

## CHAPTER 8



# The Bankruptcy and Legacy of the Motorways

## The Bankruptcy of the Concessionaires

We have seen how the fundamental characteristics of the Italian motorway between the two wars were the inconsistency of the different initiatives and the weakness of any evaluation of the economic and functional opportunities of the projects. The financial plans that formed the basis for founding the limited companies for construction and management were drafted—perhaps with the exception of the Turin–Milan—in an amateurish way, when they were not intentionally distorted. The vehicle traffic and income linked to ancillary services (sale of fuel, oil, etc.) were optimistically estimated, as was the revenue for the advertising concessions. Conversely, the expenses of operation and maintenance were underestimated; the amortization figures were tenuous.

Francesco Aimone Jelmoni—who in the postwar period lionized Puricelli, as alluded to in the introduction—offers us a cross-section of the entrepreneurial improvisation that surrounded the Italian motorways. Regarding the Milan–Lakes, the rapidity of the negotiations conducted by the TCI and Puricelli to define the convention with the government prevented the participants from “establishing a company to properly and completely calculate the estimated financial balance, with the provision of a well-studied and well-meditated financial plan. We are not aware that anyone thought to do so, because in truth, no one spoke of it. Even Vandone [TCI representative], when he mentioned a ‘financial perspective,’ . . . judging it ‘seriously plausible,’ used the incorrect expression, because he dealt with, in reality, a simple estimation of construction expenses and not a real and proper financial plan.”<sup>1</sup>

The enthusiasm of the early days, the political connections, and the need for propaganda fuel guaranteed that approximate estimations, with little depth and excessive optimism, would continue. The raising of capital was long, troubled, and insufficient, and the management of the finished project was certainly not easy. Additionally, “there was a deficiency of the automobile fleet in the regions of Milan and the north-east. The ‘ingenious idea of roads for automobiles’ became a reality, but

too early. They undoubtedly constituted an excellent service offered to motoring: it was just that the service lacked users."<sup>2</sup> The income from ancillary services was also much less than had been written, rather carelessly, in the construction programs, making balance deficits so inevitable. The motorway companies in all the best-known cases—again with the exception of the Turin–Milan—lacked caution in their business, and in the case of the Florence–Sea witnessed the involvement of well-known gangsters in management.<sup>3</sup> Their contemporaries in the political system knew about this phenomenon: in 1931 the Ministry of Public Works alerted Mussolini to the fact that while inspecting “various companies operating motorways, notable deficiencies in their administration and bookkeeping have been observed.”<sup>4</sup>

In this already-troubled panorama, the effects of the 1929 crisis were a mortal blow for the concessionaires and more generally for the idea of the motorway. Motor traffic became more generally rare and the motorways, which charged a toll, saw a further contraction of use. The term “motorway” itself became overused, to such an extent that the Genoa–Serravalle, as mentioned, preferred to use the term “truckway.” In 1935, when engineers Barbieri and Simoncini proposed a new connection between Rome and Naples, they spoke of a “direct road,” rather than a motorway, even though there was no difference.<sup>5</sup>

Finally, in 1932, we should note Suardo’s resignation as commissioner of the Pedemontana, due to the evident impossibility of achieving the project scope. In a letter in April 1932, Suardo confirmed that the very low financial balance prevented the completion of the works, suggesting that the task of promoting and launching motorway programs would have found a better seat in the Ministry of Public Works.<sup>6</sup> The decree in which the resignation was accepted was more direct and more substantial, confirming that “the mandate has been absolved and, further, the construction of other trunks of the motorway indicated above have been postponed, beyond those approved and already constructed or in the course of construction.”<sup>7</sup>

With the Genoa–Serravalle truckway’s works in 1932, the first stage of motorway construction in Italy closed, but the problems of the concessionaires remained open. The accumulated deficits caused the companies to neglect the maintenance of the motorway; in the hope of creating an increase in income, the tolls remained high, leading to the only logical consequence of a further reduction in traffic. The financial deficits made the remuneration of the companies’ capital and the reimbursement of the state quota almost impossible, and soon the payment of bonds became difficult, causing problems for those local authorities that had acted as guarantors.

In few words, the house of cards of the motorway and its self-financing with tolls had collapsed upon itself, and the motives of propaganda and prestige had boomeranged back onto the government. The Fascist regime, in order to avoid financial scandals, found itself taking on the management of the motorways. Puricelli became aware of the paradoxical situation that had come about and played the “buyback” card for the Milan–Lakes, appealing directly, as was his habit, to Mussolini. Pressured by the parallel problems that his major company found itself in and by the rumors of a possible collapse, the Milanese entrepreneur did not deny the general situation of crisis, but stated that “these kinds of rumors try to base themselves on the outward appearance of the balance of my company that shows rather relevant debts, but these are until now the necessary fruit of a system of payment by the public authorities (state, provinces, municipalities) that, due to their extended form (annuities) and the procedure of payments, require, in relation to the mass of work executed, a high financial overdraft.”<sup>8</sup>

In an attempt to work out his problems, Puricelli complained that around 60 million lire (USD 65 million today) of his capital was immobilized in motorway shares and explicitly requested a government buyback. Mussolini’s answer is not found in the archives, but in February 1933 Puricelli wrote him a letter of thanks for the government decision to take on the Milan–Lakes: “Duce, the measures for the motorway bring a notable financial relief to the company that I preside over and to which I have linked my name. The assurance of the triennial program of work reassures me completely about tomorrow.”<sup>9</sup>

The effective passage to the state of the Milan–Lakes concessionaire was finalized in September 1933 and the motorway became the responsibility of AASS, which needed to conduct a “substantial reorganization, because the concessionaire company, completely depleted, had abandoned any type of maintenance work, both of the surface and of the road structures.”<sup>10</sup> It should also be noted that AASS demonstrated an entrepreneurial capacity superior to that of the private actors. In fact, AASS first invested significant resources in the improvement of the general conditions of the motorway and then reduced the tolls. In this way—aided by the more favorable motor vehicle traffic flows of the late 1930s—the average daily transit of vehicles rose to the record total of two thousand in 1938.<sup>11</sup>

As we will see, the problems of Puricelli’s company, far from being over, had only just begun. However, equally interesting is the way in which the buyback of the Milan–Lakes created a precedent that would be used a few years later by the other concessionaires. The government was in fact forced to buy the other concessionaires, consequently

managing three-quarters of the national network. In 1938, the Bergamo–Milan passed to the control of AASS: in eleven years of activity, it had never paid dividends, and it had not even been able to cover all its financial obligations, requiring the public guarantors to pay the bond interest. The traffic in 1938, around 730 vehicles per day on average, was totally insufficient to cover the management expenses. The traffic on the Bergamo–Brescia was even more limited: in a year like 1938, which was a “good” year for motor traffic, it was able to count just 540 vehicles per day, and also ended up in the hands of AASS.<sup>12</sup> The last in the series was the Florence–Sea. Not even this motorway, despite its significant length of over 90 kilometers, saw more than a thousand vehicles daily, and it had a balance in the red from the first operation. It underwent state buyback in the middle of the World War, in April 1941.

The progressive passage of the motorway network into the hands of the state could have become a moment to rethink the activity in the roads sector and formulate more systemic management methods. In the late 1930s, it was confirmed that the private actors were not able to manage the motorways at the time and that the state was the only actor on the scene able to guarantee operation; there was no lack of people who wanted to carry this process to its logical extreme. They wished for total public control of the motorways, and, once this was achieved, the abolition of tolls, which the AASS had continued after the buyback. In February of 1940, Bruno Bolis offered his interpretation of this proposal in the TCI’s journal, with supporting evidence showing that doing away with tolls would not undermine motoring taxation in any way.

The nationalization of the Italian motorway is going ahead, as it rightly should. A further step forward should, however, be taken, and in these pages we allow ourselves to hope for it, as soon as the general political and economic conditions have changed, the currents of international tourism are reinvigorated, and domestic motoring can reach greater dimensions. This further step is the abolition of tolls. In the face of the enormous fiscal proceeds coming from motor vehicles (around 2 billion lire annually [USD 1.5 billion today]), the tolls (around 20 million lire annually [USD 15 million]) represent a negligible pittance, but a pittance that has the effect of demoralizing those who collect it and hindering those who pay it.<sup>13</sup>

AASS’s balance problem was the decisive element in keeping the tolls and the decision to buy back the concessionaires only where the situation was completely out of control. Three motorways remained in private hands: the Padua–Venice, the Naples–Pompeii, and the Turin–Milan.

The Padua–Venice had modest traffic, never more than six hundred vehicles a day: “the briefness of the motorway—25 kilometers long—sheltered the operating society from overly serious deficits that could not be covered at a regional level.”<sup>14</sup> In other words, the constant intervention of the local authorities to pay off the deficits—which we can easily imagine was due to prefect and government pressure—prevented collapse.

The Naples–Pompeii also remained in private hands due to several favorable factors. The high tolls, double the already considerable ones of the Milan–Lakes, were compounded by the disastrous conditions of the ordinary roads, which guaranteed conditions of low traffic—never more than nine hundred vehicles a day, but with a high remuneration. The concessionaire also benefitted from particularly propitious conditions for the concession, unique in the Italian panorama.<sup>15</sup>

The third and last concession to remain in private hands was the Turin–Milan: in chapter 6 we outlined the entrepreneurial strategies and the creative accounting that allowed the company, firmly in the hands of Fiat, to benefit from solid overall management, even if it did not show a positive balance.

### **. . . and the Collapse of the Puricelli Empire**

In addition to the concessionaire societies of the Italian motorways, Piero Puricelli’s businesses were being dragged into a financial crisis and a vortex of deficits, which would place them into the hands of the IRI, their biggest creditor (Istituto per la Ricostruzione Industriale [Institute for Industrial Reconstruction], the government-owned industrial company founded after the 1929 crisis).

Puricelli, already the owner of an impressive family business, had benefited from wartime supply contracts during World War I, leading to a series of initiatives before and after the war that helped him assume an increasingly large role in the roads sector. In 1914 the family business became a limited company—with the foundation of *Puricelli strade e cave* (Puricelli limited company for roads and quarries). His business affairs with Giacomo Tedeschi allowed him, at the start of the 1920s, in agreement with the Banca Commerciale Italiana, “to proceed toward a horizontal extension of the group, via the constitution of individual companies for specific works.”<sup>16</sup> In 1927, to give his assets some coherence, and aiming to obtain a national concession for the ordinary roads renewal, he established the holding *Industrie riunite della strada Puricelli* (IRSP), which regrouped the companies that had been created, with

the exception of the limited company Puricelli roads and quarries.<sup>17</sup> The failure to be awarded the ordinary roads control made it necessary to review his moves, and to (dramatically) rethink his role in the Italian market. In March 1929, he was set on unifying all the Puricelli businesses, including Puricelli roads and quarries, into one large company, with control entirely in his hands, while Banca Commerciale left the business. In order to finance this new holding,

most of the shares of the new [Puricelli] company should have been distributed, and at higher prices, among the general public, through a dedicated syndication. The operation did not have a good outcome, as, just a bit later, the Italian market felt the effects of the New York stock market collapse. As Olindo Malagodi [a top-ranked IRI officer] wrote, significantly, on 6 May 1933 to the directors of Sofindit [the Società finanziaria industriale italiana, a financial company owned by the Italian state] "Puricelli represents the typical case of postwar inflated growth until the breakout of the crisis in autumn 1929. Inflation due to the development of the company, disproportionate to the rest of the country, and due to its financial constitution . . . As for the inflation of its financial structure, it was conceptualized and devised with the scope of immediate speculation in the over-the-counter market, which was crushed by the sudden crisis; so, in spring 1929, it was the result of a fusion of a group of companies each of which perhaps already suffered from inflationary excess, aggravated by the new company."<sup>18</sup>

This unbalanced situation ("inflation" in the words of Malagodi) was likewise an effect of Puricelli's careless attitude toward management and reckless business behaviors, but there were also more structural issues, namely, the particular mode of payment of the works by the public authorities, which were annual payments extended over decades. This diluted form of payment, in theory "could have been discounted and been circulated (as cash) for the life of the company."<sup>19</sup> Puricelli found himself with a huge quantity of annual credits to resell to the bank system, but in a financial market that was not interested in the operation, or that put a high cost on it. Those extra costs created a long-lasting financial imbalance, and thus lack of cash, which the company responded to with short-term banking loans with naturally high interest rates, thus necessitating more loans. Once trapped in the spiral, Puricelli had the (incongruous) hope of covering the balance deficits with the assumption of additional public works; the latter, also naturally being paid in deferred annuities, did nothing but hasten the collapse.

It is not surprising then that in 1932, the Puricelli company had an impressive debt of almost 400 million (more or less the same in

USD today) exactly at the moment the 1929 crisis changed the Italian financial landscape. The subsequent reorganization of the bank and industrial systems forced Banca Commerciale to hand over its credits in Puricelli's favor to the IRI in 1933. Puricelli (who in the face of the failure of his company had an unconcerned attitude, coupled with unconfined optimism) again believed the solution could be a new loan, in addition to the buyback of the Bergamo–Milan motorway. The bank system did not intervene, partly because the company belonging to "Puricelli now seemed like a summary of the errors of mixed banking: chronic financial weakness, a distortion of the financial dealings, insufficient circulating capital, significant managerial disorganization."<sup>20</sup>

An initial depreciation of equity in 1934 was not sufficient. Meanwhile, Puricelli and Beneduce, president of the IRI, engaged in figurative arm wrestling. The final result favored the latter, who proposed that the ownership and the management of the society should pass from Puricelli to the IRI, leaving the Milanese entrepreneur as president, but without power; he achieved this in 1935. Puricelli nonetheless managed to net himself an astonishingly high golden handshake of 42 million (again equivalent to USD today) and the right to a future buyback. According to the reconstruction of events proposed by De Ianni, the entrance of the IRI does not follow from the logic of "socializing the losses and privatizing the profits," as in Bortolotti's interpretation.<sup>21</sup> Rather, within a few years, and surely by 1940, Puricelli's company had been taken from the restless (and amateurish) hands of its founder and strengthened by the support of the IRI, had achieved a strong reduction of debts, and had shown itself to be a good investment for the institute guided by Beneduce. This was also the consequence of the massive investments in road construction committed in Ethiopia and Somalia by the Italian government, as Puricelli's (former) enterprises were the main contractors for that colossal business.<sup>22</sup>

For his part, in March 1940, Puricelli, caught between new debts of every origin and kind (above all personal), was able (perhaps thanks to Mussolini's intervention) to gain another out-of-scale 25 million (about USD 20 million today) as compensation for renouncing his buyback option, which was by now completely hypothetical.<sup>23</sup> The Milanese entrepreneur at this point also ceded the presidency of the society, which in August of the same year changed its name to Italstrade. In abandoning the society, Puricelli prepared a memo on his past activities and sent it in April 1940 to Donato Menichella, director general of the IRI, and then to Mussolini in May of the same year, claiming the worth of his entrepreneurial activities.<sup>24</sup> However, as we shall see in the next section, this was not his last intervention in the roads sector.

## The “Victorious” Postwar Programs

The Rome–Berlin motorway had by now been shelved on the precise indications of Mussolini, but between 1939 and 1942, up to the eve of the Fascist regime’s collapse, Italy continued to discuss and plan motorways. In spring 1939, the ministry of public works sent the prime minister a program of works for AASS planned for the decade from 1938 to 1948, to be carried out with total financing of a billion lire (about USD 800 million today). The program entailed 2,000 kilometers of provincial roads to pass to the state, and dust elimination on 3,000 kilometers of state roads. It also included a motorway program, which had little connection to the 1934 AASS scheme and was focused entirely on northern Italy. In this new program, the ministry proposed prioritizing the Piacenza–Rimini motorway, 256 kilometers in length, for a cost of around 500 million. The Pedemontana would be completed in a second phase and only along the section from Venice to Trieste; a third phase included the construction of the Milan–Piacenza and eventually, in a fourth phase, the Rimini–Venice.<sup>25</sup>

But the next year, AASS established a new “survey office, which, for several of the future motorways, implemented a site inspection, to create preliminary drafts of projects and also some master plans.”<sup>26</sup> The planning suddenly took new directions, and according to AASS director Giuseppe Pini, the 1940 scheme involved the following motorways:

- Savona–Genoa: aero-photogrammetric survey and master plan;
- Genoa–Spezia: site inspection and preliminary draft;
- Pisa–Livorno: master plan;
- Rome–Bologna: preliminary draft for the Rome–Viterbo tract; master plan for the Viterbo–Siena tract; aero-photogrammetric survey for the Siena–Florence tract; site inspection and preliminary draft between Florence and Bologna;
- Rome–Naples: preliminary draft project;
- Naples–Bari: master plan between Naples and Nocera and between Bari and Rocchetta S. Antonio; preliminary draft plan in the intermediary tract.<sup>27</sup>

The list shows how the projects were concentrated, if confusedly, around central and southern Italy, assigning Rome the role of a central node, perhaps in the frenzy of excitement about the Rome 1942 World’s Fair, held to celebrate the twenty-year anniversary of the seizure of power by Mussolini. The idea of a motorway axis from Naples to Bologna, which would pass through the capital, was part of this last-



minute scheme. It goes without saying that the state's authority in the motorway field was by now past discussion, both because of the centralization of functions, even more evident during the World War, and because there were no longer private bodies interested in financing new construction. The logical consequence was a proposal—resurfacing in 1942—from the Ministry of Public Works to create a “state-controlled agency for the study and creation of a motorway network.” Mussolini himself was an adherent of the idea, but he postponed any decision until the end of the conflict. Meanwhile Puricelli—who evidently was still active in the roads sector, or at least had ambitions—wrote a letter to the prime minister suggesting the immediate constitution of such an entity so that the studies could be conducted immediately and used to combat unemployment at the end of the war.<sup>28</sup>

The political motives were accentuated, before the war, by the overtly imperialist implications. This was the case of the network of trans-African roads presented in 1938 and revisited in 1942 among the Italian colonial milieu.<sup>29</sup> But even the Venice–Trieste motorway, to limit ourselves to Europe, had expansionist elements. Back in 1928, the limited company Autovie had been established in Trieste with the aim of promoting the construction of the Venice–Trieste trunk, with an extension to Fiume, in Istria, within the Pedemontana project. Despite the end of motorway activities during the 1930s, Autovie not only remained alive, though without finding financial resources, but it also demonstrated an irresistible activism. In 1933, while all the Italian motorway programs were being postponed to better times, Autovie prepared a memo in which the Pedemontana was rebaptized “Via Mussolinia” with a route that led to the imperial borders of the “Augustian Regions of Italy.”<sup>30</sup> The request to present the project personally to the head of the government was rejected, while the prime minister wearily sent the plan to the Ministry of Public Works. In March 1935, there was more news about Autovie, which was able to reach the TCI's journal and published a brief article on the “progress” of the Venice–Trieste planning, which had “by now completed its master plan for the project.”<sup>31</sup> A few years later, as reported in another memo from the Ministry of Public Works, the restless Autovie went beyond the simple scheme of the Venice–Trieste leg, and, making a fool of itself, suggested self-appointing the (inactive) Trieste company as a “national entity for motorways.” In a confusing and slapdash list, Autovie suggested a multiyear plan, to be carried out with public resources.<sup>32</sup>

The plan was proposed again, without outcome, in 1940 and 1941. Unshakeable, the directors of the Trieste company returned to the charge in February 1942, explicitly advancing the Venice–Trieste motor-

way as a potential instrument of military, political, and commercial penetration in eastern Europe and the Balkans. The Venice–Trieste would be a trampoline to launch the greater influence of “imperial” Italy, above all toward Croatia and Hungary, countries to which subsequent branches of the network would be directed. The example was the German *Autobahnen*, which were regarded with admiration and reverential awe. “The development that is now happening in Germany to construct great motorways, with flows toward the various frontiers, toward their own ports and to foreign ones, has already led to the planning, and in several cases the start of works, of new arteries, in Denmark, in Holland, in Belgium, and in France, for an outlet to the sea, connecting with the networks of the Reich.”<sup>33</sup> In other words, Italy must not be cut out of the new channels of traffic. With this aim “the memo is finished with a diagram of the German, Danish, Dutch, Belgian, and French motorways; as well as with a sketch of the Italian ones, which must first be constructed, with the objective of participating in the major European traffic, after this war.”<sup>34</sup>

### **“Better Living through Better Roads”: The Motorways of the Economic Miracle**

World War II and the end of fascism dissolved the fanciful motorway projects under discussion at the start of the conflict, and the proposal of a national entity vanished from the scene. The Italian motorways remained as they were built in the 1920s and the early 1930s. Due to the heavy destruction experienced, in the immediate postwar period Italy found itself with a collapsed railway system: in 1949, for the first time, the volume of goods being transported by motor vehicle was more than that by rail, thanks in part to the numerous trucks abandoned in Italy by the Anglo-Americans as war remnants.<sup>35</sup> From then on, the politics of national transport was oriented decisively toward making the roads adequate—and particularly to the construction of motorways—even at the expense of other forms of transport.<sup>36</sup>

After World War II, the construction of the motorway network did not go through many of the difficulties that had characterized the tormented life of the projects between the two wars.<sup>37</sup> The contemporary development of mass motorization, the pervasiveness of the model of motorized mobility, and its extraordinary successes were elements that were more than enough to guarantee the success of the national motorway plan, approved by the Italian parliament in 1955 and 1961. This new cycle saw a partial change of the personnel

involved, associated with elements of continuity of management and planning models. The choice—made before the war—to maintain the tolls and, later on, to leave just a few private concessionaires, had many consequences in the second postwar period. The post–World War II motorways were constructed, as in the fascist period, on the basis of agreements between state and private companies: some of these companies, above all in the north, were made up of local authorities, while others were made up of industrial groups, such as Fiat. A large part of the motorway works—including the *Autostrada del Sole* (Motorway of the Sun)—were realized by IRI. The choice of IRI was not coincidental, as it allowed public control of the operation, but it assigned the management to a private company, *Autostrade*, founded for this purpose; the IRI, as will be remembered, was already the owner of *Italstrade*, born from Puricelli roads and quarries, which constituted the perfect planning and managerial center for the work.<sup>38</sup> The IRI finally also controlled part of the national iron and steel industry. Together with Fiat, Agip (another national public company, for hydrocarbon), Pirelli (rubber), and the cement groups, it made up a powerful lobby aimed at creating motorways, with all participants benefitting in different ways.

This implementation system obtained excellent performance: the Italian motorway network went from less than 500 kilometers in 1939 to 1,300 in 1961 (the year in which a second motorway plan was approved), and then to 4,300 kilometers in 1971 and finally to 5,900 kilometers in 1980.<sup>39</sup> In parallel to this construction program, the equally impressive process of mass motorization occurred, with particular development between 1958 and 1973. It is a given that there was a close understanding between the political powers and the economic ones, but such a decisive and intense motorway program can also be read in the light of other factors. In particular, the construction of the motorway assumed, in the larger framework of economic development, a key role. It was favored over other infrastructural sectors because it was considered an irreplaceable element of economic takeoff. This development was supported by the industrial production in the automobile sector, which was diffusing new models and new styles of life, and above all introducing, in a country with such an atavistic hunger for material goods, the idea of consumption, of travel—of which the automobile was the best example for everyone, in an almost totemic way.<sup>40</sup>

The country's exit from poverty was in the name of individual mobility, with drastically modified isochrones, temporal distances, and the shortened geography of the new roads: the motorway, more than favoring communication, created it.<sup>41</sup> Ultimately, the ambition to possess cars and the desire for movement was not "the result of a plot manipulated

by capitalists” as much as it was a “pursuit of cultural models and lifestyles widely aspired to.”<sup>42</sup> These, in their turn, were an effect of the popularization of the automobile, which extended through the rest of the twentieth century.

## Notes

1. Francesco Aimone Jelmoni, “Piero Puricelli,” 20–23, 22.
2. *Ibid.*, 23.
3. See Bortolotti and De Luca, *Fascismo e autostrade*, 164.
4. Letter from the Minister for Public Works to the Pcm, dated 3 December 1931, in Acs, Pcm, 1931–33, 7/1-2/4549, *Autostrada Torino–Milano*.
5. See Acs, Pcm, 1934–36, 7/1-2/3587, *Costruzione di una strada direttissima Roma–Littoria–Napoli (Progetto di massima degli ing. Dario Barbieri e ing. Federico Simoncini)*. See also “Per una direttissima stradale Roma–Littoria–Napoli,” *Le vie d’Italia* 9 (1935).
6. See the letter from Giacomo Suardo to the Pcm dated April 1932, with an attachment of a “Scheme of legislative provision regarding the construction and operation of the motorway,” in Acs, Pcm, 1931–33, 7/1-2/5043, *Autostrade–Commissariato governativo per le Autostrade*.
7. Decree of 21 June 1933 from the Prime Minister.
8. Account by Piero Puricelli dated 2 March 1932, in Acs, Spd, Cr, busta 60, *Piero Puricelli*.
9. Letter from Piero Puricelli to Benito Mussolini dated 16 February 1933, in Acs, Spd, Cr, busta 60, *Piero Puricelli*.
10. Da Rios and Rinelli, “Autostrada Milano–Laghi,” 53.
11. See *ibid.*, 53–55, and Mattia, “La costruzione dell’autostrada Milano–Laghi,” 196–197. See also Rocco, “La ‘tassa’ di pedaggio,” 167 and table 3 bis of Rocco’s article.
12. See Giovanni Da Rios and Savino Rinelli, “Autostrada Bergamo–Milano,” in *Le autostrade della prima generazione*, 56–65, here 65; Da Rios and Rinelli, “Autostrada Brescia–Bergamo,” in *Le autostrade della prima generazione*, 80–86, here 86.
13. Bruno Bolis, “Il passaggio allo Stato dell’autostrada Firenze–Mare,” *Le Strade* 2 (1940), 77.
14. See Da Rios and Rinelli, “Autostrada Venezia–Padova,” 119.
15. Da Rios and Rinelli, “Autostrada Napoli–Pompei,” 71.
16. De Ianni, “Vecchi e nuovi documenti sullo ‘Stato industriale,’” 295.
17. The Industrie riunite della strada Puricelli had capital of 55 million, with 50.4 percent in the hands of Puricelli and the remaining with Comit; see De Ianni, “Vecchi e nuovi documenti,” 295, and Annabella Galleni, “Strade, autostrade e fascismo,” 67.
18. Galleni, “Strade, autostrade e fascismo,” 70.
19. De Ianni, “Vecchi e nuovi documenti,” 297.
20. *Ibid.*, 301.
21. *Ibid.*, 292.
22. See Podestà, “Building the Empire, 37–53.

23. See the documents in Acs, Iri, numerazione rossa, busta 527.
24. See Galleni, "Strade, autostrade e fascismo," 51 et seq. The report sent to Menichella can be found in Acs, Iri, numerazione rossa, busta 527; the one sent to Mussolini is in Acs, Spd, Cr, busta 60.
25. See the letter from the Minister of Public Works to the Pcm, dated 8 March 1939, in Acs, Pcm, 1937–39, 7/1-2/6695, *Azienda autonoma statale della Strada—Piano di finanziamento per l'esecuzione delle opere del programma tecnico da attuarsi nel 2° decennio*.
26. Giuseppe Pini, "Piano regolatore delle autostrade italiane," 156.
27. Ibid. Part of the planning work was entrusted to the Italstrade company, still Puricelli: see Lucillo Ornati, "Lo 'Studio Tecnico Puricelli', l'Italstrade e la SPEA," in *Le autostrade della prima generazione* (Milano: Spa per l'Autostrada Serravalle–Milano–Ponte Chiasso, 1984), 170–177, here 176.
28. See the letter from Piero Puricelli to Benito Mussolini dated 26 May 1942, in Acs, Spd, Cr, busta 60, *Piero Puricelli*.
29. See Bortolotti, "Italia, Europa e oltre," 160, 161.
30. Letter from the president of the Autovie venete to the Pcm dated 19 October 1933 (with attached memo), in Acs, Pcm, 1931–33, 7/1-2/11548, *Autostrada Trieste Venezia*.
31. "Il progetto per l'autostrada Venezia–Trieste," *Le vie d'Italia* 3 (1935).
32. In a memo from the director general of AASS to the Minister of Public Works, dated 18 February 1942 (Acs, Spd, Co, 10792, *Autostrada Pedeaipina–Veneto*), AASS bureaucratically reported how "in November 1939–XVIII the limited company Autovie proposed the establishment of an entity for the planning and operation of 1,200 km of motorway, including the Brescia–Padua and Mestre–Trieste trunks, which would complete the Turin–Trieste motorway itinerary; the Monfalcone–Trieste fork; the Monfalcone–Tarvisio fork; the extension of the Genoa–Valle del Po truckway to Milan and the Naples–Rome–Brenner Pass." In a note from the Duce dated 20 February 1940–XVIII, the lack of benefits of creating a motorway entity were presented.
33. Letter from the Società Autovie Venete to PCM dated 10 February 1942, in Acs, Spd, Co, 10792, *Autostrada Pedeaipina–Veneto*.
34. Ibidem.
35. Trucks in circulation in Italy went from around 72,000 in 1942 to 136,000 in 1946 and to 185,000 in 1947; see Anfia, *Automobile in cifre*, 29. See also Gianfranco Pala and Maurizio Pala, "Lo sviluppo dei trasporti," in *Lo sviluppo economico in Italia. Storia dell'economia italiana negli ultimi cento anni* (Milano: Franco Angeli, 1969), 345–387.
36. See Maggi, *Storia dei trasporti in Italia*, 121 et seq.
37. On Italian motorways post–World War II, see Lando Bortolotti, "Viabilità e sistemi infrastrutturali," 289–368; *Le autostrade della seconda generazione*; see also Enrico Menduni, *L'autostrada del Sole*.
38. On the role of IRI, there is partial but interesting data in Fedele Cova, *La rete autostradale Iri* (Roma: Firema, 1963) and Fedele Cova, *Autostrade e altri episodi di vita vissuta* (Milano: Domus, 1983). The 1955 motorway plan envisioned a first public ten-year investment of 100 billion lire (USD 1.5 billion today), divided over ten years; see Vito Rocco, "La legislazione autostradale italiana dal '55 al '75," in *Autostrade della seconda generazione*, 28–35.

39. See Albert Carreras and Elena Cefis, eds., *The Development of the Italian Highway Network 1924–1993: A Computerized Atlas* (Badia Fiesolana: European University Institute, 1996).
40. On automobile culture in Italy after World War II, see the works of Federico Paolini, *Un paese a quattro ruote e Storia sociale dell'automobile in Italia*.
41. See Menduni, *L'autostrada del Sole*, chapter 6.
42. Paolo Capuzzo, "La conquista della mobilità. Contributo ad una storia sociale dei trasporti urbani in Europa (1870–1940)," *Ricerche storiche* 3 (2000), 621–639, here 639.