequence, "cracking" entered the commercial manufacturing process for gasoline after 1912 and became an integral part of refining technique. In this process, large molecules are broken up at a high temperature into smaller molecules, often of a different structure. Originally discovered in connection with kerosine, cracking was applied to the production of gasoline when it became clear that reliance on existing methods for meeting the expanding gasoline market for automotive vehicles would involve the creation of an undisposible surplus of heavy residual products.²

By this stage, the basic output of the refining industry comprised, in descending order of volatility, gasoline, kerosine, gas oil, and residuals used as fuel oil and as a feedstock for lubricants and greases. The products of distillation (distillates) were then

¹ For the history of research into the problems of lubrication, see R. J. Forbes, "New By-Products for Burners, Bearings and Bitumens", in *More Studies*.

² On early cracking techniques, see B. T. Brooks, *et al.*, "The Preparation of Gasoline and Kerosine from Heavier Hydrocarbons", *Journal of Industrial and Engineering Chemistry*, no. 7 (1915), pp. 180 ff. On the history of the process, see J. L. Enos, *Petroleum Progress and Profits: a History of Process Innovation*.

treated with sulphuric acid and caustic soda solutions, to remove various impurities such as sulphides. The refining apparatus, therefore, necessarily included stills and heating boilers, condensers, storage for crude oil and refined products,¹ and agitators and filtration and settling tanks for the chemical treatment of distillates. There was at this time no specific vessel for cracking. A plentiful supply of relatively pure water was essential to refining, both for the production of steam and for washing distillates. From the outset, however, the refinery was a flexible factory in that, within the limits imposed by the type of crude input, the products could be varied by alterations in the manufacturing process. This characteristic enabled refiners to meet varying and fluctuating market requirements.

The first plants operated on batch production but the introduction commercially of continuous distillation processes² not only gave higher yields but also reduced unit costs, since the plant was in operation twenty-four hours a day. Continuous production demanded in theory a continuous market: the practical discrepancy between the two was represented technically by investment in tankage and commercially by the search for secure outlets. The former could only be a palliative, since storage was expensive and the costs necessarily burdened that of the current output. The latter, therefore, was a determining factor in the operation of large-scale plants with a continuous process. The production and refining of petroleum necessitated the employment of a small number of drilling and refining specialists, and unskilled labour for such work as digging conduits and preparing sites for drilling rigs—most of the latter being hired *ad hoc*. Once in production, wells needed only inspection and maintenance. Refineries' schedules were equally unexacting. There was no mass labour-force, with consequent management and social problems. The industry was (and has remained) essentially "capital-intensive". The capital needs of the industry therefore had to cover buying or leasing lands, oil extraction, field transport, refinery construction and operation, and distribution and transport. These were not wholly integrated activities, even in the United States, where Rockefeller began in refining and transport, integrated "forward" into the wholesale

and retail markets, but still acquired a large percentage of his crude oil on long-term contract from non-integrated producers.¹

Romania's oil deposits and their exploitation

Romania's oil deposits were located along the southern and eastern slopes of the Carpathian mountains—where, before the development of oil on an industrial scale, the output of various seepages had long been used by the inhabitants for lighting and greasing and for medicinal purposes. These deposits were associated, in Wallachia, with Miocene and Pliocene rock-structures, compressed into anticlines and marked by irregular folds. Deposits in Moldavia were situated largely in the older Tertiary rocks and were, geologically, easier of access. The principal field was in the Prahova district but deposits were also worked in Dâmbovița and Buzău (Wallachia) and Bacău (Moldavia). The crude oil obtained varied in quality. Buztenari (Prahova) yielded a rich oil with an asphaltic base almost devoid of solid paraffins, which subsequently became the standard for marketing purposes;² in contrast, oil from Cămpina, also in the Prahova district and only ten miles from Buztenari, had a heavy paraffin base. Generally, however, Romanian crudes³ were found to have a low sulphur content (seldom more than 0.4 per cent), and a high content of light, volatile aromatics and of naphthenes and paraffins—all of which presented problems in the distillation of the oil for the market. Because of the aromatics in the crude oil, Romanian kerosine could not successfully compete with Russian or American kerosine until 1909, when Edeleanu,⁴ the celebrated Romanian petroleum chemist, patented the method of dissolving the aromatics in liquid sulphur dioxide. The naphthenes, with which

¹ See R. W. and M. E. Hidy, *Pioneering in Big Business*, Chap. 7.

² See Dr. S. Aisimman, "Buztenari Petroleum", *The Petroleum Review* (26 Oct. 1907) (a translation of a paper read at the World Petroleum Congress, Bucharest, 1907).

³ On Romanian crude oils, see A. Salgny, "Roumanian Petroleum", *The Petroleum Industrial and Technical Review* (3 Mar. 1900), p. 139; (17 Mar. 1900), pp. 175-6; (14 Apr. 1900), pp. 234-5; also papers presented at the World Petroleum Congress, Paris, 1900, by C. Alimanesescu and Edeleanu, and by N. Concon, published in the special Congress supplement of *PTTR* (25 Aug. 1900), pp. 5-9 and 22-6.

⁴ See obituary notice, *Moniteur du pétrole romain*, no. 8 (1941), pp. 353-5.

¹ See Redwood, *Treatise*, vol. ii, section vi.

² Baku, 1883; Romania, 1897; U.S., 1903; see Redwood, *Treatise*, vol. ii, and Williamson and Daum, pp. 263-73.

were often combined naphthenic acids, also created difficulties, since the manufacture of lubricants necessarily left a residue with a high ash-content, which was a hindrance to its use as a fuel oil or bitumen.

Petroleum deposits were tapped by means of pits and conduits—a system which could be worked only seasonally and which was in operation long after its supersession in other areas, such as Galicia, and the introduction of machine drilling into Romania itself. The pits were dug by manual labour and measured from 3 ft. to 5 ft. in diameter. In Moldavia, where the oil-beds were not steeply inclined, the pits were round, and were lined with impermeable clay, bound in with planks and wicker-work. In Wallachia, where the shafts were steeper, round holes lined with wicker-work were inadequate to withstand the lateral pressure of the soil; hence holes were square and lined with timber. The “sinker”, i.e. the digger, was attached to the surface by a line, and for his job wore leather skins and a tin helmet. Fresh air was supplied to him by a metal pipe, through which it was driven by a rotary fan or a pair of bellows. The latter, although more primitive, had the advantage that the possibility of death through asphyxiation when the fan was turned in the wrong direction was ruled out. Even so the maximum time in the working was only half an hour, and the pit method of extraction was responsible for many industrial accidents and fatalities through excess of gas, an inrush of oil, or sudden flooding by water. A British observer¹ commented (1899) “the workmen who dig [such wells] run a good deal of risk. There are many days on which they consider it most unlucky to work. It is no exaggeration to say that there are about two hundred such days in the year.” When the first stage of digging had been completed, the oil and water that collected in the pit were removed by bailing or pumping,² which went on regardless of the occult influences that motivated diggers.

Drilling attempts in Romania in the 1860s and early 1870s were unsuccessful. The Pennsylvania system was introduced between 1880 and 1887, and was used on the estates of Prince Cantacuzino at Drăgăneasa in the Prahova valley, but through difficulties of lining the borings all the wells were unproductive,

¹ D. A. Sutherland, see below, p. 21.

² On pit extraction, see I. Tănăsescu and V. Tacit, *Exploatarea Petrolului în România*, pp. 89–120.

except one. The output of this well, however, far exceeded any experienced in the country up to this time, and, in default of adequate storage facilities, great quantities of oil ran to waste.¹ Concurrently, similar results were obtained by other pioneers at Sărata (Buzău) and Soloniș and Moinești (Bacău), where the Canadian system was introduced by Galician drillers. These developments vindicated technically the use of drilling in Romania.

The refining side of the industry was developed on the basis of the output of pits. The first refinery was constructed at Lucăcești (Bacău) in 1840, and by 1880 total Romanian capacity was about 94,000 tons.² With odd exceptions, such as the plant of Hagenof and Câmpeanu at Cernavodă, the Romanian refining industry grew up on the oilfields, with the main centres in Ploiești and Câmpina (Prahova). The Bacău output was refined at Valea Ariniilor. This was in direct contrast to the American practice of having a central refining area to which crudes from different fields were transported. The absence of adequate transport facilities prevented the development of a seaboard refining centre at Constanța, which became and remained principally concerned with handling refined products for export. The refining sector of the industry comprised a large number of small units. In 1898 a total crude oil production of 134,185 tons was treated in 72 refineries comprising 188 stills.³ The field location and multiplicity of primitive plants reflected the absence of a Rockefeller or a Nobel in the industry's formative stages in Romania and its essentially domestic preoccupation.

Distribution of products was by ox-cart, until the construction of the railway system offered alternative means of transport. Even during the ox-cart era, Romanian illuminating oil was exported to Brassó, and Pest, and eventually to Marseilles, where it competed successfully for a brief period, with that from the United States and Russia. Exports, however, accounted for only about 15 per cent of the total crude output in 1894.⁴

¹ For a description of the Drăgăneasa operation, see *ibid.*, pp. 121–32.

² For refining companies, refinery capacities, and capital investment, see table on p. 75 of Mihai Pizanty's *Le Pétrole en Roumanie*.

³ See abstracts of “Statistical Report of Ministry of Agriculture, Industry and Commerce for 1898”, in *PITR* (1899), pp. 603–4, 631, 659.

⁴ See Acting Consul-General Bennett, *Report on the Petroleum Industry of Romania*, FO, 1896, Miscellaneous Series, no. 411, Dec. 1896, p. 4.

The emergence of the Romanian State

The development of Romania's oil resources took place during a period when the Principalities of Moldavia and Wallachia were achieving, in consequence largely of Great Power rivalry in the Balkans and Near East, first unity and then independence of the suzerainty exercised by the Turks since the fifteenth century.

From the time of Peter the Great onwards, Russia's forward policy south-westwards challenged Turkish rule in the Balkans and resulted in the establishment of certain rights in the Principalities. This advance threatened Austria's trading position along the Danube,¹ particularly after 1812, when Russia² became a riparian state controlling the northern part of the delta, and gained rights of free navigation and trade for merchant shipping. Further Russian activity against Turkey involved Great Britain, generally as part of "the Eastern Question", and, more specifically, through Russia's attempt to control the outlet from what increasingly was regarded on the London and Liverpool corn exchanges as an important source of supply. French interest in the Romanian problem was initially ideological. Paris provided the higher education of many emerging leaders of Romanian politics,³ who successfully engaged the sympathy of Lamartine and, subsequently, Napoleon III⁴ on behalf of the independence of their native country. With the Crimean War, the future of the Principalities became a primary question of international politics. By the Treaty of Paris, 1856, Russia's rights were abrogated in favour of a joint guarantee by the signatories of Moldavia and Wallachia, under Turkish

¹ For the part played by considerations of trade and navigation in the achievement of Romanian independence, see J. P. Chamberlin, *The Régime of International Rivers: Danube and Rhine*.

² On Russian policy, see C. and B. Jelavich, "The Danubian Principalities and Bulgaria under Russian Protectorship", in *Jahrbücher für Geschichte Osteuropas* (Oct. 1961), pp. 349-66.

³ In 1839 the Society of Romanian Students was formed in Paris and was supported by donations from both Romanian and French sympathizers, among whom the most influential in their effect on public opinion were Michelet and Quinet: see J. C. Campbell, "The Influence of Western Political Thought in the Roumanian Principalities, 1828-1848", in *Journal of Central European Affairs* (Oct. 1944).

⁴ For the question of unification generally and for the crucial role of Napoleon III, see W. G. East, *The Union of Moldavia and Wallachia 1859*; and T. W. Riker, *The Making of Roumania*.

suzerainty. From the post-war settlement there emerged in 1861 a unified regime for both Principalities. Formal independence was achieved seventeen years later in consequence of Romanian participation in the Russo-Turkish war of 1875-8, Romania's claims being recognized by the Treaty of Berlin.

Changes in Romania's international status were accompanied by equally radical changes in its internal situation. Until 1864 the social structure was feudal, with a small class of landowners (boians) and a large peasantry. Trading and commercial activities were confined to Jews and Greeks in the towns, principally Bucharest, Galati, and Iasi. Of a population, according to the 1859 census, of 4,425,000¹ only 10 per cent lived in towns: by 1890 the population had increased to 5,950,000, of which 18.9 per cent was urban. The achievement of unity involved the reorganization of the State: a constitution after the Belgian model was introduced, serfdom abolished, and the State itself acquired 2,500,000 hectares of land as a result of the suppression of the monasteries. The existing assemblies of Moldavia and Wallachia became a Parliament, comprising a Senate and a Chamber of Deputies. Parliament had about 300 members, elected on a restricted franchise expressed through electoral colleges. Changes in government took place under royal management² and commonly preceded elections, which were, in the expressive Romanian idiom, "made", and therefore invariably won, by the party newly installed in office. The crumbling of the resultant large majority through internal rivalries prepared the way for the next change to be initiated by the King, whose decision the Opposition attempted to influence by staging street demonstrations. Parliamentary sessions lasted from mid November to the beginning of May, with recesses for religious festivals. The bureaucracy was staffed by political patronage, and the creation of jobs remained one of the objects of administration. The Civil Service reciprocated by assisting its mentors, particularly at election times. Prefects and

¹ Quoted in G. Cioriceanu, *La Roumanie économique 1860-1915*, p. 46. Between 1859 and 1890 Romania had lost three districts of Bessarabia to Russia and had gained the Dobrogea from Bulgaria.

² In May 1907, the King complained to the British minister, apropos government changes, that he had been compelled to do what he had never done before, viz. to accept a Cabinet whose members he had not himself selected or at any rate approved: there had been no time. See Sir Conyngham Greene to Sir Edward Grey: Dispatch no. 30, 29 May 1907, *FO Series 371*, vol. 317.

sub-prefects helped to control the vote, and senior officials in departments saw to it that their staff got to the polls.¹

The two main parties, the Conservative and the National Liberal, were both essentially "connections" built round personalities and both supported by the landowners. The Conservatives generally

represented the old landed class with their interest and expectations centred mainly on the development of agriculture; and in Roumania they had on their side King Carol, who worked hard to make of the Crown domains model agricultural estates. They wanted industry, but through a gradual and natural growth: . . . they also disliked greatly, as Carol did, the rather "pushing" ways and temperament of the Liberals.²

Because they "wanted industry", the Conservatives were in principle prepared to make concessions to foreigners. Their legislative programme on their return to office in 1894 envisaged modifying provisions of the Commercial Code stipulating Romanian nationality qualifications for directors of enterprises, and those of the Constitution barring non-Romanians from owning land.³ They eventually carried the Mining Law of 1895.⁴

The National Liberals were "liberal" only in the sense that they were the party of 1848, had appropriated monastic lands in 1864, and were interested in Romania's rapid development into a manufacturing and trading state. Their motives in so doing were wholly nationalist, and their liberalism was in the tradition of List rather than Adam Smith or Cobden. There is no formal evidence that List was adopted as a mentor in Romanian liberalism,⁵ but his classic work specifically mentioned the Danube area in the discussion of its main theme, and it would be surprising if articulate Romanian politicians remained unaware of the fact, especially in view of the German cultural influence emanating from Carol I and the fact that Romanian economists and engineers tended to

study in Germany. Further, List's notions of the nation-state as the basic economic entity and the *manufacturing* nation-state as the only tolerable form were clearly congenial to the mind of Romanian Liberals. It was axiomatic in their political vocabulary that the interests of the State were "higher" than those of individuals. The programme of November 1882 defined the party's economic objectives as the "protection of our economic interests, not of those of others, and the economic emancipation of the country as a natural and logical consequence of its political emancipation".¹ Economic emancipation entailed national effort *prim noi însine* ("through ourselves alone"), in the slogan coined by Dimitrie Sturdza. The Liberals explicitly rejected the international effort implied by the western Liberal theory of the division of labour. Foreign loans were necessary and constituted recognition of state sovereignty; their application was exclusively an internal matter: other investment was "colonization". Romania's resources should be developed by Romanians—particularly if they were Liberals.²

As, during the period of the Old Kingdom, 1866–1920, they were in office for a total of forty years, the Liberals had every opportunity to implement their ideas: they were responsible, *inter alia*, for the recovery of the railways for the State, the foundation of the National Bank,³ the tobacco monopoly, the denunciation of the ten-year-old trade agreement with Austria-Hungary in 1886 and its replacement by a stiff protectionist tariff, and for the first law for the encouragement of national industry in 1887. In this way the State became the biggest entrepreneur.⁴ In their public utterances the Liberals tended to be overtly hostile to foreign investment and enterprise on the terms then understood in the main creditor nations. The British Consul-General in Galați

¹ See F. O. Manoliu, *La Reconstruction économique et financière de la Roumanie et les partis politiques*, p. 148.

² For the results of this policy after the First World War, see below, pp. 103 et seq.

³ This was managed in such a way that the shares were reserved to adherents of the Liberal Party even when they could only pay for them out of future dividends. Wealthy Conservatives were financially ostracized. See dispatches by W. A. Winter (Bucharest) to Granville: no. 72, 7 June 1880, *FO Series 104*, no. 15; and Townley to Grey: 3 Jan. 1912, *FO Series 371*.

⁴ On this topic see N. Spulber, "The Role of the State in Economic Growth in Eastern Europe since 1860", in *The State and Economic Growth*, ed. H. G. J. Aitkin, pp. 255–86.

¹ Dispatch of Townley, chargé d'affaires, Bucharest: no. 64, 28 Sept. 1894, *FO Series 104*, vol. 112.

² David Mitrany: letter to writer, 9 Mar. 1963.

³ Dispatch by Townley: no. 94, 28 Nov. 1894 *FO Series 104*, vol. 112, summarizing the King's Speech at the Opening of Parliament. These restrictions were designedly anti-Semitic but applied to all foreigners.

⁴ See below, p. 18.

⁵ Although Manolescu, Liberal Minister of Industry and Commerce in 1931, echoed List's arguments on the shortcomings of what both took to be Adam Smith's ideas: see *CER*, no. 2 (1931), pp. 1–15.

noted in his report for the year 1890¹ that "the tendency towards protection has become more marked every day and great exception is taken to the most-favoured-nation clause as hampering measures of retaliation when a foreign country imposes an import duty on corn", and that it had been officially decided that foreign chambers of commerce among foreign merchants in Romania were to be "neither recognised nor encouraged".

There also emerged in the domestic politics of the Old Kingdom various dissident groups, of which the most important, from the viewpoint of its permanent impact on Romanian politics, was the "Junimists", whose leaders included Petre Carp, Titu Maiorescu, and Alexander Marghiloman.¹ The party advocated an explicit programme of financial and agrarian reform and a close connection with Germany and Austria-Hungary. In the parliaments of the eighties the Junimists supported the Liberals on foreign policy but opposed them on their handling of domestic issues.

There were no wide differences between the parties on foreign policy: fear of Russian-sponsored Pan-Slav expansion in the Balkans united Romania's political leaders. The only question at issue was that of the external guarantor necessary to the maintenance of the kingdom's new sovereignty. British policy was already anti-Russian but was also committed to Ottoman Turkey, from which Romania was only lately emancipated. Romania itself was not central to British policy in the Levant. Ideological sympathies with France could not overcome the fact that France, by reason of the defeat of 1871, was militarily no longer of the first importance. From that period onwards, and certainly after the Congress of Berlin, Germany appeared the most efficacious guarantor on both dynastic and military grounds, and in 1883 an alliance was concluded with Germany and her partners in the Triple Alliance. The treaty was kept secret, being disclosed by the King successively to a few Romanian political leaders, as their arrival in office demanded. This is the most striking instance of a general practice, viz. that the King was his own foreign minister.² Carol I was also the creator and Commander-in-Chief of an army, based on compulsory military service, with a peacetime establishment of 45,600 men and a normal wartime force of 207,000: its artillery was supplied by Krupps.

¹ *F.D.*, 1891 *Annual Series* No. 837, pp. 5 and 8.

² See R. W. Seton-Watson, *A History of the Romanians*, Chap. XII, pp. 346-70.

The gradual abridgement of Turkish control also permitted Romania to enter into independent commercial relationships. Before the Treaty of Adrianople, 1829, Moldavia and Wallachia functioned as a granary for Constantinople. The opening, under the treaty, of Romanian harbours to foreign shipping and the foundation in the same year of Die erste Donau-Dampfschiffahrtsgesellschaft (DDSG) operating along the Danube as far as Cernavodă,¹ linked Romania with Western and Central Europe and assisted in the reorientation of her foreign trade which took place in the 1860s. From the unification onwards, Turkey declined to third place (after Austria-Hungary and Great Britain) as a market for the agricultural products which were, and remained, Romania's largest single export item until after the First World War.

At this period any significant extension of foreign trade was inhibited by a number of internal factors—poor communications, the rudimentary nature of the credit system, lack of indigenous capital, and the diversity of currency in circulation. In consequence, Romanian governments sought to remedy these deficiencies by reforming the currency² and by contracting loans³ for expenditure on public works. Between 1864 and 1875 450 million lei was raised—350 million in Germany, 72 million in France, and 33 million in Great Britain; 100 million derived from Romanian sources. Two-thirds of the total sum was expended on communications, the rest on covering budgetary deficits. It remained characteristic of Romanian finance that the State's receipts from the exports of

¹ Russian hostility to Austrian commerce was aimed at protecting Odessa, as against Galati and Brăila, and successfully prevented the DDSG from operating in the Danube delta. Passengers and freight were transhipped at Cernavodă to go overland to Constanta. The setting up of the Danube Commission after the Crimean War put an end to Russian obstruction in the Delta until 1946. Nevertheless, a policy of low freight rates on Russian railways enabled Odessa to handle timber from Galicia and Bukovina which otherwise would have gone to Galati. (See *Trade and Commerce of Romania 1909*, FO, May 1910, p. 28.)

² Since the right to mint money was regarded as a fundamental attribute of statehood, Turkish opposition considerably delayed the establishment of a new Romanian currency: this was not achieved until 1890, when the gold lei became the standard unit, supplanting the silver lei and various intermediate currencies, and being valued, until the First World War, at par with the Swiss and French francs.

³ The first loan was authorized by the Law of 15 Jan. 1864; it was for 23 million francs at 7 per cent over 24 years and was negotiated on the London and Paris markets by the Ottoman Bank and Stern Brothers: on Romanian financial policy, see G. Ciorticeanu, *La Dette publique de la Roumanie*.

grain had to meet current expenses and interests on loans; their scheduled repayment was usually made out of further loans. Thus the State's financial position rested on the vagaries of the harvest and the goodwill of foreign lenders.

The public works programme, however, strengthened the new kingdom internally. By 1875 5,420 km. of metalled roads had been completed and about 1,300 km. of railway were in operation. Romania had been linked with the main European system, westwards to Hungary through Vărciorova and northwards to Galicia through Roman; Berlin and Vienna had been brought within two and a half days' journey from Bucharest. There was also a branch-line from Iași to link with the Russian railway to Kishinev (Chișinău) and Odessa. The Romanian Government bought out the shareholders, both native and foreign, in the various companies, and created a united state administration, the *Caîlor Ferate Române* (C.F.R.) in 1880.¹

The organization of credit was determined by the needs of agriculture, and the first public banks, founded either by the State or by private funds, served a limited clientele. Banking facilities for foreign trade were provided either by those private banks which developed out of money-lending, such as those of Marmarosch and Chrissoveloni, or by foreign capital, e.g. Anglo-Austrian in the Banque de Roumanie 1865,² or German, as in the case of Banca Generală Română, founded by the Disconto-Gesellschaft-Bleichroeder group in 1895.³

This banking investment was part of a general move by German and Austro-Hungarian capital into Romania, particularly in those sectors requiring technical expertise, e.g. foundries, manufacture of agricultural machinery, brewing, and oil. Investments in the latter were necessarily made on the basis of concessions, since

¹ The railway question became entangled with the attempts by the Powers to compel Romania to grant civic rights to Jews and exacerbatd German-Romanian relations from 1867 to 1879. See reports of Degré, Romanian agent at Berlin, of 27 and 29 May 1877 in *Correspondance diplomatique roumaine sous le roi Charles 1^{er}* (1866-1880), ed. Nicolas Iorga; and N. M. Gelber, "The Intervention of German Jews at the Berlin Congress 1878", *Year Book V*, Leo Baeck Institute.

² Subsequently the Austrian participation was withdrawn and the Bank reorganized as the Bank of Roumania Ltd., with British capital. On the question of foreign-owned banks in Romania, see D. Kastiris, *Les Capitiaux étrangers dans la finance roumaine*.

³ See dispatch by H. E. Browne (Second Secretary, British Legation Bucharest): no. 29, 1 Aug. 1897, *FO Series 104*, vol. 134.

Article 7 of the Romanian Constitution barred foreigners from holding landed property. The first attempts were uniformly unsuccessful. From 1879 onwards the Viennese banking house of Suchard and Co. financed drillings at Colibasi (Dâmbovița), but the output was insufficient to meet the royalties involved, and the bank retired. Similarly, in 1887, the German company Hildebrand failed with drillings at Matita and Ploegsti. Austro-Hungarian capital met with its first unqualified success in 1895.¹ British and French experience of Romania's oil resources dated from 1868, but had been equally unfruitful, partly for technical reasons and partly through incompetent management.²

In monetary terms, the investment in Romanian oil during the period 1865-95 totalled only 25 million lei (£1.05 m.). Progress was retarded by the absence of an adequate land survey and the complexity of the system of land-holding, particularly in the peasant sector. In 1864 about a quarter of the land had been distributed to the peasants, whose individual holdings were subsequently subdivided by a law of succession providing for the equal partition of estates between all heirs. In the Wallachian oil area this process had reduced the average size of plots to about one acre. Further, in the peasant sector, there was also the *Mogzeni*, or Elder's land, which passed down without any apparent title. The boundaries of such holdings were marked often by accidental features such as trees and stones. It was thus difficult in many cases to ascertain the real owner of petroliferous land and, in consequence, for an intending concessionaire to get a good title, there being no documents to prove ownership or to define the extent of the holding. Furthermore, since for competitive reasons concessions were often taken out in a hurry, the complexity of the system of landownership meant that negotiations could be carried on with the wrong parties. When this was discovered, concessions

¹ See below, p. 23.

² e.g. the failure of Jackson Brown & Co., who in 1868 appeared at Ploegsti as the "Wallachian Petroleum Company" and invested 8 million francs in the acquisition of lands, subsequently discovered to be highly productive, in Baioc, Tintea, and Bustenari. The company sank pits and, in order to enter the kerosine market, constructed a refinery at Brăila and organized wagon transport on a scale hitherto unprecedented. All these activities resulted in the expenditure of the entire capital of the company in four years, at which juncture the loss of oxen through disease and the destruction of the refinery by fire led to its dissolution. For the beginnings of investment of British capital in Romanian oil, see "Roumania: a review and retrospect", *PITR* (3 Mar. 1900).

taken out in good faith had to be cancelled. Connivance between peasants and intermediaries increased the hazards of investment.¹ The effect, as noted by C. M. Pleyte on his exploratory visit to the country for the Royal Dutch, even as late as 1906, was the proliferation of large numbers of small concessions with an insecure legal basis, making the country "an el Dorado for lawyers".²

The Mining Law of 1895

This chaotic situation was aggravated by the fact that the legal status of petroleum deposits and the right to exploit them varied considerably throughout the different provinces of Romania, and there was no over-all state policy with regard to intending concessionaires. A beginning was made in 1890, concerning the oil resources on state lands, i.e. those that had reverted to direct state ownership after the expropriation of 1864 and the dissolution of the monasteries. A single regime for the exploration and exploitation of all mineral deposits on both state and private lands was instituted by the Mining Law of 20 April 1895.³ It was introduced by Carp, as Minister of Domains, in accordance with the party policy, announced at the opening of Parliament in November 1894, to extract other resources from the soil besides those provided by agriculture. The Law incorporated two features designed to remedy the existing difficulties: it established a distinction between surface and subsoil rights, and further provided (Article 4) that "throughout the whole territory of Romania, any person without distinction of nationality and without any other formality than authorization of the Minister of Domains, is free to devote himself to the discovery of mines, to the investigation and prospecting of the surface without causing its deterioration. This authorization is not necessary for the owner of the surface".

At the same time, the Law declared the interest of the State in the exploitation of mineral deposits by reserving (Article 5) the right of the State to demand of the owner of the land on which deposits were discovered whether or not, within a given time, he

¹ See memorandum of Consul Liddell on "The Petroleum Industry and its Abuses", enclosed in Dispatch no. 26, 7 Sept. 1897, *FO Series 104*, vol. 135.

² 1.

³ Text in *Lois, règlements, décrets concernant les mines et le pétrole*, ed. D. R. Rosetti, pp. 4-139. Regulations on the application of its provisions, *ibid.*, pp. 143-207.

intended and was able to exploit them, and, in the case of a negative answer, to proceed to exploration and subsequent exploitation itself or to concede the mining rights to a third party. An exploitation right thus conceded lasted for seventy-five years, and was (Article 7) regarded under the category of real property, transferable, mortgageable, and distinct from the ownership of the surface. Similarly, concessions renounced by the concessionaire reverted to the State either for direct exploitation or for concession to a third party for the remainder of the original seventy-five-year term (Article 12).

These considerations established the relationship between the State and the individual owner of subsoil rights with regard to the exploitation of mineral deposits in general. Petroleum deposits were considered as a special type of mineral,¹ and by Article 65 their exploitation rested at the "full and entire disposal of the surface owner, provided that the exploitation does not imperil the safety of his neighbours".

In practice, this clause meant that the exploitation of petroleum was subjected to no prior or residual state direction, since Article 4 specifically ruled out the necessity to obtain the authorization of the Ministry of Domains in the case of a surface owner exploiting resources on his land. According to the Law, the State's interest in petroleum resources was confined to the dues and taxes stipulated and to the supervision or the relationship between a person or company engaged in the petroleum industry and the owner of neighbouring property and with employees (Articles 67-69). Furthermore, under Article 70, the exploitation of those lands the State held in its own right was submitted to the general terms prescribed by the Law for other surface owners, except that royalties, due to the State as landowner, were to be established by subsequent regulation.² Thus, apart from these minor rights retained in respect of its own property and its general concern for industrial welfare, the Romanian State played only a limited role in the exploitation of petroleum;³ it levied taxes, and determined the

¹ They were not the subject of a specific *petroleum* law till 1942, see below, p. 239.

² Promulgated 10 May 1895: text in Rosetti, pp. 143-207. See also commentary by A. de Richard in *Loi sur les mines*.

³ The mining of solid substances was attended by a greater degree of state supervision or control, and, in respect of deposits of salt, Articles 77-80 of the Mining Law ascribed to the State a complete monopoly; the State also exercised

size of exploration and exploitation areas and the scale of royalties. It did not, however, attempt to discriminate in favour of any particular class of owners or exploiters: it did not attempt to determine the organization of any exploiting company, and did not single out its own lands for any special regime.

Since rights to petroleum deposits were vested in the owners of the surface of the land in which those deposits occurred, much of the confusion resulting from the different systems of land-tenure was eliminated, although for reasons explained above (p. 17) the "surface owner" had to be carefully investigated by intending exploiters. Accordingly, a consolidation law was necessary to complement the Mining Law in this respect. Consolidation as established by the law of 8 May 1904¹ was a means of creating a legal basis for exploration and exploitation by the registration of the applicants' right to do so by a tribunal in the locality concerned, after an investigation of land-holdings by public inquiry. Once registered, the right was established against all comers.

Notwithstanding this lacuna and the delay in filling it, the terms of the Mining Law of 1895 were themselves sufficient to throw open Romania's petroleum resources for rapid development.

certain rights in the Dobrogea, where all mines were state property, but no petroleum development took place in that area during the period of the 1895 Law.

¹ See Rosetti: text, pp. 210-33; regulations, pp. 236-67, *For Exposé des motifs* see *MPPR* no. 5 (1904), pp. 181-5. See also A. de Richard.

CHAPTER II

The Foreigners Arrive

The beginnings of corporate investment

THE technical and legal changes already described made possible the development of Romania's oil industry from primitive reliance on pits and ox-carts to a highly developed industrial undertaking whose operations became an important factor in Romanian economic life. But the introduction of the new techniques in all phases of the industry from exploitation to marketing demanded greater resources of capital than had hitherto been necessary.

These changes in cost were discussed by D. A. Sutherland in a report published in 1899 which is the first appraisal of the industry published in English by a technically qualified observer: Sutherland noted that the cost (based on labour costs and the provision of well-lining materials, bailing equipment, and tanks) of a 150-metre pit was 6,000 francs², and of a 300-metre pit 15,000-18,000 francs. These costs were doubled for difficult strata. Maintenance costs of such wells he averaged at sixty francs a month, "including the wages of a driver and the keep of the unfortunate horse which is doomed to gyrate like the turnspit of a mediaeval kitchen".

Mechanical drilling could penetrate strata as far as 1,000 metres beneath the surface and open up wells which were more productive. It was, however, much more expensive—75,000 francs to a depth of 600 metres—on account of greatly increased primary and drilling costs, and the much longer time taken to complete a well. Drilling also demanded specialist labour, which in the absence of skilled Romanians was imported from Galicia.³ Sutherland's figures are generally supported by Brackel and Leis in their discussion of Romania in the context of U.S.-Russian oil rivalry,⁴ though no

¹ See *PITR* (1 Apr. 1899), pp. 95-101 and 104; (15 Apr. 1899), pp. 131-7 and 146.

² At this period francs 24 = £1.

³ A government drilling school was opened at Câmpina in 1904.

⁴ O. von Brackel and J. Leis, *Der dreissigjährige Petroleumkrieg*, pp. 257-60.

exact comparisons can be established. Nevertheless, from their study of Romanian sources (not available to the present writer) they arrive at an average combined extraction and refining cost of thirty francs a ton—"which in no other production area has been achieved as an average and which in itself secured competitiveness on the world market for Roumanian producers".

Capital was needed not only for the extraction itself but also for expenditure on marketing facilities—tankage, pipelines, railways in refineries, and oil docks, and so on—the cost of which related basically to the cost of iron and steel. Sutherland reported on pipelines which ran from fields to refineries or to railway loading-points, that "the cost in steel tubing of 3" diameter is about 11.5 francs per metre, so that a line of 12 miles (the largest then in existence in Romania) inclusive of conical threads, freight and laying would cost about £8,000".

*The advent of foreign capital and the
controversy over state-owned oil lands*

Capital of the order required for large-scale operation with the new techniques was not forthcoming from Romanian sources. Romania was not a money economy: agriculture was the pre-dominant industry and the wealth of the boiars consisted not in cash or securities but in *latifundia*,¹ farmed to provide a wheat crop which earned a premium at Liverpool. Oil was regarded by the generality of landowners as a secondary 'crop', the importance of which was entirely overlooked. The outstanding exception in this respect was Prince Cantacuzino, who financed and supervised the successful venture on his estates at Drăgăneasa.² Public corporate enterprise was restricted by the relatively small number of companies and their limited capital basis.

Of the indigenous companies operating before the first Mining Law, one of the most important was the *Societatea Română pentru Industria și Comerțul Petrolului* (Romanian Company for the Manufacture and Marketing of Oil Products) founded in 1889 by Romanian capitalists, with assistance from the Vienna

¹ Even when estates were sublet, metayage was widespread, particularly in Wallachia. On the prevalence of *latifundia*, see D. Miranu, *The Land and the Peasant in Rumania*, pp. 255 et seq.; on wheat production, *ibid.*, pp. 288-9.

² See above, p. 8.

banking house of Offenheim and Singer. The company rapidly became prominent in the inland petroleum trade—having refineries at Bucharest, Câmpina, and elsewhere, and possessing land in its own right in Moinești and Solinti. However, after five years' operations it ran into financial difficulties, which induced its directors to seek the help of the Hungarian Bank for Commerce and Industry of Pest, a creation of the Wiener Bankverein. The Hungarian bank financed a new Romanian company registered on 17 September 1895 as the *Steaua Română S.A.* The Bank also sought additional support on the London market, where the Romanian Oil Trust Limited was set up to bring in British finance as a guarantee of the Bank's advances to *Steaua*. Under the reorganization of the *Societatea Română*, *Steaua Română* acquired all its commercial and industrial assets and took over *Societate Română's* landed property at Câmpina on mortgage. Initially, *Steaua* had a capital of 2,400,000 lei: the problem for its management was "to develop a business originally adapted to the requirements of an inland trade into one capable of competing successfully in outside markets of Europe and Asia".¹ Accordingly it set up an integrated exploration, refining, and marketing business—the first in Romania. The organization's immediate progress was spectacular: increased drilling activity met with success and the company's production between 1896 and 1899 rose from 23,655 tons to 152,500 tons or from 29 per cent, to 61 per cent of the total for Romania. Dividends for these years were from 5 to 7½ per cent. These results demonstrated beyond question that Romania was a suitable field for oil development provided that capital and skills were forthcoming on a sufficient scale.

Capital arrived from the Netherlands from 1897 onwards, but the first group to draw the correct conclusions from the *Steaua* experience was that led by Frits Olie, who in 1899 invested the fortune derived from the East Indian tobacco trade in the *Internationale Ruineensche Pet.-Mij.* of Amsterdam. The company, for an outlay of 5 million francs, purchased properties at Buștenari and Gura Ocnitei and an existing refining company, the *Aurora*, whose Bălcoi plant was modernized and extended. Henceforward,

¹ Dr. Lagerwall, Managing Director, in his report to the second general meeting of shareholders of the Romanian Oil Trust 29 Dec. 1899, summarized in *PITR* (30 Dec. 1899), p. 718; (6 Jan. 1900), pp. 4 and 19.

Internationale concentrated on production and Aurora on refining and marketing.

During the same period, the United States and Germany first showed interest in Romanian oil. From 1895 onwards a series of representatives of Standard Oil Company of New Jersey appeared in the Prahova to inspect the oil workings and assess their possibilities, while in 1898 Richard Sorge, a noted German geologist, made a similar survey on behalf of the Disconto-Gesellschaft, the main supplier of credit to the Romanian government. Rockefeller was interested in Romania as a source of supply to offset the current American deficit against Russian output, and to strengthen his position in face of increased Russian competition in India and Central Europe. The motives of the Disconto-Gesellschaft differed, inasmuch as they had not hitherto made an investment in oil, but were concerned to establish a German-owned source of supply for the German market.

The opportunity to transform these investigations into investments was provided, not by the operational frailty of existing concerns, but by a financial crisis of the Romanian State itself. Since independence the financial basis of Romania had been almost wholly provided by the receipts from grain exports and by foreign loans. The disastrous harvests in the seasons 1895-9 curtailed exports and therefore the return to Romania, contributing to a deficit in the financial year 1898-9 of 74 million lei, or about one-third of the total annual budget.¹ In consequence the German banks, including the Disconto-Gesellschaft, refused further advances. At this juncture the Carp Government resorted to a policy of realizing the country's most valuable commercial assets—the petroleum-lands belonging to the State, and a concession for a pipeline from the oilfields to Constanța—to create a new sphere of activity and make the economy less dependent on the vagaries of the harvest.² The short-term financial difficulties were overcome by the direct personal intervention of the King, which

¹ On 24 Oct. 1899 Sir John Kennedy, the British minister, reported the King as stating, over lunch at Sinaia, that Romania needed £1 million for current expenses, even at 7-8 per cent, and that the forthcoming renewal of the Bank of Romania's concession might be used to bring pressure to bear on its directors to help in floating a loan in the U.K.: see dispatch in *FO Series 104*, vol. 139.

² This idea had been in the Junimist programme since 1894. See dispatch by Townley: no. 94, 28 Nov. 1894, *FO Series 104*, vol. 112.

induced the banks to grant the equivalent of £7,000,000 for five years¹ as a preliminary to the negotiation of a long-term loan.

In the developing financial crisis, the Carp Government commissioned Angel Saligny, Director-General of the C.F.R., to report on the possibilities of pipeline construction. In September 1899 he reported in favour of a line from Băicoi via Ploesti-Buzău and Pitești to Cernavodă, where there was to be a Danube terminal, and then to Constanța—a total distance of 310 kilometres. The route was to run via Buzău in order to provide the greatest incentive to exploitation in Moldavia, hitherto impeded by lack of transport facilities. Alternatively, Saligny suggested, a line should be constructed direct from Băicoi to Giurgiu on the Danube—156 kilometres. The adoption of either would depend on the level of output and exports. Saligny's plans were based on the transport of kerosene, the loss to the C.F.R. in this respect being offset by increasing rail-transport of residuals. The cost of the Băicoi-Constanța line, including ancillaries, he estimated at 13 million francs, which should be met by concessioning the construction and operation to a private undertaking for twenty five years on a "common-carrier" basis, with a fixed uniform tariff and level of profit. On the expiry of the concession, the line would revert to the State.²

In March 1900 the Government announced the general conditions on which it was prepared to consider offers for the construction of a Constanța line: these included, apart from technical provisions, fixed transport and storage charges for users, and state supervision of the concessionaires' accounts. The attraction to the operator of a concession on state lands was twofold: the lands themselves were geologically favourable, and a concession offered an easily defined legal basis for operations—both necessary inducements to the profitable application of new techniques. The pipeline was complementary in that discoveries on state lands would create serious transport problems for the already strained resources of the C.F.R. and their solution was necessary to realizing the full advantages of any concession.

The first approach was made by the Disconto-Gesellschaft for ¹ See dispatches by Kennedy: 8 Nov., 9 Nov., and 1 Dec. 1899, *FO Series 104*, vol. 139. On the uses and its outcome see also report by C. S. Francis (U.S. minister), "Financial Conditions in Roumania", in *Foreign Relations of the United States 1902*, pp. 905-9.

² For text of the report (16 Sept. 1899), see *MPP*, no. 1 (1940), pp. 49-51.

a concession of 10,000 hectares on state petroliferous lands, comprising those areas favourably reported on by Richard Sorge, and for the construction of a pipeline to Constanța alongside the existing railway. In return the Disconto offered a 10 per cent royalty on the crude oil produced and a rent of 30 lei per hectare per annum. At about the same time Standard Oil asked for a concession to construct a crude-oil pipeline from the main producing centres to Constanța. The Romanian Government requested both parties to make a joint approach: negotiations took place during November and December 1900.

In the proposed agreement¹ the Romanian Government undertook to grant the Standard Oil Company for fifty years an exploitation-concession of about 15,000 hectares on state lands recognized as oil-bearing. The question of whether the work of exploitation was to be carried out by Standard Oil under its own name or as a Romanian joint-stock company was left open, but during the first eight years of the concession the exploiting company undertook to expend 7 million francs on drilling wells of 500 metres in depth in such a manner as to prospect the whole area (Article 1). Royalties for the crude oil extracted were estimated at 8 per cent rising to 10 per cent, and, in addition, certain specific taxes were agreed upon (Articles 2 and 3). Standard Oil was also to be granted an exclusive right for eight years to search for oil on state lands outside the recognized petroliferous area, against payment of a royalty (Article 4.)

Articles 5 to 18 of the draft convention concerned the concession of a pipeline. The line, which was to be used for the transport of crude oil from the state lands and from those belonging to private owners, was to run alongside the railway. It was expressly stated that every producer had the right to make use of the line for the transport of his oil. Standard undertook to construct all the necessary storage and pumping-stations, to which all producers had the right to establish branch lines. The company was to be permitted to import free of duty all machinery and accessories necessary to construction, including the pipe itself (Article 11).² The route was established (Article 12) as being from the region of Cămpina to Băicoi and hence to Constanța, and it was further

¹ Text subsequently published in *MPPR*, no. 9 (1904), pp. 273-6.

² This provision was in accordance with the Law for Encouragement of Industry of 1887.

provided that, if production in Moldavia increased so that the combined output of Moldavia and Wallachia reached 600,000 tons per annum, then Standard Oil would be bound to lay a second pipeline. The transit rates which the company would be permitted to charge other producers for transporting their oil through the pipeline were to be fixed by law. Standard undertook to pay a predetermined royalty to the State on the quantity of oil going through the line, amounting to 95 centimes a ton per 100 kilometres for the Cămpina-Constanța line and 70 centimes for the Moldavia line. Article 16 set out the conditions of government control of the working of the line and of the installations belonging to it, and provided for arbitration in case of dispute, with appeal to Romanian courts. Furthermore, it explicitly reserved to the State the right to inspect all the accounts and operational records of the company. The concession was to run for thirty years, after which the Government reserved the right to purchase the line outright. By Article 19 Standard Oil bound itself "to participate in the advance of the sum of 10 million francs which the Disconto-Gesellschaft makes to the Roumanian Government on the security of the revenues of the lands conceded".

The Standard Oil proposals presented the Liberals with an opportunity to stage that political crisis on which their chance of returning to office depended. Sturdza accused the Government of wishing to sell out Romania's vital interests: the scheme provided for the exploitation of Romanian oil to serve the interests of a rival producing state; this would be achieved by price manipulation by Standard Oil to ruin Romanian producers; the resultant monopoly would then deter other foreign investors. Against the Government, the Liberals urged that the State should not part with such important assets merely in order to satisfy temporary needs: even if it were decided to realize the state lands and pipeline concessions, this should be done only on the basis of tenders and not by bargaining between the State and particular interests. Opposition policy was not only publicly anti-Standard but also privately pro-German. In October 1900 Alimăneșțianu, the Liberal responsible for industry within the Ministry of Agriculture, Industry, Commerce, and Domains, wrote to a German correspondent¹ stressing the identity of German and Romanian interests in oil matters and urging large-scale German help in realizing

¹ Professor Oebbecke of Munich, see *Petroleum* (15 June 1918), p. 725.

Romania's oil assets, which offered a convenient source of supply to combat Standard Oil in Germany. In the political clamour the attempts of the Standard representatives to state their case and to rebut the charges went unregarded,¹ and on 8 December 1900 the proposals were withdrawn.

Two days later the Disconto-Gesellschaft came forward with an alternative proposition,² undertaking to form a company with sufficient capital to exploit petroliferous land on a large scale—for which right they offered in return various tax and royalty payments and a loan of RM 6,480,000. At this stage, however, the political agitation was now against any concession of whatever kind and the negotiations lapsed. In February 1901 the Carp Government resigned, on failing to get a vote of confidence over its budget proposals, and was succeeded by the Liberals, Sturdza combining the offices of Prime Minister and Minister of Finance. His remedy for the financial crisis relied on retrenchment, good harvests, and the patience of Romania's creditors.³ The new government was also assured of further immediate German financial support in addition to that negotiated by the King, in that at the beginning of 1902 the Disconto-Gesellschaft opened an unlimited account in favour of the Romanian Government at 5 per cent, pending the conclusion of a long-term loan.

It became an article of faith with Liberals, thereafter, that "the powerful and rapacious Standard Oil" had attempted to despoil Romania of her oil resources. The terms of the draft agreement and the declared intentions of the Government make it clear that, however that company might have behaved either then or previously elsewhere, it was prepared to agree to official supervision of its activity in Romania. Nevertheless, Liberal opinion then and thereafter consistently ignored this evidence of the company's willingness to accommodate itself to Romanian conditions, and official party policy continued to insist on the attempt at monopoly by Standard Oil.⁴ The state-lands crisis became therefore a determinant

of political attitudes and was a major factor in the formulation of a specific nationalist programme for Romania's oil resources.¹

The weakness of Standard's² position lay in its misunderstanding of the strength of nationalist feeling in a country which had within living memory been liberated from a long period of foreign rule, and its apparent disregard of the techniques of political change in Romania. The Liberals, having been out of office since April 1899, needed some big issue on which to base their agitation in the Parliament and in the streets to demonstrate to the King that the time had come for a change of government. Standard Oil presented them with one. No attempt appears to have been made to sound Liberal opinion—with or without appropriate *donceurs*—or to obtain some bipartisan support in Romania on such a fundamental issue. The maladroit nature of this approach was, presumably a result of its being Standard's first oil-producing (as distinct from refining or marketing) venture outside the United States and therefore set in unfamiliar territory. It was evidently supposed that a deal with a state involved only the same sort of commercial nexus as a deal with a private partner. The company enjoyed no diplomatic support. At the time, U.S. representations to Romania were made by an envoy based in Athens, whose bailiwick also included Greece and Bulgaria.³ Standard Oil was put in a disadvantageous position simply by being American: among all Romanian political groups there was hostility to the United States on account of the U.S. Government's persistent representations about the treatment of Jews in Romania.

Both rebuffed undertakings returned on a private basis in 1903. In June of that year Standard Oil representatives toured the oil areas and inspected the properties of Telegra and Steana Română with a view to buying either or both of these companies. Such ideas, however, were abandoned in favour of a directly owned Standard enterprise, and in December 1903 G. F. Southard registered himself as a firm "for trading in all kinds of petroleum business".

¹ See below, p. 66.

² There is only an implied mention and no discussion of the state-lands controversy and Standard Oil's role in *Pioneering in Big Business* (see p. 516), which R. W. Hidy confirmed to the writer was due to the absence of company records.

³ See J. B. Jackson's account of his reception, as reported to Hay, U.S. Secretary of State, on 9 Feb. 1903, in *Foreign Relations of the U.S., 1903*, pp. 699, 700, and 701.

¹ See interview with *Montieur des intérêts pétrolières roumains*, translated in *PTTR* (24 Nov. 1900), p. 476.

² Text subsequently published in *MPPR*, no. 10 (1904), pp. 303-5.

³ On Sturdza's financial reforms see Kennedy, dispatch to F.O. 8 Mar. 1902: *FO Series 104*, vol. 151; also O. von Brackel, *Rumäniens Staats-Kredit in deutscher Beleuchtung*, Chap. IV.

⁴ The Romanian verb *acaparare* implies 'grab' rather than 'monopolize', although customarily translated as such.

The Liberal Government remained unwilling to see Standard in Romania but could not, without prejudice to the legal basis of the economy, deprive it of the right to commence operations on privately owned lands.¹ This did not apparently preclude Sturdza from using his position to hamper the new company. His attitude was summed up in a speech at Prahova made in June 1904: "Taking as a model the motto of Americans, 'America for Americans', I have as my motto 'Europe for Europeans' and especially 'Romania for Romanians'. . . . Guard yourself against the Standard Oil Trust and all who are in league with it."²

In June 1904 the Southard concern was taken over by Româno-Americană S.A., which was formally incorporated as a Romanian company with a capital of 2 million francs, entirely owned by the Standard Oil Company of New Jersey.³ Registration was protracted since the competent tribunal rejected the application of the new company, which had to obtain a High Court decision in its favour before it could properly be constituted and operate. Româno-Americană announced its intention to build a refinery and concentrate its activities on the export market,⁴ to explore deeper strata than hitherto—using for this purpose the Pennsylvania drilling system—and to train and employ Romanian labour, wherever possible. Finally, Româno-Americană reiterated that it had no intention of applying for a concession on state lands. The basis of Româno-Americană's operations was land held at Cosmina (Prahova) by the European Petroleum Co.—a British concern whose primary oil interests were in Baku, but which had in Romania concessions of 400 hectares together with other assets, including a short pipeline and 10,000 tons of tankage. All these assets were taken on long lease by Româno-Americană against a royalty of 10 per cent on the crude output and a stipulated drilling programme. Româno-Americană also acquired from private owners lands at Comănești (Bacău) and Boldăești (Prahova) totalling 4,600 hectares. The early history of the company was punctuated by lawsuits over failure to fulfil contracted drilling obligations. In April 1905 Româno-Americană increased its capital to 6 million francs, acquired tankage at Constanța, and began work on a refinery at Ploești, which went on stream in December of that year.

¹ See *MPPR* for Mar. and Apr. 1904.

² See *MPPR*, no. 11 (1904), p. 333.

³ Statutes in *MPPR*, no. 12 (1904), pp. 425–30.

⁴ The export market intended was Germany (see below, pp. 40–43).

The Disconto-Gesellschaft/Bleichroeder group also reappeared privately in Romania in 1903 by buying itself into existing concerns. In co-operation with the Internationale and Aurora, it assumed control of the Telega Oil Company,¹ a British enterprise with about 10 per cent of Romanian production, but whose operations were curtailed by insufficient capital and lack of a refinery. Later in the same year, the Disconto-Gesellschaft took a leading part in re-forming the Buztenari Company—a combination of small producers in the Buztenari district. The capital was increased to 10 million francs and the company was amalgamated with the existing National Pipeline Company, which had a capital of 500,000 francs and owned a line from Buztenari to Băicoi. The new resources enabled Buztenari to initiate a policy of drilling for its output rather than of relying on hand-dug wells. Apart from reorganizing existing concerns, the Disconto-Gesellschaft/Bleichroeder group also extended its investment by founding, in December 1904, two new companies, the Vega, for refining, and Creditul Petrolifer, for transport and storage. A French concern, the Compagnie Internationale des Pétroles, contributed about one-third of Vega's capital. In both companies a minor shareholding was held by Romanian nationals.

During 1902 operational difficulties led to the control of Steaua Română passing from Austro-Hungarian into German hands. Steaua's policy of achieving the quickest possible increase in output tied up an excessive amount of capital in the oilfields. In particular, Steaua had on concession about 7,500 hectares, the technical advantages of which were to some extent offset on the financial side, since the land in question was held on leases, which in many cases stipulated an annual amount of development work. Such clauses imposed wasteful expenditure. Furthermore a decline in prices for crude and products, and the temporary elimination in 1902 of its market in the Balkans and Asia Minor² deprived the company of income which it had expected to use as working capital. Expensive technical innovations not only failed to yield the expected economies but suffered from teething troubles. In July 1901 Steaua had introduced electric power³ into its opera-

¹ In Jan. 1907 these two producing interests were fused into the company Concordia: see F. Haase, *Die Erdöl-Interessen der Deutschen Bank und der Direction der Disconto-Gesellschaft in Rumänien*, p. 75.

² See below, p. 39.

³ On the advantages of electricity, see article 'Electricity as a Motive Power

tions by an overhead-wire system radiating from a generating station at Sinaia but frequent breakdowns in the supply of current entailed continuous reliance on reserves of steam power. Similarly, the water-flush boring system was widely introduced on the company's lands in place of the Canadian pole system, but again technical difficulties caused unexpected expense. As a result Steaua Română's liabilities stood at 9 million francs on 30 April 1902. In November of that year the Hungarian Bank failed and the Steaua was necessarily involved. The Wiener Bankverein intervened to take control of the company during the liquidators' investigation of the Hungarian Bank. It soon appeared that, even if Steaua repaid advances made by the bank and provided for its own floating debt in Romania and for outstanding debentures, no assets would remain to represent the major part of the share capital. Hence, to satisfy the bank's liquidators and to keep the company going, new capital was necessary. Negotiations were opened with the Deutsche Bank, which agreed to salvage Steaua Română on terms involving the liquidation of the Romanian Oil Trust in London. In return for sufficient funds to enable the bank's liquidators to settle outstanding claims and also to keep Steaua Română in being, the Deutsche Bank assumed effective direction and control and raised its share capital to 17 million francs (₤680,000).

The Deutsche Bank's intervention in Romania was prompted by developments in the German oil market, particularly with regard to kerosine,¹ but the reconstruction of Steaua Română led to the appointment (as its President) of the Bank's Director, Arthur von Gwinner, who was an ardent supporter of the Baghdad Railway project, and who saw in the German-controlled company a source of fuel for the operation of the Balkan and Anatolian stretches of the line.²

The initiatives of the Disconto-Gesellschaft and the Deutsche Bank were followed by other German institutions. In July 1904 another powerful combination, the Dresdner Bank and the in the Petroleum Fields', *PITR* (20 Apr. 1899), pp. 170-1: on its application to Romania see 'The Electrical Installation at Câmpina, Roumania', *ibid.* (9 Dec. 1899), pp. 663-4.

¹ See below, p. 41. The Deutsche Bank also made similar investments in Galicia and Russia. On both the Disconto-Gesellschaft and Deutsche Bank ventures see F. Haase, *Die Erdöl-Interessen*.

² See below, p. 50.

Schaffhausen'scher Bankverein, entered the Romanian industry by founding the Câmpina-Moreni company, which, with a capital of 3 million francs, quickly acquired large areas in Moreni, hitherto largely unexplored, but soon discovered to be very productive. Involved in Câmpina Moreni were also the Henkel von Donnersmarck interests together with those of Anton Raký, founder of the Internationale Bohrgesellschaft, Ekelenz. The latter strengthened his position in Romanian oil in 1906, by founding the S.A. Română Raký as a drilling concern, in order to find use for his assets when the working of German mines was closed to private enterprise.¹

The investment of the Royal Dutch in Romania effectively resulted from its competition with Standard Oil in the European gasoline trade.² The company originally featured (1903) as a purchaser of the gasoline output of another Netherlands company, Internationale. Subsequently, the possibility of a Standard monopoly through Româno-Americană of the Romanian gasoline output determined the Royal Dutch on direct investment. They adopted the same procedure as Standard; a pilot firm explored the possibilities and was then transformed into a Romanian limited company, Astra Română S.A.³ The reasons, however, differed: Royal Dutch was concerned not to jeopardize its impending amalgamation with the Shell Transport & Trading Co.

By 1906, therefore, the foreign interests which were to assume such importance in the development of Romanian oil were all represented by subsidiary companies established for that purpose. The total capital investment was computed at 185 million francs, of which 74 million were of German origin.⁴ This accession of

¹ On these, and other smaller German ventures, see F. Wirth, *Deutsche Arbeit und deutsches Kapital in der rumänischen Erdölindustrie*, 1927, pp. 45-8.

² The company had shown some interest in acquiring state lands in 1900, but this was dispelled by the controversy over the Standard-Disconto project; see F. C. Gerretson, *History of the Royal Dutch*, vol. II, Chap. 5.

³ For details of the development of the private firm of C. M. Pleyte into Astra Română, see Gerretson, vol. III, Chap. 2.

⁴

German	74m.	Italian	15m.
French	31m.	U.S.	12.5m.
Dutch	22m.	Belgian	5m.
Romanian	16m.	U.K.	3m.
		Miscellaneous	6.5m.

MPR, no. P. 261 (1907); see also Paul Schwarz, "Die Kapitalinvestitionen in der rumänischen Petroleum-Industrie in ihrer geschichtlichen Entwicklung" (a paper read before the International Petroleum Congress, Bucharest, 1907).

German capital and the consequent reorganization of the various managements increased German influence in Romanian oil to an extent greater than the aggregate of German participations, when compared to the number belonging to other nationalities, would suggest. All the United States capital was in one company (Româno-Americană), while much of the rest of the capital was in minority holdings in various undertakings (e.g. British and Belgian in Telega, and French in Vega). The Romanian stake, although totalling some 16 millions, was spread over a large number of small undertakings or confined to minority interests in large ones. Furthermore, German capital was invested in those concerns with the exception of Româno-Americană, which were the market leaders in the industry.¹

The advent of this foreign capital enabled Romanian oil to expand rapidly in all phases of activity. It implied easy access to foreign markets, both as a source of capital and as an outlet for products. The investment took place in response to market considerations, and specifically the preponderance of Standard Oil in the trade of Central Europe. Even the German Government, which by reason of its standing alliance with Romania had political reasons independent of Germany's oil needs for urging the Deutsche Bank to participate in Romanian oil, subscribed to these considerations. Nevertheless, the investment's foreign character left open the possibility of political complications with the governments of the shareholders concerned, particularly in view of the endemic nationalism of Romanian political life.²

¹ After the First World War this preponderance of German capital was widely regarded as a sinister manifestation of German imperialism: at the time even the Liberals thought of Berlin as their primary source of finance and technique.

² See below, p. 62.

CHAPTER III

Production, Trade, and Policy

Refining and marketing

THE application of new capital, both Romanian and foreign, resulted in increased exploration activity through all the known oil-bearing areas. The digging of pits diminished in favour of drilling wells (see Table 1), and the annual output of crude oil

TABLE I
PITS AND WELLS DRILLED (AS AT 31 DECEMBER)

1902	577	136
1903	635	195
1904	745	220
1905	680	340
1906	701	425
1907	643	595
1908	583	681
1909	568	748
1910	547	847
1911	560	819
1912	488	850
1913	537	944
1914	562	987

increased rapidly, exceeding 1 million tons for the first time in 1907 (see Figure 1). Similarly, refinery construction by the new companies or combinations of companies extended the range and the capacity for manufacture. The principal plants were:

Company	Date of construction	Place	Initial distilling capacity (tons p.a.)
Steaua Română	1897	Câmpina	516,890
Vega	1905	Ploești	283,260
Aurora	1898	Băicoi	275,520
Româno-Americană	1905	Teleajen	151,680
Colombia	1906	Ploești	143,720
Aquila	1904	Ploești	141,909
Aurora		Târgoviște	79,960
Astra Română	1908	Ploești	44,890

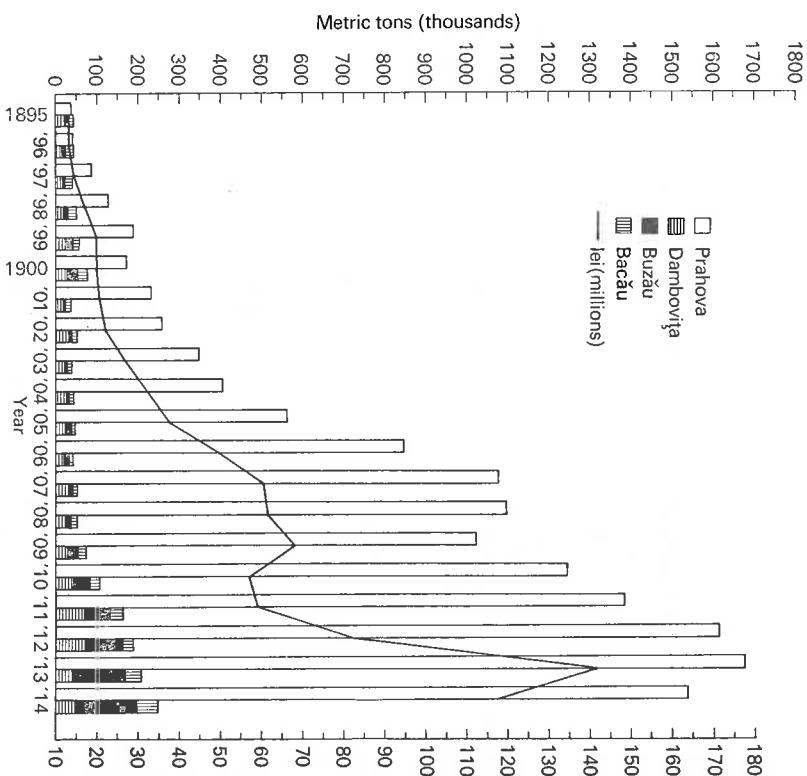


FIG. 1. Annual crude-oil production by areas.

The new plants, in addition to the then conventional distillation processes, provided for the manufacture of the higher-grade products, motor gasoline and kerosine, demanded by the Central and Western European oil markets. All lubricants were manufactured in refineries owned by foreign-capital companies. The growth in refining was superimposed on the existing pattern of manufacturing in the petroleum industry; the small refineries remained in being, working for the domestic market. The increase in over-all capacity put an end to the practice whereby small producers, by reason of their limited storage facilities, were forced to sell their crude oil virtually as it was produced, and enabled them better to withstand fluctuations in the price of their output by forward selling on contract to the large refiners. The latter used

such supplies to make up any shortfall in their own crude output so that they were able to employ their capacity to the maximum extent and, if ever united, could enforce market leadership on their own terms.

For the purposes of a report¹ on the working capacity of Romanian refineries, in June–July 1908, the Government Inspector of Finances, Constantin Hălăceanu, distinguished three categories of refining, viz.:

Group I, comprising nine refineries of over 40,000 tons each.

Group II, comprising five refineries of between 10,000 and 40,000 tons each.

Group III, comprising forty refineries of under 10,000 tons each.

Subsequently, the numbers varied but the pattern remained. Until the end of the First World War, Group I was entirely "foreign"-owned and Groups II and III entirely Romanian. There were many different techniques used within this sector of the industry, but the broad difference between Group I and the others was that the former could carry out continuous distillation, and had better storage facilities and a more varied crude supply. These refineries were therefore better placed to manufacture to more exacting specifications, with the concomitant possibility of bigger unit returns.

The main products were kerosine (produced both for domestic consumption and for export as an illuminant), gasoline (also known as benzine, produced virtually for export for use in automotive vehicles and chemical manufacture), and residual fuel oil. The latter was a low-value product, and the possibilities for export were regulated by rail freights: residuals were, therefore, used within Romania as a fuel in manufacturing industry and for locomotives and ships. In response to the demand for higher-grade products, refining methods were developed to overcome the disadvantages in quality of the yields from the various Romanian crude oils. The first Edeleanu² plant in Romania to wash out the aromatic fractions in kerosine, which caused soot in lamps, went into operation at Astra's refinery in Ploesti in 1913. Further, the demand for motor gasoline increased the use of crude oil from Băicoi and Câmpina, which were rich in gasoline fractions, e.g. Casin or Teșcani crudes, distilling 38 per cent–47 per cent

¹ See below, p. 53.

² See above, p. 7.

gasoline at 150 °C. in contrast to Gura Ocnicei or Sărata crudes, which yielded only 20 per cent.¹

The market structure of the industry also reflected the division between "Romanian" and "foreign" capital. The domestic retail market provided the basis for the continued existence of small-scale concerns, as producers, refiners, or distributors (the latter comprising at least two sets of middlemen). They were and remained, however, particularly vulnerable to changes through their limited scale of operations, particularly as regards shortage of tankage. Thus, for example, as specifications became more stringent, they found themselves saddled with a type of crude oil commanding lower prices or with insufficient refining capacity to produce high-value products. In 1900, however, both these disadvantages were latent, and in spite of them the small-scale producers and refiners survived, largely through political pressure in general, and government price and transport control in particular, as beneficiaries of Romanian nationalist policies.

(a) *The export trade*

The export market provided the *raison d'être* of the foreign capital concerns, but prices could not be similarly controlled by the Romanian State, since they depended ultimately on the pre-dominant U.S. contribution to the world oil trade—a position which was strengthened by the decline of Russian output in the years 1901–5 and of the Galician after 1908. In the United States the beginnings of production in the Gulf Coast area created a rival centre to Pennsylvania and Indiana² which was more favourably situated for the export trade, with the result that New York and Philadelphia were replaced as bases for shipment by the Gulf ports. In consequence of the predominance of the United States in the world export trade, quotations "f.o.b. U.S. Gulf" became the accepted international yardstick until about 1950. This was a matter not only of the proportion of export output in relation to other sources, but also of the structure of refining in the Gulf area.³

¹ As at this time gasoline engines had low compression ratios of 2½–3, the quality requirements, and hence the refining process, were not exacting: anti-knock aromatics, such as toluene, were *extrated*, the residual product being still adequate for automotive purposes.

² On the shift in American production, see H. F. Williamson *et al.*, *The American Petroleum Industry: The Age of Energy 1899–1959*, Chap. 2.

³ See D. C. Hamilton, *Competition in Oil: the Gulf Refinery Market 1925–1950*.

During a period when oil movements in the international market outside the Western Hemisphere originated from a few sources only, *viz.* Romania, the Netherlands East Indies, Iran, and later Iraq, their export prices were necessarily conditioned by the price in the major alternative and preponderant market, and the cost of freight. In the European market the standard Romanian export price, f.o.b. Constanta, customarily enjoyed a premium over the Gulf price in virtue of the possibility of supply at shorter notice and in smaller quantities, to suit the general storage and handling conditions of the trade. The high cost of transport in Romania restricted the area in which this premium could be earned. Nevertheless the Constanta quotation did reflect state financial policy in that payment in lei by the exporter, before the products left the refinery, of the costs of rail (later pipeline) transport, customs and excise duties, and manipulation expenses in the state-owned installations was a prerequisite of delivery to Constanta. These costs, which accrued to the State through either the C.F.R. or the fiscal authorities, became known as the "f.o.b. charges", and approximated to between 35 per cent and 50 per cent of the total f.o.b. quotation. This was also subjected to various *ad hoc* charges, depending on government financial policy. The Romanian State thus exercised an indirect command over the oil exporter through the possibility of varying the f.o.b. charges, which entered into the total f.o.b. price quotation.

The development of Romania's oil resources by foreign capital was based primarily on the demand for kerosine and lubricants in Western and Central Europe. This required the production of higher-grade kerosine than was necessary for the original export market, Bulgaria and Turkey, and of gasoline, for which there was no demand in these countries. Returns from the Balkan market were inadequate to support continued development of the industry and were too sensitive to influences from Baku.¹ Until the mid eighties, virtually all supplies to Western and Central

¹ In Russia, during the 1890s, the metallurgical industry's work on government contracts for the railway system had caused the Baku industry to concentrate on the output of fuels, to the neglect of kerosine. The reduction in kerosine output in turn caused a rise in prices which encouraged additional investment in drilling. The completion of the government contracts, in 1901–2, entailed a reversion to the distillation of kerosine, which now, took place at a rate greater than the domestic market could absorb. Russian producers therefore turned to exports and undersold their rivals in the Balkans and the Levant.

Europe were made by Standard Oil from the United States: after that time its position was challenged by Russian sources in consequence of the reduction of railway freights in 1885, and the organization of the Nobel distribution system.¹ Between 1883, when U.S. kerosine ceased to be competitive in St. Petersburg, and 1899, when Russian kerosine began to be sold in Portugal, the competition between Russian and American oil interests intensified their search for other sources of supply and necessarily involved Romania.²

Romania was geographically well placed to participate in the Western and Central European oil trade both by sea from Constanța and by the Danube from Giurgiu to Regensburg. The rail connection with Constanța was improved after the opening of the Cernavodă bridge in 1895. The sea route from Constanța to Hamburg was only fifty nautical miles shorter than that from New York, but freight costs before shipment could be expected to be cheaper, since Ploesti was nearer Constanța than the main U.S. sources of supply were to New York. The improvement of storage facilities in Constanța³ and the pipeline project inhibited the development of the Danube waterway, which appeared better on

¹ The advantages enjoyed by Baku producers were to some extent offset by difficulties, owing to the quality of the product and to retail practice. Russian kerosine commonly contained more gasoline fractions than the best Pennsylvanian product and therefore "ashed" more easily: lubricants from the two sources tended to be complementary—the Russian having a high viscosity at low temperatures which made them suitable as machine oils, while the American, having a high viscosity at high temperatures, were more suitable as cylinder or spindle oils. In the main illuminant market, Germany, kerosine was sold wholesale by weight, and retail by volume: since the Russian product was 4 per cent heavier, German dealers had an initial preference in favour of the Americans. See "The Importation of Russian Petroleum into Germany", *PIZR* (1899), p. 519.

² The competition also changed the character of marketing inasmuch as both Standard Oil and Nobel discontinued selling through independent importers and organized their own marketing subsidiaries, viz:

Nobel:

Oesterreichische-Russische Nafta Import G.m.b.H.

Deutsche-Russische Nafta Import G.m.b.H.

Standard: Anglo-American Oil Company, 1888.

Deutsche-Amerikanische Petroleum Gesellschaft, 1890.

Soc. Italo-Americana del Petrolio, 1891.

On the organization of the Nobel interests see A. Beeby Thomson, *The Oil Fields of Russia*, for the rivalry between the two companies see Hidy, *Pioneering*, and Williamson and Daum, Chaps. 19 and 24.

³ On Constanța, see reports by Vice-Consul Pogson, 1905 (*FO* June 1906, pp. 3-5), 1906 (*FO* Oct. 1907, p. 13).

a map than in actual practice. Although it was considerably improved after the opening of the Iron Gates Canal in 1896, operations were still hampered by the winter freezing and the much reduced draught in summer. The first was offset by the construction of winter harbours at Deggendorf (Bavaria) and Passau, but the second factor compelled the loading of vessels to less than full capacity. Even in normal conditions, Regensburg could only be reached by vessels with a maximum draught of one metre (i.e. in terms of capacity, 300-400 tons). Larger vessels (600-1,000 tons) operated as far as Budapest, where their cargo was transported. The trip from Giurgiu to Regensburg took four weeks. Because of these operational restrictions, Romanian kerosine, using the Danube route, was effectively competitive only in south Germany and Switzerland: raw gasoline enjoyed a special rail tariff enabling it to reach central Germany. From 1906 onwards, i.e. after the large-scale foreign investments in Romanian oil, only 10-13 per cent per annum of Romania's exports went via the Danube.¹ Through the technical shortcomings of the C.F.R. overland rail communications² were of less importance until the Dardanelles were closed.³

There were also difficulties over the quality of the product. Until it came to be treated by the Edleleau process, Romanian kerosine tended to burn unevenly and leave deposits of soot in the lamps then in use, so that despite propaganda by Romanian officials and publicists, it was less acceptable than the established brands from American and Russian sources.

As the first undertaking founded for the export trade, Steaua Română set the pace by shipping cargoes of kerosine to Regensburg in 1898. At the same time, this company erected storage facilities and a case factory at Constanța for use in an export trade by steamer, mainly with Bulgaria, Turkey, and Italy. Under the aegis of the Romanian Oil Trust, Romanian oil began to appear in quantity in the U.K. This ceased in March 1904 when, after the reorganization of Steaua Română by the Deutsche Bank, the company's exports, other than those to the local Balkan market, were directed to Germany as part of the Deutsche Bank's challenge

¹ On Danube trade, see K. Obbeke, "Bayern und die Rumänische Petroleumindustrie", in *Festschrift für den III Internationalen Petroleum Kongress*, Berlin, 1907; and Brackel and Leis, pp. 325-45.

² See below, p. 45.

³ See below, pp. 72-73.

to Standard Oil. Other Romanian companies lacking similar export organizations sold f.o.b. Constanța.

The development of Romanian oil in the export markets,

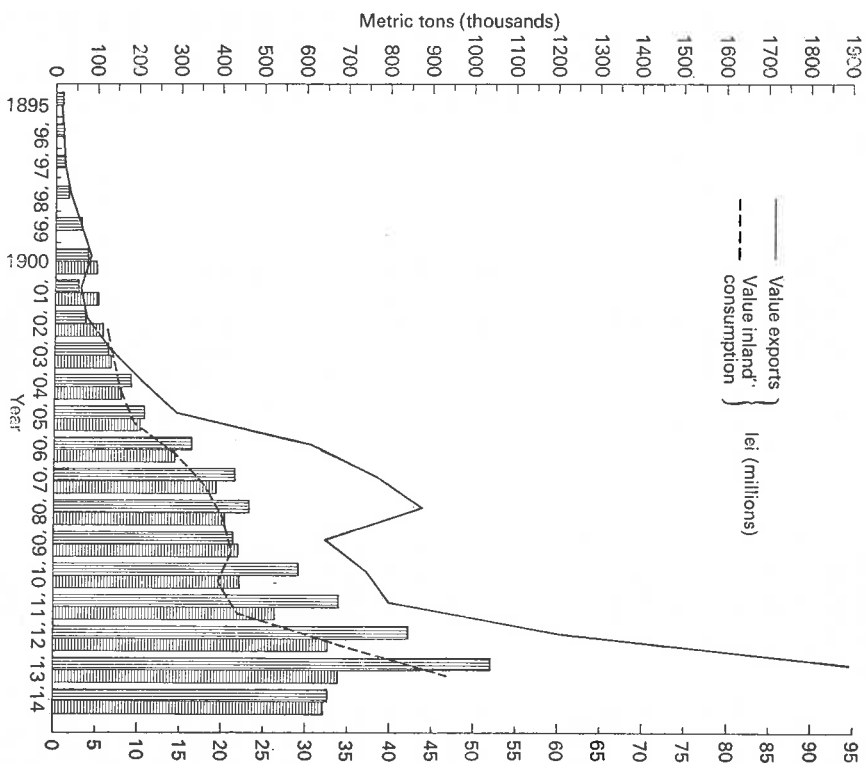


Fig. 2. Exports and inland consumption, 1895-1914.

particularly Germany and Austria-Hungary, disappointed the expectations of those who had invested in its production. Romanian kerosene and gasoline were to be used in a battle with Standard Oil, and for this purpose were sold through organizations set up by the Deutsche Bank—first the Petroleum Produkte A.G.,¹

¹ The shareholding companies in the Petroleum Produkte A.G. were the Deutsche Bank, the Deutsche Petroleum A.G. (the organization which managed the Deutsche Bank's oil investments in Romania and elsewhere), the Berliner

and then the Europäische Petroleum Union¹ (E.P.U.). Both were defeated in the market—an episode which had not only commercial repercussions but nationalist implications.² Notwithstanding this

TABLE 2
EXPORTS OF PETROLEUM PRODUCTS

Year	Crude oil and residuals	Kerosine	Gasoline	Total tons	Value in francs/lei
1895	15,718	2	..	15,720	686,000
1896	17,269	529	..	17,798	910,000
1897	21,339	48	..	21,387	1,069,350
1898	27,480	4,253	..	31,733	1,745,315
1899	48,108	14,283	..	62,391	3,119,550
1900	48,899	24,612	4,145	77,656	4,001,775
1901	39,753	16,819	8,300	55,872	3,057,025
1902	23,073	32,291	16,344	71,708	3,916,434
1903	58,723	45,897	21,601	126,226	6,923,220
1904	45,204	78,270	36,970	160,444	10,606,620
1905	49,515	118,134	46,696	214,345	14,466,970
1906	54,799	190,914	74,493	325,206	30,572,310
1907	78,423	262,480	89,522	430,434	38,384,230
1908	78,765	263,633	122,860	465,258	43,622,780
1909	54,265	262,587	108,736	425,588	32,406,500
1910	122,492	337,036	126,334	586,151	37,371,810
1911	231,327	323,012	125,060	679,887	39,986,480
1912	318,441	353,564	173,816	846,420	69,323,380
1913	380,077	418,622	237,168	1,036,446	94,773,850
1914	191,545	297,800	164,143	654,024	..

particular set-back, Romanian oil, under the foreign capital regime, found new and regular outlets, based on the two routes to Central and north-west Europe discussed above. The progress in the export trade is shown in Tables 2 and 3.

(b) The problem of transport—the Constanța pipeline project

The export bias to the industry's activity focused attention on problems of transport—at which point the State became involved, in that the railways were already under its control and the disputes Bank, Steaua Română S.A., and the Shell Transport and Trading Company. After the Steaua agreement the Disconto-Gesellschaft was admitted to P.P.A.G., which henceforward sold all Romanian oil in Germany on behalf of its principals. Supplies were drawn from Steaua Română (Deutsche Bank share), Telega (Disconto share), and Aurora (under contract to Shell Transport and Trading). On the origins and operations of P.P.A.G. see Gerretson, vol. iii, pp. 83-8; and R. Henriques, *Marcus Samuel* (references, see index).

¹ See Gerretson, vol. iii, pp. 88-106.

² See below, p. 63.

TABLE 3
ANNUAL EXPORTS BY COUNTRIES OF DESTINATION
(In tons)

Country	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914
Austria-Hungary	20,712	22,107	19,240	16,479	22,959	3,623	5,409	33,881	46,311	86,013	77,184	84,253
Belgium	164	22	87	7,944	33,390	18,726	28,857	40,280	27,673	11,907	25,136	18,076
Bulgaria	3,909	4,995	4,643	3,448	3,243	4,062	6,285	7,364	8,550	10,358	13,149	18,689
Egypt	..	25	..	..	20,910	79,945	66,317	73,286	115,170	142,418	121,642	62,714
France and French North Africa	13,148	40,631	118,925	91,618	116,076	123,052	134,564	142,601	127,396	170,732	159,606	58,384
Germany	24,271	25,757	37,091	38,040	48,381	34,109	24,972	53,294	54,059	84,041	126,295	99,165
Greece	298	166	..	..	6	19	17	18	100	1,502	6,958	12,406
India	..	..	..	5,466	58,371	15,715	..	..	..	..	..	..
Italy	10,140	8,026	77	34,206	21,466	21,549	31,104	28,479	18,048	25,921	118,643	108,144
Japan	..	..	..	..	..	..	..	18,631	1,549	..	..	..
Netherlands	298	166	..	..	6	19	17	18	100	1,502	6,958	12,406
Russia	..	..	575	..	..	3	26	33	47	1,210	9,114	7,016
Scandinavia	..	3,348	2,751	3,435	5,183	6,406	10,417	12,724	20,531	15,843	22,039	19,412
Serbia	7	34	704	25	403	121	291	622	1,044	2,614	3,675	24,369
Spain	..	..	..	..	71	..	63	14	648	64	111	..
Switzerland	250	119	25	26	5	127	..	10	..	..	1,155	836
Turkey	1,241	2,100	7,660	22,524	24,587	32,568	37,838	29,951	49,655	53,549	73,790	31,463
U.K.	37,085	36,869	22,570	91,262	64,575	109,372	70,979	125,687	180,614	214,195	232,880	77,971
U.S.A.	..	..	..	..	..	..	..	2,353	3,827	..	..	..

Production, Trade, and Policy

Refining and Marketing

in 1900 over the pipeline scheme had made it clear that any pipeline construction and operation would take place only on its terms.

After the withdrawal of the Standard Oil-Disconto-Gesellschaft scheme, the Minister of Finance in the Sturdza Government, Emil Constantescu, suggested in 1902 that the Constantza line should be constructed, owned, and run by the State—the estimated cost being 12 million francs. In the following year he introduced a law whereby 500,000 francs from the current budget surplus was set aside for the necessary preliminary studies of routes to the Black Sea and also to the Danube. Furthermore, an engineer was sent to the United States to study problems of pipeline construction. Various estimates of cost were made, and the Government, through Alexandru Beldiman, Romanian minister in Berlin, sought the advice of Richard Sorge. Sorge made comparisons with the Caucasus, where oil exports along the single-track railway from Batum to Baku were made at a million tons a year: he argued that even when Romanian exports reached that figure there were two other export routes by water available, and, provided that the railways could move the larger quantities of oil, there was no reason why a pipeline should be necessary. A pipeline would be helpful but was not either then or in the foreseeable future essential; Romanian exports would be better stimulated by a cut in rail freights. Beldiman reported in these terms to Sturdza and the project was shelved.¹ The proposals concerning the line advanced by the Deutsche Bank and Banque de Paris et des Pays Bas in 1905 (see below, p. 57) merely emphasized the fact that the State now had the whole pipeline project firmly in its own hands.

The premiss on which the construction of a pipeline was put into abeyance, viz. that the railways could adequately move the increasing oil exports and at rates which did not nullify Romania's competitive advantages in European markets over current Russian and American production, was not long valid. By 1906 the performance of the railway caused the convening of a conference, attended by representatives of the Ministry of Industry, the C.F.R., and the oil companies. The latter complained particularly about congestion and delays in transit, resulting in restriction on exports—the current programme of three oil-trains a day moved

¹ In consequence, Steaua Română and Agula, who had been induced by the scheme to plan refineries at Constantza and even buy sites for their construction, reverted to extending their up-country plants.

only 32,000 tons a month, whereas the net export availability was 40,000 to 45,000 tons a month. It was generally admitted that this was due to a shortage of locomotives, which private concerns had not been allowed to provide for themselves.¹ Further, in the view of the oil industry, the existing routes² suffered from two major drawbacks—they all converged on Fetești and then followed the same route over the Cernavodă bridge to Constanța, and—since they passed through the grain areas—oil-trains had to give way during the harvest to grain exports.³

Various remedies⁴ were canvassed to increase both the number of trains and their running speeds, and to cut down unloading time at Constanța. The conference agreed that the oil companies should draw up a memorandum of shortcomings and suggest "means for satisfying the present and future needs" for both inland and export trades. The problem was complicated by the fact that the types as well as the volume of exports increased. Residuals, hitherto a burdensome waste product, were now in some demand as fuel,⁵ but competition in export markets was so severe that Romanian residuals could not bear the high freights levied by the railway authority.⁶ The kerosine trade also increased rapidly and Asia Minor was no longer supplied in cases, but in bulk.

¹ Official permission was granted in 1906, but the type of locomotive had to be the same as those used by the C.F.R.—which ruled out any rapid increase in numbers available.

² There were two main routes by which oil was transported and to this a third was being added.

Câmpina—Ploesti—Mogackaia—Fetești and Cernavodă—Constanța: 282 km. Ploesti—Buzău—Făurei—Fetești and Cernavodă—Constanța: 279 km.

Ploesti—Slobozia—Fetești and Cernavodă—Constanța: 256 km. (Completed September 1909).

³ The industry also suffered by reason of the army manoeuvres for 1907, which, taking place in the Dobrogea, occupied the Constanța railway with military traffic during preparations in September and closed the port for a fortnight in October.

⁴ In his report for 1906 the British Vice-Consul in Constanța wrote, "the critical question of the moment is the improvement and extension of transport facilities. It has been estimated that the State railway alterations would need at least £4 million, whilst a pipeline from the chief oil fields at Câmpina . . . would be made at an expense only of £400,000. It is therefore probable that the cheaper alternative will be adopted in the near future." The Vice-Consul was over-sanguine: see *Trade and Shipping of Constanța for the Year 1906*, no. 3939 in the series *Roumania: Diplomatic and Consular Reports*, Foreign Office, Oct. 1907.

⁵ See below, p. 49.

⁶ Approximately one-third of the f.o.b. Constanța price of residual fuel oil represented the freight.

The problem of the disposal of the residuals that necessarily resulted from refining operations enforced continuous official consideration of improving transport facilities, but the immediate cause of the decision to build the pipeline was the sudden increase in output from Prahova in 1910.¹ In consequence, at the end of 1911 the Ministry of Industry decided on the construction of three lines,² one for residuals and two for kerosine.

The necessary law was introduced on 25 March 1912. Permission to finance (to the extent of 18 million lei) a pipeline along a route to Baicoi—Constanța via Ploesti, Buzău, Făurei, Fetești, and Cernavodă—was given to the Minister of Finance (Article 1). Construction was to be undertaken by the Ministry of Public Works through the management of the railways: competence in commercial and tariff questions was ascribed to the Ministry of Industry and Commerce (Article 3). It was foreseen that other lines from the producing areas to the main trunk-line could also be constructed, though not in competition with existing private lines (Article 4). Existing refineries, as specified in the Law, were to secure a partial amortization for a maximum period of twenty years by means of rebates in the transport tariffs for crude and kerosine to a level of 15 million lei.³ The necessary land for lines, pumping stations, and all ancillaries was declared expropriated on grounds of public utility by Article 8.

Although the law as a whole reflected an initiative and the ultimate continuing competence of the State, concessions were made to the industry in Articles 4 and 5 whereby existing refiners whose plants were inland and therefore dependent on the line were safeguarded against loss of export markets (in consequence of the raising of transport tariffs) to any refineries operating from the seaboard. This was done, as explained by the Prime Minister, P. P. Carp, when introducing the Bill, not as a right but as a simple matter of equity.

As defined in the Law, the route to be followed was 287 kilometres in length: the head of the line was well situated to gather

¹ See Figure 1 above.

² Originally two, but, in view of the different qualities of kerosine exported to the European and the Balkan and Near Eastern countries respectively, the number was increased to three.

³ The levels were based on the transport of a minimum quantity of 500,000 tons of crude and kerosine through the line p.a. at 1.5 centimes per ton per kilometre.

crude oil from the existing producing areas in Prahova—all within a radius of 30 kilometres—and to take kerosine from the concentration of refineries in Ploesti. The Directorate of the Railways sent two missions—to Russia and the United States—to study the organization and running of pipeline systems. It was decided that the crude lines were to be 9 in. in diameter from Băicoi to Ploesti, and 11 in. from Ploesti to Constanța, the kerosine lines 6 in. and 5 in. In this way it was hoped to transport 1.8 m. tons crude oil and 500,000 tons kerosine a year. Storage problems were discussed by an *ad hoc* commission,¹ which recommended which types of crude oil should be transported and into which type of tankage they had to be segregated: a total capacity of 140,000 tons would be required.

Tenders were put out for 600,655 metres of 5 in. pipe, 90,300 metres of 9 in., and 210,027 of 14 in. The successful bid was for 11,680,247.80 francs put in by the firm of Stokois and Zonn, Rotterdam, on behalf of the United States Steel Products Company. The contract was approved by the Council of Ministers on 2 December. It was estimated that the work would be finished and the line in operation by 1915. Construction was interrupted by the Balkan Wars of 1913, by the end of which year the 18 million lei originally appropriated was exhausted, and a further subvention became necessary.

(c) *The inland market—the Proration Law of 1908*

Romanian oil-production went through the same phases of flush production described above² as characteristic of early developments in Pennsylvania. The multiplicity of new wells and the inadequacy of storage forced producers to sell almost immediately and kept prices low.³ They attempted to offset this disadvantage by combining to stabilize and maintain prices: the effects were, however, local and temporary. The setting up of Steaua Română introduced into the Romanian industry an organization sufficiently large in relation to other producers and refiners to exercise leadership in both these phases. In consequence, the Steaua management initiated

¹ Composed of representatives of Steaua Română, Astra Română, Creditul Petrolier, Româno-Americană, and of small firms (Aisimann).

² P. 3.

³ See A. P. Bennett, *Report on the Petroleum Industry of Romania*, (FO, 1896, Misc. Series, no. 411); and article in *PITR* (9 Dec. 1899).

the control of production, through agreements, and of surplus refining capacity, through subsidies. Again, the effect was short-lived, since unorganized production increased and depressed the price of crude oil. There was nothing in liberal theory or practice against the operation of cartels. In 1901 the Minister of Domains (responsible for oil affairs) sponsored the formation of a 'Petroleum Producers' Association', under the Presidency of Constantin Alimăneștianu, of the Ministry. This Association contrived to maintain prices at between 3 and 4 francs per 100 kilogrammes. The problem remained, however, of putting the Romanian oil industry on a solid and profitable foundation. In a speech to members at Ploesti, on 4 February 1902, Alimăneștianu suggested a programme of measures comprising the organization of a selling syndicate disposing of at least 70 per cent of the yearly output of the home retail trade, including arrangements for storage and transport, of a technical and commercial bureau for advice on problems of manufacturing and materials used in petroleum engineering, and of a syndicate of home and foreign bankers to furnish capital and provide credit.

By this means Alimăneștianu hoped to raise prices to producers and reduce them to consumers through economies of scale. As an immediate step a central sales bureau for crude oil was organized from within the Association in February 1902: it was unsuccessful in maintaining prices—during 1903, the latter dropped from 3 francs in January to 1.7 francs in December. Alimăneștianu's programme was never implemented, and the problem of disposing of crude oil output disappeared through the enlargement of manufacturing opportunities represented by the investment in refining²—to be replaced by that of disposing of the resultant products.

Refining operations were designed to yield kerosine, gasoline, and, where possible, lubricants, in that order. They necessarily gave rise to a large yield of residuals, the price of which affected the earning capacity of the developing industry. The disposal of these residuals remained a persistent problem, though new outlets were found in the conversion of C.F.R. locomotives from coal- to oil-burning and the adoption of fuel oil by the Romanian Department of Navigation in 1905 and the Romanian Navy in 1906.

¹ Text of speech, in translation, in *PITR* (1 Mar. 1902), pp. 240 f.

² See above, p. 35.

Steaua Română also began to interest itself in the marine bunker business, setting up tanks at Alexandria for this purpose. In 1909 the company began supplying residual fuel oil to the Anatolian railway, thus fulfilling, in part, the aim of the original investment by the Deutsche Bank. Further, the naval authorities of the Great Powers began to make contracts for supplies of residuals for use as fuel oil. Nevertheless, such outlets only enabled refiners to keep abreast of their yields, not to overcome the difficulties they created. Steaua Română, after various attempts, managed to form a residuals cartel in May 1906, with the approval of the Government, the latter imposing a limit on any upward movement of the price, viz. that it should not exceed the price of a quantity of Cardiff coal c.i.f. Brăila with an equivalent thermal output.

The main product for the inland market was kerosine, for lighting and heating. On this market, specifications were not so exacting as for exports, and therefore Steaua Română's technical superiority could not be used to compel smaller refiners to fall into line. Nevertheless, the company was able to control a proportion of the output of kerosine through a joint office established in August 1901 with Aurora and four smaller refiners, through which all sales of kerosine meeting a guaranteed specification were made, at prices decided upon monthly. Steaua and its partners were able to hold prices in this way, and the arrangements were renewed in May of each year. The reorganization of Steaua Română by the Deutsche Bank, and the company's consequent participation in the Europäische Petroleum Union, strengthened the position within Romania of the cartel, which sought to persuade new entrants to the industry to join, in order to maintain the price structure. The most formidable newcomer was Româno-Americană, which, from the completion of its refinery in 1905 until the spring of 1907, exported all its kerosine output; after that time it began to take a strong interest in the domestic kerosine market. For this purpose, the company erected storage and distribution depots and introduced improved methods of selling direct to retailers and consumers, a practice inimical to the existence of the various middlemen traditionally engaged in distribution.¹ Moreover it introduced a higher-quality product, made from Moreni crude oil.

The competition thus provoked reduced the home market price

¹ This technique of bypassing traditional intermediaries caused great antipathy to Standard Oil in Europe and subsequently touched off the agitation

for kerosine during 1907 from 12 lei per 100 kilogrammes to 6 to 7 lei, and brought about an agitation in both political and commercial circles, during which all the charges of monopoly made in 1900 were revived. It was alleged that Româno-Americană was deliberately forcing down prices in order to eliminate its competitors: having arrived at a *de facto* monopoly of the market it would try through increased prices to recoup itself for the losses necessarily sustained. The suggestion derived its plausibility from the hostility to Standard Oil caused by the state-lands controversy and from what were construed as that organization's malpractices elsewhere.¹ It was, however, not simply an argument of small business against big: the small manufacturers and distributors whose interests were damaged by Româno-Americană's marketing methods were all *Romanian*: therefore they could expect official sympathy, if not support.

Furthermore, the competition had corroded the existing cartel, whose members, other than Steaua, saw themselves as likely to be forced out of business after the impending defeat of their organization: the inland trade would then be left to the only companies possessing distributing assets, viz. Steaua and the Americans. These cartel members therefore suggested the foundation of a neutral sales bureau, for a period of ten years, which Steaua should be invited to join.² The Steaua countered by proposing its own scheme for such a bureau,³ in March 1908: the scheme was not immediately acceptable and the cartel agreement was due to be renegotiated in May. While these proposals were being debated within the cartel, Româno-Americană extended its operations and prices continued to fall, reaching the lowest point of 4 lei per 100 kilogrammes ex-refinery in April 1908.⁴

In May 1908 the Romanian Government put an end to this situation by announcing that it would in future allow no competition in the home retail trade, which instead should be regulated by agreement among refiners: in default of such agreement, the

for a kerosine monopoly in Germany and Austria-Hungary; see Gibb and Knowlton, *The Resting Years*, p. 203; and Gerritson, vol. iv, p. 170.

¹ As to which, see R. W. and M. E. Hidy, *Pioneering*, Chap. 8; and A. Nevins, *Rockefeller*, vol. 1, Chaps. V-VIII.

² 2.

³ 3.

⁴ On the competition between Româno-Americană and the cartel, see article "Le Commerce du pétrole en Roumanie", *MPPR* no. 7 (1908), pp. 245-50.

Government proposed to set up a state monopoly. During the last three days of the parliamentary session, the Government rushed through a bill giving effect to these ideas in order, as the Minister of Finance, Emil Constantinescu, explained, "to extirpate the evil transplanted from elsewhere before it takes root in Romanian soil".

The Law for the Proration of the Inland Consumption of Illumination Oil empowered the Government (Article 1) "to arrange the distribution of the total consumption of illuminating oil [kerosine] among existing refineries and those which may be established", and provided that (Article 2) quantities for distribution were to be fixed among refiners on the basis of the producing capacity of each refinery. Control of output was to be complemented by control over prices. Article 7 declared that the maximum selling price¹ would be determined by the Government and would be binding on all refiners. There were heavy penalties for non-compliance, either by over-production or by manufacturing an inferior quality or by selling at prices higher than those permitted (Articles 10-14). Only refineries capable of meeting the State's prerequisites would be permitted to manufacture kerosine for the home market. Further, the Law empowered the Government to construct storage facilities, in the case when refiners would not themselves construct them, at railway stations and ports (Articles 15 and 16). The Law was to be applied at the latest on 1 October 1908 (Article 17).²

As published, the terms of the Law required the definition of refining capacity and also of the average price of crude oil. Further, it had merely established the basis for the maximum price of kerosine ex-refinery, not the retail price to the consumer: it therefore left open the vexed question of the retail system to be adopted, i.e. whether it was to operate with or without intermediaries. The question of refining capacity—whether constructed capacity or actual throughputs were to be taken into account in arriving at the ex-refinery price—was considered at Constantinescu's request by

¹ This was to be, ex-refinery per 100 kg., "between frs. 3.50 and frs. 4.50, representing the cost of refining and the refiner's profit"—to which figure was to be added "the average price of the crude oil delivered to the refinery. The total of these two figures will form the maximum selling price."

² It was in fact applied from 1 July 1908: see "Report of the Minister of Finance to the Council of Ministers, 19 June 1908", *MPR*, no. 18 (1908), p. 638.

an *ad hoc* commission of refiners¹ and by Constantin Hălăceanu,² an official of his ministry. On the basis of Hălăceanu's report, the Government announced the first proration on 24 June 1908, and established the price for the next quarter at 8.70 francs per 100 kilogrammes.³ The Proration Law induced that combination among refiners which the Government wished: in this it emphasized the position of Steaua Română and Româno-Americană, the only concerns possessing storage and distribution facilities for the internal market.

Steaua Română and Aurora announced the formation of a new distributing company, the "Societatea anonimă pentru distribuirea produselor petrolului".⁴ Other companies were invited to participate. Româno-Americană did so, after its point about selling direct to consumers instead of through intermediaries had been conceded. On 28 July 1908 the three companies registered with the tribunal of Ilfov (Bucharest) contracts by which their production would be sold through the new organization (which became known as Distribuția). Kerosine quotas would be those assigned to each of the participants by the Law: other products, *pro rata* to the distillation capacity, as established, of their respective refineries. At the same time, the three companies agreed to surrender their distributing organizations and their government contracts to Distribuția, and on this basis the new company began to consolidate and extend its sales network throughout the country and tried to secure the adhesion of other refiners. In this way Distribuția put an end to the other product cartels, which had been organized and regulated the supply to the domestic markets in a way which

¹ Consisting of Bergher (Steaua Română), Edeleanu (Vega), Aisimann, Mony (Colombia), Bossal (Aquila), Parascheva and Frischhoff (small refiners). Hălăceanu took part in the discussions. The commissioners advocated that capacity be determined by reference not only to the crude intake capacity of a refinery, but also to the redistilling capacity and storage and loading facilities.

² Hălăceanu broke down the refining process into its component parts—according to which he then examined the plants in the existing refining industry, in order to assess the seven different manufacturing systems in use on a common basis (see translation of this report in *PR* (18 July 1908), pp. 15, 45, 46, and 71). Hălăceanu was also commissioned to examine "the average price of crude oil"—a concept difficult to establish, since 70 per cent of crude output belonged to refinery companies and therefore was never quoted in the market, while 20-25 per cent was sold under long-term contract: the basis for an open-market price was thus slender.

³ The small refiners protested at the basis of the award, and at the price, which they argued should have been 10.70 francs.

⁴ *MPR*, no. 13 (1908).

ensured the continued existence of the small producers. Even so, the latter were dissatisfied with the results of proration and advocated a complete state monopoly.¹

The Proration Law was explicitly anti-American. In the debate in the Chamber, Româno-Americană was criticized, for example, for bringing down prices to the point where two kilogrammes of kerosene were sold for the price that obtained for one before it

TABLE 4
INLAND CONSUMPTION

Years	Gasoline	Kerosene	Gas oil	Fuel oil	Others	Total (tons)	Value francs/lei
1900	1,500	30,000	500	65,000	..	97,000	
1901	1,555	30,904	075	66,753	109	100,050	6,318,706
1902	1,365	32,210	2,685	77,876	671	114,807	7,195,261
1903	2,120	32,273	2,976	97,098	744	133,211	7,843,512
1904	2,369	32,440	2,739	119,673	685	157,968	7,657,470
1905	2,666	31,558	5,046	162,213	1,261	202,804	14,766,948
1906	4,059	35,243	7,878	337,477	1,970	386,222	18,120,579
1907	5,689	38,467	7,238	332,999	1,809	386,202	20,604,106
1908	9,055	38,422	9,564	347,329	2,391	406,761	21,211,849
1909	14,041	39,451	12,558	366,793	3,815	420,828	21,888,700
1910	24,450	41,849	14,035	360,351	4,279	440,828	21,888,700
1911	24,450	43,941	17,021	434,004	5,624	520,030	34,154,420
1912	30,656	49,941	23,108	540,385	6,937	651,117	40,352,153
1913	30,331	51,396	20,980	560,492	8,170	677,109	
1914	31,072	51,710	32,653	524,234	9,579	642,868	

came on the scene. This sort of practice, it was alleged, would cause other foreign organizations to abandon Romania. The language of the Minister in the official *exposé des motifs* was similarly highly charged.² Româno-Americană's attempts to defend itself by arguing from the benefit to the consumer in both quality and price, and by showing that its quotations had not been the lowest in a number of public adjudications, were ignored.³ The agitation was not concerned to protect the Romanian consumer but the Romanian producer, and, as Gerretson notes,⁴ the Standard was regarded as the evil genius of the industry. The Law was also timely for Steana Română, whose position in the inland market was assured by the Government's action. The Bill was introduced unexpectedly and passed unanimously, after four hours' debate

¹ See Grigorescu in *MPR*, no. 13 (1908), pp. 465-6; no. 14, pp. 508-10.

² See *MPR*, no. 11 (1908), pp. 385-8.

³ See letter to the Bucharest journal *Curierul Financiar* reprinted in *PR* (25 Apr. 1908); see also table in *MPR*, no. 10 (1908), p. 256.

⁴ Gerretson, vol. 3, p. 123.

in the Chamber of Deputies and none in the Senate. It was the first of four measures fundamentally altering the relationship between the industry and the State that were so enacted—the others being the Mining Laws of 1924¹ and 1937² and the Nationalization Law of 1948.³ The progress of the internal market can be seen in Table 4.

State oil lands and state policy

The Romanian State impinged on the development of the oil industry not only through its capacity as legislator and customer, but also as owner of the most likely source of raw material. The disputes of 1900 did nothing to further the exploitation of the State's resources but merely established the conditions on which such exploitation would be carried out. Given that the Government was not willing to wait until it commanded sufficient capital for a company of its own, some form of concession was necessary, and the questions at issue were concerned with who was to receive it and the arrangements under which it was to be granted. Applicants had a continuing interest in gaining concessions on state-owned lands in order to strengthen their position in Romanian oil in relation to that of their competitors in other markets.

In 1903 the Disconto-Gesellschaft made another approach to the Romanian Government with proposals similar to those made in the name of the syndicate in 1900. The Romanian Government's terms were stiffer and included a demand for state participation in profits and some control over the exploitation of the areas conceded. These clauses were unacceptable to the Disconto-Gesellschaft, and the negotiations, which took place in Berlin, were broken off. The next year Rothschilds, Nobel, and Mantaschew,⁴ all producers in Baku, sought to use Romanian resources against Standard Oil. Negotiations were opened by a Viennese lawyer, Dr. Herman Fialla, who revealed the identity of his principals only in July 1904. On 10 September he concluded with Sturdza a secret agreement⁵ whereby they, the Baku group, would found a company to exploit the state oil lands on concession

¹ See below, p. 115.

² See below, p. 205.

³ See below, p. 318.

⁴ On this episode see Haase, pp. 37-42.

⁵ See *MPR*, no. 22 (1905), pp. 500-3, and editorial comment in no. 23 (1905), p. 645.

for fifty years on terms explicitly allowing comprehensive supervision by the State. Its purpose was stated in Article 1, according to which the group was to set up in Bucharest a Romanian State Petroleum Company, under Romanian law, to exploit petroliferous lands belonging to the State. The company was to have no connection in any way with Standard Oil. It was to receive the support of the Romanian State in the exercise of its rights, and in return undertook "to establish its enterprises on a basis which best corresponds with the interests of the Romanian State, particularly in regard to employment as far as possible of Romanian nationals as technicians and workers". The company was to obtain the exclusive rights (concessions) to explore and drill state lands for fifty years (Article 2), the relevant areas were to be subsequently enumerated by the Government but the concession was not to exceed 30,000 hectares in total (Article 4). The choice of actual plots was at the company's discretion for a period of ten years, but a mixed commission of state and company representatives was to determine their extent in each case.

In return for these rights the company undertook (Articles 5-7) to make certain annual payments together with a proportion of dividends above a certain level. The Government was to have the right to inspect and annually audit the company's books.

Articles 8 to 11 set out the reciprocal obligations of the State and the company, concerning the actual working of the areas under concession. Article 12 reserved to the State the exclusive right to erect and operate public, i.e. trunk, pipelines. By Article 13 the State undertook to draw, so far as possible, its own supplies of crude and products from the company. Finally, the Romanian Government reserved the right (Articles 14-15) to take part in the drafting of the statutes of the company which would, when completed, have to receive official approval. The validity of the contract was to be sanctioned in a constitutional manner and the Government undertook to use its good offices for this approval to be given as soon as possible.

The agreement was signed by the Prime Minister, Sturdza, and Dr. Fialla at Munich on 10 September 1904 and was covered by a letter¹ from the Prime Minister in which was set out an undertaking by both parties to observe complete secrecy on the terms for a

¹ Given by Sturdza in the Senate, 13 May 1905; *MPPR*, no. 15 (1905), pp. 432-3.

period of seven months, during which the Romanian Government bound itself not to discuss with any other party the questions involved, and during which the company was to be set up. The final working agreement would be reached on the basis of the agreement under reference. Sturdza also stipulated that the board of management would include members appointed by the Government and envisaged an increase in the suggested royalty to 8 per cent.

The terms specified in Sturdza's letter expired on 10 April 1905, by which time his government had given way to that of the Conservatives under Cantacuzino. On 11 January 1905 Fialla inquired of Sturdza as to the effect of the change of government on their Munich agreement, to be informed that it still remained in force. On 24 February 1905 Fialla informed Sturdza that he had, as foreseen by that agreement, succeeded in forming a company, but that the principals in the case were now the Deutsche Bank and the Banque de Paris et des Pays Bas.¹ At the beginning of March he visited Cantacuzino, accompanied by Spies, the General Manager of Steaua Română, and entered into negotiations on the basis of the Munich agreement, whose terms were at that juncture not known to the general public, on behalf of his new principals. The terms² varied slightly from those originally negotiated by Fialla on behalf of the Russian interests, and the text began significantly: "New project for a concession, worked out in conformity with the desires, exigencies, and conditions expressed by the Romanian Government." As before, a company was to be set up, at the latest by 1 August 1905, and was to be conceded the subsoil rights to an area of 30,000 hectares (later reduced to 10,000) on state lands for a period of fifty years, in the first ten of which the company undertook to sink 150 wells in stipulated districts. In return the State was to receive a royalty of 10 per cent on the output per annum, either in value, determined at well-head prices, or in kind, at the State's option, together with taxes and a share in profits.

These proposals, dated 17 May 1905, evoked a great political

¹ Haase, (p. 39) suggests that the substitution may have had to do with the threads between the Deutsche Bank and the Russians—as seen later in the establishment of the Europäische Petroleum Union. The archives of the Deutsche Bank disclosed no evidence on this point.

² See *MPPR*, no. 23 (1905), pp. 645-9; also letter by Ion Lahovari (Conservative Minister of Domains in 1905) published in *MPPR*, no. 5 (1908), p. 168.

uproar,¹ not so much on the grounds of the foreign nature of the capital, but of the extent of the area involved, which was considered too much for any commercial purpose.² At this stage also the terms of the Fialla-Sturdza agreement were made public in government journals as a test of public reaction. From the resultant political controversy there emerged a proposal put forward by Lascar Catargiu and Alexandre Marghiloman, for a company financed by exclusively Romanian capital to explore and exploit state lands, the rights to which would be guaranteed by the Government. The company, called "România", was hurriedly brought into legal existence from 29 May to 2 June.³

The proposals of the Deutsche Bank and the Banque du Paris and des Pays-Bas and the counter-proposals of the putative "România" company led to the final announcement of the policy on the future development of state lands. On 6 June 1905 the Prime Minister, Cantacuzino,⁴ responding to an interpellation of Sturdza, laid down three criteria:

1. Part of the state lands was to be kept as a reserve for the future (i.e. could not be conceded at all).
2. There was to be no monopoly of any lands conceded.
3. The State was to retain in its own hands all means of transport.

Sturdza welcomed the terms of this declaration, which resolved the differences between the parties on this issue, and was designed as the basis for a comprehensive programme of development: the declaration did not in itself exclude foreign interests. Sturdza's volte-face, on the technical grounds of the change of principals, put him in the position of denying to the Germans and French what he had been willing to concede to the Russians nine months previously. His defences⁵ was that in the meantime, and as a natural consequence of economic progress, Romanian nationals were in a position to undertake the financing of exploitation of the

¹ The *MPP* editorial (no. 1 (1906), p. 7) also reported "irritation" in Romanian Government circles at the forcible intervention of the German minister (Kideien Waechter) on behalf of the banks.

² See H. E. Browne to FO, 12 June 1905: *FO Series 104*, vol. 165; and *MPP*, no. 15 (1905), pp. 421-4.

³ For a prototype of the "România" scheme, dating from 1867, see *MPP*, no. 36 (1906), p. 32.

⁴ See *MPP*, no. 16 (1905), pp. 458-61.

⁵ See Sturdza's speeches in the Senate of 6 June 1905: *MPP*, no. 16 (1905), pp. 461-5; and his pamphlet *La Question du pétrole en Roumanie*.

state lands: in these circumstances the concession of state lands to foreigners was detrimental to the interests of the State. The British minister, Sir John Kennedy, offered another explanation: "that Sturdza foresaw the accession to office of a Conservative government which would include as Foreign Minister Take Ionescu, who was legal adviser to the Standard Oil interest in Romania. In order to forestall possible concessions to the Americans, Sturdza offered the state lands (through Fialla) to the Russians and then to the Germans."

In consequence of the declaration, Dr. Fialla withdrew the propositions of his principals and the formation of the "România" company was proceeded with. There was no public issue of shares but 60 per cent of the capital was taken up privately by Romanian citizens. The remainder of the capital was to be issued subsequently, in the form of bearer shares, which were to be freely negotiable. The company was to be managed by Costinescu, a former Liberal Finance Minister. Immediately after Cantacuzino's statement an official inspection of state lands was made, during which all applications for concessions were blocked.² This examination resulted in the Law of 30 December 1905³ intended to secure the State's interest in the exploitation of Romania's petroleum resources and to remedy the concentration of capital in areas known to be oil-bearing to the detriment of those which were not.

The Law divided state lands into lots with a maximum of 100 hectares of proven oil-bearing lands and a maximum of 1,000 hectares of non-proven lands. The Council of Ministers was given final authority on the approval or dismissal of any demand for concessions (Article 1). No one concessionaire could have more than three lots altogether, and before acquiring them the concessionaire had to prove that he disposed of sufficient capital for development, determined (Article 2) as at least two million francs for each lot of 100 hectares of proven land and 1,000 hectares of non-proven. Articles 3 to 13 discussed restrictions on concession-holding drilling obligations, transport, and royalties. Article 15 introduced a novel feature by stipulating that only Romanian courts were competent to try disputes between the State and the concessionaire.

¹ Dispatch to FO, no. 31, 5 June 1905: *FO Series 104*, vol. 164.

² *MPP*, no. 16 (1905), pp. 473-4.

³ *MPP*, no. 38 (1905), pp. 1064-6.

The Law did not define "proven" and "non-proven" lands, which were by subsequent Ministerial explanation specified respectively as those on which there were borings or hand-wells in exploitation and those which were extensions of "proven" lands but were hitherto undeveloped.¹ The Law signified the end of ideas of exploiting state lands *en bloc* through an individual concessionaire who would be responsible for all matters of detail: this in itself deprived the "România" company of its *raison d'être*, and the project collapsed. It is noteworthy, however, that it did not discriminate between Romanian and foreign nationals as applicants for concessions.

In introducing the Law,² the Minister of Domains, Lahovary, had expressed his conviction that under its aegis the petroleum operations of the State would multiply and prosper and that, as the rights of the State and those of concessionaires were equally protected, the national economy would find in the oil industry an abundant source of riches for the future. These hopes were not realized: the State had arrived at a policy for the development of its own lands, but could not compel others to adopt it. No concessions were taken out in the next three years. During this period, production increased from 641,070 tons (1905) to 1,142,448 (1907), all from private lands. Moreover, although in 1908 the output increased further to 1,180,000 tons, the rate of increase fell off from an average of 34 per cent to one of under 4 per cent. In this situation the only prospects appeared to be offered by the state lands. This was the incentive to revision of the Law, which was proposed by Take Ionescu in the debate on the Royal Message at the opening of the parliamentary session 1908-9.³ He advocated different regimes for proven and non-proven territories, with the former split up into small plots of 15 to 20 hectares and concessioned by public adjudication against royalty payments, and the latter reserved for Romanian capital and technicians: in this way the state lands would attract concessionaires and the stagnation would be broken. Viintila Brătianu, then Finance Minister, gave the orthodox Liberal rejoinder, stressing that the State should explore and then provide openings for "Romanian capital, Romanian intelligence, and Romanian labour".

¹ At the time the State domain included 5,750 hectares of proven lands and 82,000 hectares of non-proven lands.

² *MPR*, no. 35 (1905), pp. 985-90.

³ *MPR*, no. 36 (1908), pp. 1337-8.

The implications of this brief statement were formally developed in the Law for the Exploitation of State Lands passed on 5-6 April 1909.¹ This authorized the Ministry of Industry and Commerce² to determine which territory on state lands was to be declared oil-bearing: such territories could be leased for thirty years by public adjudication

according to the following rules: a quarter of the chosen area will be reserved to the State and cannot be conceded except on the basis of a special law: the second quarter will be leased only to companies with Romanian capital, with nominative shares reserved exclusively for Romanian nationals: the third quarter to companies in legal existence at the time of the present law disposing of a paid-up capital of at least 500,000 million; the fourth quarter . . . without distinction among all comers to whoever offers the highest royalties. (Article 1.)

Fusions of companies for exploitation in the same region were forbidden (Article 2). Articles 3 to 8 set out the details of the administration of the concessioning procedure, royalty payments, and drilling obligations.

In the Chamber of Deputies Djuvara claimed that the solution given by the Law was "just, honest, and Romanian" (*soluție dreaptă, cinstită și românească*). In the long term, the Law's significance lay in the last ascription, since it introduced a distinction between Romanian and non-Romanian participants in the oil industry which became fundamental to the country's mining legislation, and which in consequence had important effects on the relationship between the industry and the State. This policy was underpinned by the stipulation on nominative shares. It was a novel feature in that shares in Romania were traditionally "to bearer": *nominative* shares, registered with the company in the name of the owner, made it possible to ensure that the capital stayed in Romanian hands. Citizenship thus became a criterion of ownership. It was maintained through subsequent formal changes—when, for example, as early as 1911, Liberal policy abandoned concessions to individuals as a technique of exploration, in favour of joint ventures between the State and private individuals, with

¹ *MPR*, no. 9 (1909), pp. 313-18 (Djuvara's statement); *MPR*, no. 10 (1909), pp. 355-60: details summarized *MPR*, no. 11 (1909), pp. 391-5.

² Industry and Commerce was separated from its former departmental association with Domains and Agriculture in 1908.

the former contributing lands and some capital, and the latter, the remainder of the capital and day-to-day management.¹

The Romanian State's right to decide the terms on which its own property was to be exploited was uncontested, however restrictive they might be. At this time, however, the State's domain, though extensive and comprising areas most favourably situated for working, was by no means all the land available for oil exploration. It was nearly twenty years before this trend was worked out to the point where all lands not already in private ownership became state lands.²

The demand for a "national" industry

The foregoing analysis of the industry demonstrates that, even in the heyday of international private capital transactions, foreign capital enjoyed no privileged position or even the possibility of unhindered operation: there was in Romania no counter-part of the ex-territorial rights enjoyed by foreign nationals investing in other countries lacking the means to develop their own resources, as, for example, Turkey. The State was able to impose its own legal and technical requirements in matters both of principle—as over the exploitation of its own territories—and of detail, as over, for example, the setting up of companies.³

The Conservatives were in general satisfied with the state of affairs: they took the view that under proper safeguards on state-owned land, and subject to Romanian law, exploration and exploitation should be open to all comers: Romanian capital should be encouraged to participate, but foreign capital should be invited on equal terms, from no matter what source. This reflected not so much enlightened internationalist opinion as a deep commitment to Romanian agriculture. The general assumptions on which the foreign investments were made, however, remained anathema to

¹ See exchanges in the Senate between Carp and Ionel Brătianu, in *MPR*, no. 35 (1911), pp. 1356-7.

² See below, pp. 112 et seq.

³ Pleyre wrote to his principals, Geconsolideerde Hollandsche Petroleum Compagnie, on 22 Jan. 1907: "Permission must be requested from the Ministry of Domains to set up a second registered office of the Company in Bucharest. The application must be accompanied by: (1) a sworn translation of the Memorandum of Association and the Articles of Association . . . (2) A power of attorney for the Representative . . . In the Application with which these documents are sent the Representative also states that he submits to Romanian law." ⁴

important sections of Romanian opinion, made politically articulate by the Liberal party. The advocates of "Romania for the Romanians"¹ regarded the "foreign capital" companies as, by definition, inimical to Romanian interests, but until the retirement of Sturdza from public life at the end of 1909 the cry remained a slogan without a programme, and its ultimately xenophobic implications were not worked out. This task was taken up by Sturdza's successors, the younger members of the Brătianu dynasty, Ionel and Vintila. The latter, when Mayor of Bucharest, first announced his ideas for the "nationalization" of the oil industry to an international audience at the World Oil Congress held in Bucharest in 1907.² These were designed to rectify "the weak not to say utterly insufficient participation of the national element in all its forms in an industry we call national" and rested on two general arguments, namely that Romania was sufficiently advanced technically to be able to stand on its own feet, and that its oil resources should not be monopolized by foreigners (Standard Oil) or, as exports, suffer through market policies not in accordance with Romanian interests (the failure of E.P.U. against Standard Oil in Germany).³ These arguments were embedded in the received Liberal version of Romanian petroleum developments since the state lands crisis of 1900. The remedy lay in state action "reserving the greatest possible part in oil exploitation to the national element", whether in capital or labour, by, for example, the creation of an industrial credit bank and protection of small producers through state-owned means of transport and storage, and the work of the State Geological Institute. The basis of royalty payments to small landowners should be changed to allow them progressively to participate in the wealth created by the output of wells on their land. The State should act powerfully before it was too late: otherwise "it will be difficult to struggle with the unequal arms we possess".

Vintila Brătianu's analysis was inadequate: in 1907 the training of Romanian technologists and technicians had not advanced

¹ Sturdza in a speech at Prahova, June 1904 (see above, p. 30). "Romania for Romanians" was also anti-Semitic and anti-Hungarian, i.e. it implied a definition of nationality as a test of citizenship, excluding some who lived under the jurisdiction of the Romanian State and including some who did not. The grievances of the Romanians in Transylvania became an official part of Liberal policy after a speech by Sturdza in the Senate on 9 Dec. 1892.

² *MPR*, no. 38 (1907), pp. 1037-41, 1069-72.

³ See above, p. 43.

sufficiently to support the scale of operations throughout the industry which his programme envisaged: the State had already provided against a foreign monopoly, and it could not command success in export markets, such as Germany, which were freely open to other sources of supply.¹ His reference to "unequal arms" curiously underestimated the already proven effect of state power through legislation and existing state institutions such as the C.F.R.

Four years later Vintila Brătianu (by this time Director of the National Bank) rehearsed these arguments in greater detail in a book written jointly with Constantin Hălăceanu, *Politica de stat în industria petrolului*.² The conclusions were similarly developed into a worked-out programme of state action, designed to determine the conditions for the immediate future of the industry and to promote national initiative. Measures under the first heading were those which the State as legislator could take at any time to protect the general interest and comprised (i) centralized control of all transport and storage; (ii) the completion of Constanta, and (iii) the construction of the main pipelines; (iv) and (v) limitation when necessary of all refining capacity to the level of the internal consumption of kerosine (to protect the small and medium refineries) with an eventual state monopoly of kerosine sales; (vi) a programme of prospecting organized by the State to establish the existence of oil deposits even on private properties; (vii) a cadastral survey of private properties in the oil area and the determination of minimum joint perimeters for exploitation; (viii) legislation to encourage industry and detailed regulations on administration making the widest possible use of the national element; (ix) the creation of an industrial credit bank, with Romanian capital, to finance installations, production, and the exploitation of lands found to be oil-bearing; (x) the development of professional and technical training; (xi) safeguarding the independence of Romanian exploitation from the influence of foreign control—though leaving open a possibility of co-operation with foreign groups for export sales.

Ideas for the promotion of national initiative aimed at the more distant future and envisaged the entry of Romanian capital into

¹ The Romanian Ambassador in Berlin argued Brătianu's case with greater relevance in 1934 at the time of exchange restrictions and import quotas: see below, p. 196 n. 1.

² Bucharest, 1911.

oil, above all in exploration, through the action of the State and through replacing the existing organizations. This was a matter of uniting the diverse interests of Romanians with those of the State, and of some of the foreigners who had already invested capital, as follows: state lands were to be reserved exclusively for Romanian capital, as a basis for a National Oil Company for exploration and production, which would collaborate in refining and marketing with some of the existing organizations. The State would contribute to the National Oil Company its own oil-lands and those bought back from companies wishing to participate in the venture. Romanian capital would be responsible for all installations and for future investment. This solution implied exclusively Romanian partners in the national concern: in fact, association of the State with foreign capital would be forbidden "for superior reasons" and because such a collaboration could be disguised as a concession, "which would exacerbate the abnormal situation in which we find ourselves today". This objection did not hold for refining, where collaboration between Romanian and the existing foreign capital—possibly involving the National Oil Company—would be permitted. As regards marketing, the only problem remaining in the internal market was one of organization: exports could continue as before, with participation in foreign sales organizations, or by direct selling, where eventually the interests of Romanian and foreign capital together would be "in a privileged situation". Collaboration between the three branches should be assured to attain the common end. The successive participation of the National Oil Company (for exploitation) in the two other spheres (manufacturing and selling) would form the bond of interest and the "happiest" means whereby the three could be transformed into a single unit. As the final result was due in the first instance to the selling price, a solution could certainly be found which, based on that price, allowed a profit margin to be allocated to each enterprise.

Brătianu and Hălăceanu concluded their exposition by referring to foreign capital already in Romanian oil, whose readiness to co-operate in the envisaged organization was held to be as necessary to the realization of the programme as action by the Romanian State, but their peroration restated the nationalist theme: the State would have to show more perseverance and concern itself in greater detail in all economic matters; "we should strive to

convince Romanian capital and labour that their national and economic role is overwhelming and that, at the same time as [they earn] a brilliant return for their risks and their efforts, they will assist in the best possible way the work of economic emancipation for which we all strive".

Politica de stat în industria petrolului was a manifesto of economic nationalism in relation to oil resources. Some of its proposals, e.g. the pipeline and Constanța construction schemes (neither completed at the time), merely fitted particular technical necessities into a nationalist context and showed that they assisted towards "economic emancipation": others referred to developments such as the seaboard refineries, which never got beyond discussion. The novel feature was the emphasis on national ownership of raw materials, i.e. that they belonged to Romania whether they were exploited or not. Hence the concern in the first instance, for a National Oil Company for *exploration*. In this field, state power was to be exercised against foreigners not because, for example, they had infringed some law or other, but because they were foreign. Refinery and marketing could admit foreign capital under strictly controlled conditions: even here the Romanian voice, either state or private, would be decisive. The continued references to "part of" the existing foreign capital, and the unworked-out hints about the rationalization of various interests quoted above, seem to indicate the authors' willingness to come to terms with Germany (where in 1911 the agitation for a state kerosine monopoly was at its height) over joint working in parts of the Romanian industry in return for a guaranteed market—the "privileged situation" referred to at the end of the proposals for the future. Otherwise, Romanian oil was to be reserved for Romanians.

The arguments to this conclusion derived from an inaccurate interpretation of what Standard Oil had or had not tried to do in Romania, but Vintila Brătianu had already shown himself beyond reasoned discussion on this point. A more serious flaw was that they envisaged state action to realize a particular source of national wealth, the precise value of which at any given time depended on market factors which Romania could not control. Liberal opinion overestimated the importance of Romanian oil to the international oil trade. The failure of the attack by the Europäische Petroleum Union on the position of Standard Oil in Germany demonstrated

that Romania was not a vital but merely a useful source of supply.¹ The agitation for a state monopoly also failed, and the guaranteed market did not materialize. By 1912 the Deutsche Bank was already seeking to sell its assets in Romania. Further, the increase in demand for gasoline and kerosine in Central and Western Europe was being met by production from the Netherlands East Indies and the United States rather than from Romania.

The programme implied political as well as economic results. State control of the industry would strengthen the Liberal interest: the manoeuvres over the National Bank and other "patriotic undertakings" suggested that the industrial credit bank would be similarly manipulated for party ends. Moreover, the apparatus of state control would not only create jobs but, by the same token, multiply the number of Liberal Party dependants. This in fact happened. The next year, 1912, the Brătianus founded the "industrial credit bank", the Banca Românească, whose operations became the mainspring in carrying through after the First World War the rest of the nationalization programme which, among other things, provided jobs for Liberal engineers and bureaucrats.

There is no evidence that these implications of *Politica de stat în industria petrolului* were widely discussed by the foreign capitalists² whose interests were threatened, though they reacted *ad hoc* on issues raised in the book such as the obligation to employ Romanian labour.³ Foreign opinion noted that Romania's need of foreign capital was greater than the latter's need of Romania. This was, in 1911, correct, but did not remain so. Further, this reaction discounted the nationalist overtones in the programme. Seen from Bucharest, the oil industry not only offered a source of wealth and employment but symbolized Romania's emergence from tutelage and her aspirations to be a European power. It was noteworthy that the advocates of a rigorous interventionist state policy for oil were also those who promoted most vehemently the idea of *România Mare* ('Greater Romania') in which all Romanians should be united.⁴

¹ As it was, similarly, in the period prior to the Second World War: see below, p. 218.

² The book appears not to have been translated into French or German (the usual languages for works of this kind): summaries and excerpts appear in *MPR*, no. 32 (1911), pp. 1210-12; no. 34, pp. 1290-2; no. 35, pp. 1338-43.

³ Henri Deterding of Royal Dutch-Shell and Vintila Brătianu quarrelled on this issue in 1909: see 5, also below, p. 78.

⁴ This applied especially to Hungary, since the recovery of Bessarabia

Before the First World War these ideas¹ in Romania were confined to a small number of politicians, grouped around the two Brătianus; this in itself did not ensure that they would be carried out. The necessary opportunity was provided by the war itself, which enabled the nationalist programme in all its aspects to be realized.² For this reason the outbreak of the war provides a convenient juncture for a résumé of the industry as it had developed under the regime of foreign capital.

Total investment excluding the state contribution in the form of, for example, tank cars owned by the C.F.R. had reached Fr. fr. 440 million:³ of this sum the individual contributions by nationality were as follows:

Germany/Austria-Hungary	31%
Great Britain	21%
Netherlands	20%
France/Belgium	14%
U.S.A.	7%
Romania	5%
Italy/Switzerland	2%

In terms of enterprises, German and Austrian capital financed 27 per cent of production⁴ and 36 per cent of refining, Dutch

could only result from a dispute, possibly war, with Russia—as distinct from encouraging Vienna to exert pressure on Budapest. Further, Russian rule in the province (unlike Hungarian rule in Transylvania) involved no religious conflict, and did not permit the existence of national schools to be the focus of nationalist agitation and to train emergent leaders. There were signs as early as 1898 that Romania was prepared to “write off” Bessarabia: see Trotter’s (*chargé d’affaires*, Bucharest) report, no. 47, 9 Aug. 1898, on the significance of King Carol’s visit to St. Petersburg; and Kennedy’s (minister’s) dispatch on conversation with Sturdza, no. 53, 14 Sept. 1898: *FO Series 104*, vol. no. 136. On the subsequent developments in irredentist agitation, see R. W. Seton-Watson, *History*, Chap. XIII.

¹ Brătianu and Hăliceanu’s study is additionally important outside the Romanian context, as being the first discussion of nationalist policies for the development of oil resources, which have since found a response in, e.g., Mexico, Iran, Iraq, and Indonesia, and have come to be argued in oil-consuming as well as oil-producing countries, in consequence of the greater involvement of government in all oil matters since 1911. The terms of the argument have become much more intricate but the basic attitudes and themes can be identified. See, e.g., J. E. Hartshorn, *Oil Companies and Governments*.

² See below, pp. 105–11.

³ End-1913 figure: *MPPR*, no. 3 (1914), pp. 116 and 118.

⁴ 1913 figures: “refining” = % of 1913 total crude-oil runs, not theoretically available capacity.

capital 31 per cent and 29 per cent, French and Belgian capital 16 per cent and 12 per cent, British capital 5 per cent and 2 per cent, and U.S. 18 per cent and 17 per cent. In peacetime these participations merely indicated the predominant voice in management, the country of origin of some of its personnel, and the likely source of new capital. During the war, however, they took on a more direct political significance.¹

Production in the first half of 1914 was running at a rate of 146,148 tons a month and was recovering from the drilling setbacks experienced during the two Balkan Wars of 1912 and 1913. New fields were developed at Bana-Moreni (Astra Română and Romanian Consolidated Oilfields) and Tuicani (Steaua Română), both in Prahova; Fierbătorii (Romano Americana and Romanian Consolidated Oilfields) in Băicoi, and Ochiuri in Dâmbovița (Astra Română); exploration drilling at Ceptura, Valea Telegii, and Cricov showed positive results. Exports, likewise, averaged 80,604 tons a month and internal consumption 68,662: i.e. the stocks accumulated during 1913 were being liquidated. The course of the export trade had established the following pattern by destinations (1913):

Country	Quantity
U.K.	232,800
France	151,402
Germany	126,295
Egypt	121,642
Italy	118,643
Austria-Hungary	77,184
Turkey	64,682
Others	143,798
	<hr/> 1,036,446

The value of these exports to Romania was 100,773,850 lei, or 15 per cent of the total receipts from exports.

¹ See below, p. 72.