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**Monopoly Power and Competition
The Italian Marginalist Perspective**

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Chapter IV

Monopoly power, competition and reality

1. Introduction

After focusing in the previous chapters on our marginalists' theoretical identity, we will now concentrate on their equally authentic nature as applied economists. This shift out of abstract analysis into real-world issues is indispensable if we are really to grasp the essence of their ideas, including those on pure economics. In this chapter we will look at some of the historical events of the age, linking them to the development of our economists' ideas and to their effort to understand how the actual economy works. We will show that they saw their analytical work as serving to explain real phenomena. We will then see what operative importance they attributed to their theories on competition and monopoly power, and examine some of the practical situations in which they used them. Let's start now to scrutinize their writings in search of the relation between theory and applications, following up various leads. Firstly, however, we wish to point out that in this chapter we will at times use the notions of competition and monopoly power in a broader sense than in the previous chapters, since here we are also examining issues that are not strictly economic¹. Finally, let us clarify that we are not dealing here with their vision of the state and economic policy, which will be the subject of the next chapter.

2. Applied economists

Let's start with Pantaleoni, who always used economic theory as a tool for interpreting reality: armed with selectionism, he was determined to explain facts in detail and every day to provide penetrating analyses of

¹ Hartmann and Kjaer (2015) explore different forms of competition in different spheres of sociology.

practical phenomena². To achieve this he worked doggedly at the cutting edge of economics: on the one hand he incorporated categories and methods borrowed from other disciplines, and on the other he applied economic reasoning to facts that were not just economic, but also political, historical and social³.

In the case of Barone, too, it is particularly easy to find the link between theory and applications since for him “every theory that does not correspond to the facts, must absolutely be rejected” ([1911-12] 1937, p. 6). He therefore contended continually with episodes taken from current affairs or from history⁴. For instance, the subject of the “destruction of firms (those with higher costs) by free competition” ([1908b] 1935, p. 288), which we dealt with in the previous chapter, is taken up by Barone also with specific reference to concrete episodes, such as the attempt to provide remedies for the wine producing crisis, an attempt that in his opinion was absurd because to get out of the crisis he could see no other way than the reduction of production, in other words the bankruptcy of the producers with higher costs⁵.

On the one hand, twenty years of political activism, and on the other, his position as an expert on public finance provided De Viti de Marco with endless opportunities to intervene in debates on current issues; in fact his political writings are more numerous than those on

² According to his dear friend De Viti (1925, p. 169), Pantaleoni’s “most ingenious and original and prolific scientific production” was marked by a “complete fusion of theoretical principles with the elaboration of concrete facts”.

³ Reference has already been made to the many times that Pantaleoni complained of the narrowness of the field of enquiry in economics, and the connection of his research with that of Pareto in sociology.

⁴ Barone (1908a 1936: 6) wrote: “Deduction, ... mathematics, statistical induction, historical research, comparison of economic facts with other facts of social life, it all helps to discover the uniformity that economic *facts* present”. Don’t forget that among his other activities, Barone was also a teacher of military history and modern history (from 1887 to 1901). See Gentilucci (2006, p. 17).

⁵ A similar example is when Barone comments on a reduction of the alcohol tax: “The subsidy was intended to be a way of getting out of the wine producing crisis: an absurd idea, because to resolve the crisis the only way was to reduce production, in other words make the producers with higher cost bankrupt” (Barone [1911-12] 1937, p. 242). The case of the sugar industry is similar ([1911-12] 1937, pp. 243-251).

pure theory. In this chapter we will examine a series of passages, some taken from his political interventions, others from his lecture notes in *Scienza delle finanze*, where he examined the “liveliness of today’s competition” (De Viti de Marco 1885, p. 216) and practical situations of the exercise of monopoly power.

As to Pareto, the relation he established between theory and facts, to which he constantly returned⁶, can be summed up in these terms: 1) real science springs only from facts (this statement was always accompanied by harsh criticism of the “metaphysicals”); 2) in the relations between those facts, one looks for uniformity, or laws, which enable theories to be formulated (for him this statement also had a strongly polemical thrust, this time against the historicists); 3) theories must necessarily be verified by observation⁷ (and here Pareto was finding fault with all those who make do with the deductive method⁸). In his words: “The sole guide and master of scientific theories is experience. *The only, absolutely the only* question to ask in order to judge a scientific theory is the following: does it or does it not comply with experience? The rest does not count”⁹. And also, “For me there exist no valuable demonstrations except those that are based on facts” (Pareto 1897, 491). This is his famous “experimental method”, which he himself said he had not used in his works prior to the *Manual*¹⁰, but which we feel he never applied completely¹¹.

⁶ Think of the title of the book *Fatti e teorie* (Facts and Theories, Pareto 1920) and that of a part of the *Cours* (Applied political economy, Pareto 1896-97) and of *Manual* (The concrete economic phenomenon, Pareto 1906).

⁷ He thought observation was necessary because in the social sciences it is impossible to carry out experiments. See Pareto (1916, ch. I).

⁸ Pareto (1973, p. 978) writes: “Observation without theory is empiricism, theory without observation runs the risk of being mere imagination” (Letter to A. de Pietri-Tonelli, 8 August 1917).

⁹ Letter to Felice Vinci, 19 August 1912 (Pareto 1973, p. 783).

¹⁰ This statement is found in the same *Manual*. On this, of particular interest is a letter from Pareto to Emanuele Sella of 11 June 1913 in which he briefly outlines his intellectual biography (Pareto 1973, pp. 831-833).

¹¹ For Schumpeter ([1951] 2003 p. 136) Pareto’s experimental method was: “a complete delusion”. By contrast, Barone ([1924] 1936, p. 443) considered it his greatest

3. Explanatory relevance of theory

In this section we will examine the explicative power our four economists attributed to their ideas on competition and monopoly power.

In Pantaleoni's first work, competitive equilibrium was a result of pure theory, but also a concrete fact often found in reality: "most of the products of which the quantity can be increased with a proportional increase in cost are produced ... in conditions of perfectly free competition" (Pantaleoni [1882] 1958, p. 88); in today's terms, when the long-run supply curve is horizontal, it is a sign that there is free entry in that market¹². He therefore found perfect competition realistic as well: referring once again to Cairnes, Pantaleoni ([1882] 1958, p. 90) stated that the mobility required of the factors of production in order to achieve the effects of competition only involved a small part of the total¹³. That said, we know that the more mature Pantaleoni preferred to concentrate on "dynamic phenomena, which in industrial and commercial practice are the most common object of interest" (Pantaleoni [1909] 1955, pp. 28-29)¹⁴. We have seen that the

contribution to science. Pantaleoni credited Pareto with awareness of the fact that "*nothing is more uncertain, nothing is more disputable, nothing is more difficult than the observation of a fact*" ([1924] 1938 p. 352). This was confirmed by Pareto himself ([1896-97] 1971, p. 140) when he stated: "We do not know, and we will never know, any concrete phenomenon in all its details". For his part, in 1889 Pantaleoni wrote to Loria: "pure and simple observation, be it historical or statistical, is totally silent in itself and only speaks when it is laid out in the context of a theory" (Fiorot 1976, p. 472).

¹² Obviously this is true in a sector with constant returns to scale. Pantaleoni's reasoning, expressed in current terms, seems to be the following: an upsloping supply curve means a surplus for inframarginal firms; if such a situation persists it means there are entry barriers. This interpretation is suggested by his examples (Pantaleoni [1882] 1958, pp. 85-88), and also by the following passage: "If [competition] were viable, the extra-profit is such a lure that it would have disappeared due to the large size of the supply. Therefore the presence of an extra-profit is proof that in point of fact there is no possible competition" ([1882] 1958, p. 108).

¹³ See Chapter II, footnote 60.

¹⁴ This is also the interpretation of Michelini (1993: 22) for whom: "economic dynamics must become, according to Pantaleoni, a heuristic tool to interpret real world phenomena".

dynamic competition which he endows with explicative power was of a selectionist kind. The struggle for existence in all its forms, including competition, even among large firms, was in his view pervasive¹⁵. If competition has “always upheld the social world” (Pantaleoni [1900] 2001, p. 356), it is because when it is opposed it does not disappear but makes way for more primitive, barbaric forms of struggle, typical of prior civilizations¹⁶. He had already asserted that if one risks losing when fighting under rules established by the progress of civilization, one resorts to “primitive systems of fighting and competing for survival” (Pantaleoni [1892] 1925, p. 41). Now, with recursive reasoning, Pantaleoni goes so far as to state that “the forms of competition themselves are subject to the law of competition”, and that this law is even confirmed by history (Pantaleoni [1900] 2001, p. 356): it is in fact “historical selection” that eliminated kinds of competition that were less “fecund of progress” ([1900] 2001, p. 362). Pantaleoni opened the 20th century with the belief that “never or rarely in past ages was there more intense competition” ([1900] 2001, p. 362), and would always continue to express the conviction that his selectionist ideas were dictated by “long and repeated historical experience” ([1921] 1922, p. 196). The outcome of selection was inequality: Pantaleoni found that in history the confirmation of the “inequality in the distribution of physical and mental force among men” ([1900] 2001, p. 351) had always existed and would continue to exist¹⁷. Later Pantaleoni was to say that “perfect free competition does not exist but nor does perfect monopoly” ([1913a] 1925, p. 17). These declarations by him, along with those on the highly unstable nature of

¹⁵ We have already encountered (in § 4.2.3 of ch. II) the statement that from a certain time onwards for Pantaleoni ([1892] 1925, p. 16) competition was nothing more than a special aspect of the struggle for existence.

¹⁶ For Pantaleoni ([1901] 1925, p. 61) there was “a law of hierarchy among the forms of struggle and a law governing the choice of the form”. Remember that this idea came from Spencer; on the way the English philosopher inspired Pantaleoni, see Sunna and Mosca (2017).

¹⁷ We will return to this topic in the next chapter about his concept of the state.

monopolies and cartels, and on the irrelevance of obstacles to competition that we have already analysed, suggest that Pantaleoni's attitude was essentially a faith which he would continue to profess using ever harsher terms.

As regards Pareto, Schumpeter believes he emphatically denied that competition actually rules in our society, and points out that for him "the virtues therein [in his *Cours*] predicated on pure competition have no bearing upon the actual economic process, since pure competition does not actually prevail" (Schumpeter [1951] 2003, p. 116). In actual fact for Pareto the static theory of competition refers to an ideal world: competitive equilibrium is "marked by Walras's hypothesis of an ideal entrepreneur who made neither profit nor loss" (Pareto [1896-97] 1971, p. 168). The concrete case in which "Phenomena which come closer to those studied in pure economics are found" is for Pareto ([1906] 1971, p. 338) that of "large scale production". However, also for him, the part of the theory that could really represent reality is the dynamic part: "I have endeavoured to extend to dynamic questions the use of the equations given for the static equilibrium. The most accurate description possible for economic phenomenon is to be reached in this way" (Pareto 1897, p. 492). Proof of this is that the static approach to competition is actually missing in chapter IX of the *Manual* entitled "The concrete economic phenomenon"; in general, as his student Amoroso (1938, p. 6) stated, for Pareto "the dynamic aspect is the essential, not the contingent of economic reality, and this latter is not polarized around an ideal configuration, but moves incessantly in an eternal change"¹⁸. Lastly, notice that all Pareto's comments on trusts are found in this same chapter of the *Manual*, a sign that he considered them the most widespread market structure.

¹⁸ Backhouse (1990), too, deals with these aspects of Pareto's thought, although he includes him among the theoreticians of the static concept of competition.

For Barone, as for Pareto, reality was exclusively dynamic (Barone [1908a] 1936, p. 6)¹⁹. Barone had no doubts: perfect competition was only a hypothesis by Walras²⁰, of a limit state to be postulated in order to study equilibrium²¹. In fact, one of the reasons he believed that Walras's general economic equilibrium theory by itself was no use in interpreting the real world, was the very fact that it "starts from the assumption of *indefinite* free competition, while in reality it is not so" ([1908a] 1936, p. 45). As we have seen, the most frequent case for Barone is that the adjustment process toward perfect competition equilibrium is slowed down by the presence of "frictions" ([1908a] 1936, p. XVII). The study of the transitional period is essential for Barone because it confers descriptive realism on economic theory; in his own words, "The analysis of equilibrium – which is indispensable ... – if it is not then integrated with the analysis of all these *dynamic* phenomena, of all these phenomena of *adaptation*, would give rise to very different conclusions from the phenomenon in the real world", and he adds significantly: "In this lies the aspect missing in many economic theories" ([1908a] 1936, p. XVII)²². Notice that for Barone, unlike the other marginalists, the expression "free competition" is not just a synonym of "free entry", but it is a realistic approximation of the limit concept of perfect competition²³. He states that the characteristics of free competition are "realized all the better,

¹⁹ On this point, a few years earlier Barone wrote "when we move into the field of theoretical abstraction, we must not lose sight of reality. And reality suggests that disturbances succeed one another" (Barone [1894] 1992, p. 25).

²⁰ Barone wrote: "Walras ... always makes the hypothesis, referring back to the limit case of free competition, of businessmen who make neither profits nor losses" ([1911-12] 1937, p. 279).

²¹ Besides the examples already given on this, also notice the following: "let us confine ourselves now to the limiting case to which free competition tends" (Barone [1908b] 1935, p. 252).

²² As we know, Barone was referring to Walras. Concerning this point, Blaug argues that Walras "simply gave up the effort to provide a convincing account of how real-world competitive markets achieve simultaneous multi-market equilibrium" (Blaug 1997, p. 72).

²³ For example in Barone ([1896] 1936, pp. 155, 190, 207; [1908a] 1936, pp. 34, 36).

the more perfect it is"²⁴. However, while it is true that the theory of economic equilibrium "is only an initial, rough approximation of the real phenomenon" ([1908a] 1936, p. 45), it is also true that he considered it a very powerful theory, the indispensabile "general fabric" on which to "embroider", as he calls the analysis of dynamic phenomena, needed to explain the real facts²⁵. Like Pantaleoni, for Barone pure monopoly, akin to perfect competition, is an ideal concept²⁶. The need to formulate a theory that can explain more recent economic events makes Barone devote great attention to the "coalition regime": he includes this argument in his economics textbook for the very reason that such a regime "in the current economic world moves towards increasing development" ([1908a] 1936, p. 303).

In the works of De Viti de Marco pure theory is the essential foundation of every other dimension: it must not be forgotten that he was the one that gave Public Finance its theoretical character²⁷ by applying the laws of economic theory to financial phenomena. Nevertheless, we can also say that for De Viti – public finance scholar and committed politician – pure theory is of interest above all if it can provide secure guidance for intervening in economic and political life²⁸. As regards our topic, we have already mentioned the difficulty of extrapolating, from his writings, a theory of the various market structures, which he keeps concealed amidst his thoughts on Public Finance; it is therefore no surprise that in De Viti we find neither a

²⁴ The translation of this sentence in the English edition is not faithful to the original Italian: "the maximum is more nearly attained the more perfectly they [the characteristics] are realized" (Barone [1908b] 1935, p. 289). In Italian: "tanto meglio realizzate quanto più questa è perfetta" Barone ([1908b] 1936, p. 294).

²⁵ The term "embroidery" often appears in Barone, see for instance also ([1908a] 1936, p. 45) and ([1911-12] 1937, pp. 275, 282).

²⁶ This can be deduced from his difference of opinion with Loria, whom he accuses of reasoning "nearly always ... as if the capital were concentrated in the hands of just one capitalist" (Barone [1895], ed. 1936, p. 125).

²⁷ That was De Viti de Marco (1888). On the question of priority between De Viti and Sax, see Mosca (2010).

²⁸ The relation between theory and applications in De Viti is examined in Mosca (2005).

specific discourse on its explanatory power, nor an explicit analysis of its operative importance. What we know is that in his view, apart from “natural or legal” monopolies, all the rest is competition (De Viti de Marco 1885, p. 25). We can therefore find in his works not only the belief that, in the presence of certain basic freedoms, if the “natural play of the economic forces” (De Viti de Marco 1893, p. 93) is allowed, there is a benefit for society²⁹, but also the certainty that economic theory was capable of demonstrating the existence of this outcome. The basic freedoms that De Viti was talking about, and which he strenuously defended throughout his whole life, are freedom of contract ([1890b] 1898, p. 39), that of “buying and selling wherever we like” ([1903b] 1929: 36) and “the ancient right of *going and coming*” ([1919a] 1929: 356). However, if his faith in the market formulated in these terms is to be identified as faith in the concrete operation of competition, we must interpret the latter in a very broad Smithian sense³⁰. In his works this ideal economy in which the market is truly free serves more than anything as a reference point for the policies he envisaged, as we shall see in the next chapter. He is actually well aware of the existence of monopoly power, and he uses the specific cases in which it appears both to assess the wisdom of state intervention and to denounce the harmful effects of protectionism.

4. Theory applied to the facts

In this section we will examine some of the actual occasions when the four economists used the concepts of competition and monopoly power. We will see how they made use of their ideas on these issues to explain, comment on and judge some of the events of the time. The “facts” we are dealing with are: gender issues, the labour market, socialism and the Great War.

²⁹ Except in the specific cases we saw in the previous chapter.

³⁰ We share the opinion of Blaug (1997, p. 67), when he maintains that for Smith competition was simply the system of natural liberty. On this conception of competition in the classicals see Giocoli (2017).

4.1. Women

While keeping a firm grip on their theory, let's start by looking at with some of Pantaleoni's incursions into different fields from economics, where he investigates boldly, or as he would say of himself, with virility³¹. This word leads us to start from a brief mention of the application of his ideas on competition to gender issues: while for him "virile" describes someone who accepts a fight without weakness³², competition in its modern form helps women because, unlike previous kinds of struggle, it is not based on physical strength (Pantaleoni [1900] 2001, p. 364); instead, the female influence on politics is anti-selectionist³³. In anticipation of the next chapter's themes, let us just recall that for Pantaleoni ([1908] 1925, p. 372) women belong to the masses and not to the *élite*; and if the vote was given not only to the most ignorant of men but also to women, the level of the arguments that politicians would have to use in talking to the masses would suffer a disastrous decline (1919d, p. 192)³⁴. The tune does not change with Barone, who compares the irrational behavior of crowds to that of the individuals on the lowest rung of the ladder of evolution, and adds that such behavior "presents the features seen in savages, children, and women" (Barone 1928, p. 29). For his part, Pareto has no hesitation

³¹ This is the implicit meaning of the following utterance addressed to the public at the headquarters of the Journalists' Union in Naples at the end of a talk on post-war prospects: "If you don't like what I've said to you, that doesn't change my opinion. But for future talks, don't call men: invite women" (Pantaleoni [1916a] 1917, p. 160).

³² The cooperative idea is virile and not charitable ([1898] 1925, p. 138), virile and not demagogical is true democracy ([1918c] 1919, p. 157), in which a virile education must counteract the "feeble, sweet" character of the Italians ([1918d, p. 189). "Male" obviously describes the energy "of the new Italy living in fascism" (1922, p. XXIII).

³³ Pantaleoni ([1909] 1955, p. 35) writes: "So far women's influence in politics has showed itself and everywhere favourable to systems of legal and political intervention, paternalism, supervision, egalitarianism, anti-critical and religious tendencies. General phenomena have tended to be insufficiently appreciated owing to too lively a concern for the particular". This appears in a footnote added in 1924.

³⁴ We will confine ourselves here to competition, and will not quote all the times when Pantaleoni talked about women with irony and sarcasm. Among the many examples, see Pantaleoni (1918e), concerning the collapse of Russia.

in defining feminism “a malady which can only beset a rich people”³⁵. Today such attitudes to women strike us as extremely offensive, but we have reason to believe that to a certain extent they were offensive even then. It’s enough to remember that the Italian Risorgimento was for the women of the time an age of awakening and of participation in political life³⁶. Even Pareto, with his usual detached, sarcastic tone, describes the change that had taken place in customs³⁷: “Among very poor peoples, women are treated with less regard than domestic animals; among civilized peoples, especially the very wealthy population of the United States of America, women have become objects of luxury who consume but do not produce” ([1906] 1971, p. 297)³⁸. For that matter, there were also some among them who thought differently on the female question, such as De Viti de Marco who, being married to a very active American woman³⁹, was in favour of the vote for women and of divorce.

4.2. Labour

³⁵ Pareto ([1906] 1971, p. 298). The expression is also recalled by Schumpeter ([1951] 2003, p. 121). De Rosa talks about the “ironic, contemptuous” tone in writing about “all the public demonstrations that reveal to Pareto a decline in class consciousness and in the sense of responsibility of managerial groups: from the first women’s congress to the social legislation of Giolitti’s period” (De Rosa 1960, vol. III, p. 79).

³⁶ Remember that in 1908 the first congress of the Italian National Council of Women took place in Rome. Keep in mind that our four economists were contemporaries of enterprising women like the journalist and novelist Matilde Serao, and only slightly older than women like the 1926 Nobel Prize-winner for literature Grazia Deledda, and Maria Montessori, still famous for her pioneering approach to pedagogy.

³⁷ Pareto was divorced from his first wife and, a few days before his death, he married another woman after nearly twenty years of living together.

³⁸ Also: “The development of democracy has strengthened the sentiment of equality between the two sexes; but it is likely that the cessation of war has played a still greater role in this since it is there that the superiority of the male is most apparent. This sentiment of equality has given birth to the theory of a single sexual morality for men and women” (Pareto [1906] 1971, p. 74).

³⁹ Harriet Lathrop Dunham (1864-1939), from New York; among her many activities in support of women, she signed the petition to Parlamento by the National committee for universal female suffrage. We have research underway on her (with Elena Laurenzi).

To deal with the subject of labour Pantaleoni ([1882] 1958, p. 80) uses the concept we have already encountered, of non-competing groups, which he believes “so important for the application of economic laws” in the real world ([1889] 1957 p. 287). Remember that for Pantaleoni the only source of monopoly power that endures in the economy is skill; in one of the many cases when the economist pays homage to “genius”, he cites J.S. Mill to write “special skill is a source of extra profit or rent” (Pantaleoni [1889] 1957, p. 285). As far as workers’ associations go, in Pantaleoni’s view they are identical to the “old” kind of syndicate⁴⁰; as such, he thinks that they have started to obtain monopolistic positions, that nevertheless they are not dangerous (thanks to the pressure of competing workers), and that they can even reduce the “cost”⁴¹ of labour ([1903] 2001, pp. 207-212).

Like Pantaleoni, also Pareto (1903a)⁴² deplored the disastrous effects of workers’ unions, which he found identical to the kind of trust set up not for the sake of efficiency, but to monopolise the market. That is what he was referring when he wrote that “labour unions ... impose uniform wages” ([1906] 1971, p. 117). Though convinced that workers’ unions tend to establish monopolies, Pareto was not opposed to workers’ associations and to the right to strike, because he thought they facilitated “the game of free competition”⁴³. The rest of his analysis on the question of work can be linked to the theory of the circulation of *élites*. In the light of this analysis, well before the “two red years”⁴⁴, Pareto denounced the fact that workers received new privileges every day, because the rulers needed their

⁴⁰ Remember from Chapter III (§ 6.2.1) that Pantaleoni was referring to horizontally integrated businesses.

⁴¹ Pantaleoni ([1903] 2001, p. 212) correctly specifies: “Cost in the sense indicated by Cairnes”.

⁴² In the article in *Gazette de Lausanne*; this article by Pareto (1903a) is quoted by Pantaleoni ([1903] 2001, p. 207).

⁴³ Avagliano (1975, pp. 77-78) shows that for Pareto competition in the labour market required the right to strike.

⁴⁴ By “two red years” we refer to 1919-1920, in which workers and agricultural labourers were involved in social and political struggles in Italy.

consensus⁴⁵; in his view the working class, having gone from oppressed to oppressors, was the new *élite*⁴⁶; he saw the revolutionary unionist in particular “as the inevitable working class answer to the ‘plutocratic and demagogical’ bourgeoisie” (De Rosa 1960, vol. III, p. 79 and 1964, p. xxxi). We will examine all this in more depth in the next chapter.

Barone was in favour of workers’ associations, even in relation to the “violence that in this period marks social conflict, and that accompanies the initial rise of the workers’ movement” ([1908a, ed. 1921] 1936, p. 283). The development of trusts determined, in his view, a new situation where the workers’ organisations had their counterpart in great coalitions of firms, the effect of which was higher, more stable wages ([1908a ed. 1915], 1936, p. 242). On strikes, in Barone’s *Principi* there are two successive versions: in the first one he argues that, if kept “within the limits of free competition” ([1908a] 1936, p. 119), strikes can actually raise wages, because they speed up the process of adjusting to equilibrium, which at times is extremely slow (120); if on the other hand “they try to replace the price that ... free competition would determine with a monopoly price” (125), strikes simply generate a deadweight loss⁴⁷. This version was modified by Barone in 1920: after the passage quoted on the acceleration of adjustment, he says that in a system of free competition, wages can rise only if labour productivity also rises; otherwise strikes will only achieve ephemeral results ([1908a, ed. 1920-21] 1936, pp. 122-123.)⁴⁸. This comment gave Barone the opportunity to speak very harshly

⁴⁵ As we will see in the next chapter, Pareto’s theory of the circulation of *élites* was dated 1900.

⁴⁶ Pareto ([1906] 1971, pp. 94-95 and 343-344).

⁴⁷ Barone wrote: “the device certainly gives the group of workers an advantage, but produces ... a general destruction of wealth far greater than the benefit it grants the few” ([1908a] 1936, p. 127).

⁴⁸ As already noticed, Barone is well known (and mentioned by Walras himself) for elaborating the theory of marginal productivity.

against the abuse of striking, which had become common in the post-war period as a political rather than an economic weapon (125-127).

The issue of labour was initially also dealt with by De Viti de Marco using, like Pantaleoni, the category of non-competing groups⁴⁹. He later provided an explanation of the agricultural revolts of 1894-1897 based on economic theory: for him the reason for the peasant uprisings lay in the drop in rural wages, due to the excess supply of labour created by the protectionist policy. Using the language of economic dynamics, De Viti explains that owing to this policy, “the equilibrium previously established was upset” (De Viti de Marco [1897] 1929, p. 233). He then illustrates the operation of competition created among workers which brings the equilibrium wage down to a lower level, explaining that “where there is lively competition among workers, it just takes one individual too many, to lower the wages of thousands of other individuals” (233-234)⁵⁰. After drawing great public attention with an article in the *Giornale degli economisti* on this question (1898)⁵¹, and after the unrest of 1902, the year the Federation of Labourers was created in Italy, De Viti indicated various possible ways of solving the problem of the pressure of labour supply on wages. One possibility was on the demand side: “the wage level”, he wrote, “depends on the demand for labour, and the demand for labour depends on the amount of capital available” ([1903a] 1929, p. 53); this

⁴⁹ De Viti (1885 p. 164) wrote: “as the workers have to consider themselves as non competing groups according to the crafts they belong to, they are not in a condition of immediate competition”.

⁵⁰ And he continued, “Suppose 10 workers are employed on a certain job and are enough to complete it. The eleventh arrives in search of work; he will try to cut the tenth out, by offering to work for less. The tenth will do the same to the ninth, the ninth to the eighth, and the first will be the one actually eliminated. But he will recommence the same strategy, offering a further wage cut, which will end up becoming generalised. And so on, until one of them finds another job paid at the rate of the greatest cut that he would have been willing to offer against the other ten workers, or until he dies or emigrates, or until he has induced the employer to use the work of 11 workers at a lower price” (De Viti de Marco [1897] 1929, p. 234).

⁵¹ This attention was due to the fact that this article was reported and commented on in many national daily papers. See Mosca (2016).

capital is channeled towards the “more remunerative” industries which are “for that very reason more capable of paying high wages” ([1904] 1929, p. 120). Another possibility is on the supply side, and acts through “the total freedom to emigrate”, a freedom that De Viti actively supports⁵². As well as these proposals, there are others involving union action in defence of wages. As we have seen, freedom of association was also interpreted in a liberal key, as a freedom which itself facilitates adjustments in the labour market⁵³. It was from this angle that De Viti interpreted it when he wrote that “a strike, ... the threat of a strike, ... the offensive and defensive organisation of the workers, increases the degree to which and the speed at which a wage rise must follow the industries’ increased productivity” ([1904] 1929, pp. 85-86). Striking, in fact, is in his view simply “a way of obtaining a higher wage when the industries’ productivity allows it” ([1914a] 1929, p. 170). Equally compatible with the liberal viewpoint is the idea that “worker organisations have the same justification as all the other syndicates and industrial monopolies” ([1897] 1929 p. 234), and therefore that competition can be oligopolistic from both sides of the labour market⁵⁴. On this, De Viti explicitly wrote that for “liberal economists the struggle between workers and entrepreneurs is the means of achieving the highest possible monetary wage” ([1904] 1929, p. 127). In 1897, in one of his works, we find passages in which the support for freedom of association seems to serve the achievement of

⁵² He did so on many occasions. We have quoted from De Viti de Marco ([1919a] 1929, p. 356), but we could also quote: “Emigration abroad ... is the only safety valve that can numerically attenuate the effect of the workers’ internal competition” ([1897] 1929, p. 233), and other passages.

⁵³ De Viti recalled giving Giolitti a vote of confidence only twice, once “in 1902, when it was a matter of guaranteeing the working class the right to organisation” ([1919b] 1929, p. 381). The political battle for trade union rights was fought alongside the radical-freetraders and socialists. De Viti called it a “liberal policy on striking” ([1904] 1929, p. 81).

⁵⁴ De Viti ([1904] 1929, p. 86) wrote: “I do not think some of you are willing to admit that strikes would be more successful if they were organised against industrial syndicates rather than against individual industrialists”.

market power. He in fact states that “organisation is necessary to prevent the law of numerical competition from working” ([1897] 1929, p. 234), and even augurs an agreement to fix wages above the equilibrium level, letting firms decide how many workers to employ, and therefore accepting the solution of a reduction of the number of workers employed instead of a reduction of wages⁵⁵. The theoretical justification for this argument is expressed by De Viti in these terms: wages depend *a*) on industry’s productivity and *b*) on the “organised struggle of workers against capital” ([1904], 1929, p. 84). The ideological reason to explain why he calls for higher wages is that the working class is the most numerous ([1919b] 1929, p. 379)⁵⁶; as can be seen, unlike the other three Italian marginalists, De Viti de Marco was a real democrat⁵⁷. While it is true that his theory of competition would more coherently give rise to a defence of consumers rather than of workers, it is also true that he tried to draw attention to the fact that the interests of these two groups were the same: “The worker’s loss,” he wrote, “is far greater when he is considered a consumer of goods” ([1904] 1929, p. 95) and he calls for action: “the population of workers, avenger of the collective interest of consumers” (p. 128). Lastly, the political justification for his position lies in the fact that in those years De Viti de Marco became an ally of the socialists in order to strengthen the free trade campaign⁵⁸. In his words, “part of the workers’

⁵⁵ According to De Viti, in response to the problem described in fn 50, “the workers agree to compensate so that one of them, in turn, abstains from work to leave only ten at work at any one time, obtaining higher wages” ([1897] 1929, p. 234).

⁵⁶ De Viti ([1919b] 1929, p. 379) wrote, “High wages are the condition for the material and moral elevation of the working class; and since this class is the biggest, its elevation automatically brings with it the elevation of the whole country; this flows through to the advantage of all the classes, also economically, including the owners”.

⁵⁷ He wrote: “the politics that I work for is a democratic politics, and it must benefit the greatest number”.

⁵⁸ In fact the quotes on work were taken from anti-protectionist situations, as in De Viti de Marco (1903b). This was a conference organised by the Association of owners and farmers and by the Democratic league for the revival of the South of Italy. Here De Viti, quoting Cavour, briefly dealt with the issue of the destiny of rural wages. See also De Viti de Marco (1904), which contains three speeches in which De Viti announced

organisations have decided to join the campaign against protectionism, considering it a form of politics and legislation hostile to the proletariat" ([1904] 1929, p. 82). The alliance was based on the belief that the 1887 protectionist tariff reduced "the demand for agricultural work" (p. 83), and since agriculture was the most labour-intensive sector, overall this caused an excess supply of labour. That is why De Viti spoke against competition amongst workers "brutally incited by the Italian protectionist politics" ([1897] 1929, p. 233) and denounced the "speed with which the stroke of a pen changing the customs tariff breaks up an existing equilibrium" (p. 233)⁵⁹.

4.3. *Socialism*

J.S. Mill, referring to the socialists, wrote, "I utterly dissent from the most conspicuous and vehement part of their teaching, their declamations against competition" (1848, book IV, ch. VII, § 7). The main "fact" to which Pantaleoni applied his theory of competition is socialism, against which he fought strenuously all his life. After a few years as an ally of the socialists, in opposition to the government and to denounce the corruption of parliament⁶⁰, he accused them of colluding with power; almost all his writings have socialism as their implicit, or more often explicit, target. As far as our theme is concerned, he accused the socialists of wanting to avoid competition in order to maintain their position of power⁶¹. Pantaleoni saw that the masses were terrified of change (and of the competition that triggers it)

the establishment of an Anti-protectionist league which free-traders and some socialists helped to found. Finally, see De Viti (1914a), about his speech to the Anti-protectionist Congress in Milan in which he illustrates the movement of wages in relation to the 1887 customs tariff; by 1913 he had already broken with the socialists.

⁵⁹ The situation of rural wages was inverted during the war; with the draft, in fact, there was a "rapid increase in wages caused by the competition of the owners", which however "no longer produces any increase in working energy" (De Viti de Marco [1917c] 1918, p. 108).

⁶⁰ The time of the break in 1902 is illustrated by Fiorot (1976, p. 574).

⁶¹ See for instance (Pantaleoni [1913b] 1925, p. 151). This is also the view of Bellanca ([1995] 1997, p. 117).

“due to its cost” (Pantaleoni [1907] 1925, p. 220); this allowed him to state that socialism exerts leverage on this very fear⁶². For him, socialism always tries to hinder competition ([1907] 1925, pp. 220-221), as in the case of the protection it offers to public employees ([1913b] 1925, pp. 151-152). In 1902 Pantaleoni was a member of parliament, and when a workingmen’s association invited him to speak, he explained that one of the ideals of democracy is “political equality which is obtained in practice by destroying all forms of monopoly ... not recognising social levels other than those created by the selection of the fittest in a battle fought on an even footing” (1902, p. 81). However, Pantaleoni believes that the socialist version of equality is simply unnatural, because for him it causes: *a*) the rebellion of the skilled who, deprived of a reward, cease to work, causing a loss; *b*) the return to primitive, violent systems of conflict through which selection continues to operate, since competition can never be suppressed; *c*) the end of collectivism itself, swept away by the social mobility of the population and of the international market, on which “flow men and goods from here and there” ([1900] 2001, p. 279)⁶³. Another reason why Pantaleoni saw competition as the antidote to socialism lay in his conviction that the “most noble ends” (p. 367) of collectivism were achieved spontaneously by competition, and not artificially by socialism⁶⁴. In fact, he points out that solidarity in workingmen’s associations is the result of individualism and is governed by

⁶² Also Tusset (2009, p. 278), interpreting Pantaleoni, recalls the “social resistance” and the “social aversion to change”.

⁶³ The issue is dealt with in his work entitled *Socialismo e commercio estero* (Socialism and foreign trade, Pantaleoni 1920a). In the same year, he again underlined “the technical impossibility of socialism and of the state to conduct foreign trade” ([1920b], p. 41).

⁶⁴ An example of this statement is: “It is in the United States and England where public spirit is more generous, where the commitment of large fortunes is nobler than elsewhere, where men’s conduct towards women is more gallant and honourable, where the use mankind makes of animals is more merciful” ([1900] 2001, p. 354). A similar attitude to the good effects of free markets on cooperative behavior has recently been expressed by Zupan (2011).

competition⁶⁵. While continuing to repeat that socialist aspirations were illusions doomed to shatter against competition⁶⁶, at the same time he occasionally admitted that in some cases socialists manage to prevent that happening. For instance in 1917 he wrote that “the Russian socialist contagion will be ... a strong delaying factor for the development of great economic complexes” ([1917c] 1918, p. 89). In his view, as we know, such complexes were the efficient outcome of the new competition.

Initially also Pareto, like the other economists we are dealing with here, was a liberal who wanted to form an alliance with the socialists with anti-statist and anti-protectionist intentions⁶⁷. For example, he wrote to the leader of Italian socialism Filippo Turati, “it may well be that to achieve economic freedom one first has to have socialism. If socialism is able to educate the people, it will have made its contribution to the world”⁶⁸. The alliance with the socialists, having proven to be wishful thinking⁶⁹, gave way to anguish among our economists at the growing threat of a socialist triumph. This threat was already being discussed by Pantaleoni and Pareto in private correspondence in 1897, and then in two articles published in 1900, the

⁶⁵ In fact Pantaleoni wrote: “to be efficient, competition imposes union among those who have common interests” ([1900] 2001, p. 358).

⁶⁶ The arguments are identical year after year: 1. one cannot suppress “the inequality deriving from selection, from competition, from individualism” ([1918b] 1919, pp. 146-147), because it dries up the source of wealth; 2. foreign trade is incompatible with socialism: the director of a business open to international trade only behaves “according to his competence, demonstrated by his success, and constantly tested by a selection process” ([1920a] 1922, p. 15).

⁶⁷ On 31 December 1891 Pareto wrote to Napoleone Colajanni, the socialist member of parliament: “it seems to me that a stretch of road should be travelled together by socialists and economists, to oppose the bad arts of those who govern us” (Pareto 1973, p. 175).

⁶⁸ Filippo Turati was the leader of Italian socialism. Letter of 11 November 1893 (Pareto 1973, p. 235). On the alliance between socialists and liberals Pareto’s opinion is expressed at length in the article *Liberali e socialisti* (Liberals and socialists, Pareto 1899, 215).

⁶⁹ Also De Rosa (1960, vol. II, p. 398) recalls their hope “to be able to guide the socialist movement towards a political line of upright defence of the canons of free trade” and adds: “All this was nothing but a dream that lasted the classic *espace d’un matin*”.

first denying that socialism, as had been seen, could ever prevail, the second affirming instead that “its victory is highly probable and almost inevitable”⁷⁰. This belief was examined further by Pareto in *Systèmes socialistes* where he argues that socialism is “an extremely strong current, that sweeps away everything in its path” ([1902-03], 1978, p. 73). The reasons for this resigned, but admiring, prediction⁷¹ seem to be based on the fact that, for him, socialism: 1) like every religion had the merit of instilling strength and morally elevating the lower classes, 2) gave a noble guise to the feeling of greed and envy of these same classes, 3) appealed to the universal feeling of benevolence towards our fellow men, a feeling that in the decadent bourgeoisie degenerated into the sensual pleasure of losing heart and surrendering, 4) was used by the dissident members of the *élite* to gain the support of the lower classes. In the light of his sociological and political writings, we feel we can hypothesise that Pareto built his immense theoretical edifice around precisely this specific case: his prediction of the defeat of the bourgeois *élite* and the victory of the socialist one⁷². This was the core around which he constructed his generalisation, the emblematic case that was trumpeted as a universal law thanks to the “experimental” confirmation that he found in other epochs of history⁷³. When the Bolshevik peril became urgent, Pareto

⁷⁰ Pareto ([1900] 1991, p. 36) wrote: “Professor Pantaleoni, in a recent treatise denies that socialism will win; I have maintained that this victory is most probable and almost inevitable”. On this, we recall, with Busino (1974, p. 14), that for Pareto “liberalism is an appeal to reason; socialism is a continual appeal to the feelings. And since human action is based on feeling, socialism remains more politically successful than liberalism”, even though, when all’s said and done, the aim of both is to win power.

⁷¹ Busino ([1979] 1980, p. 348) rightly thinks Pareto highlighted “the logical inconsistency of all the socialist doctrines and at the same time their extraordinary success, being catalysts of passions, instinct, feelings, will-power”.

⁷² Missiroli (1921, p. 26) underlines Pareto’s bitterness towards the bourgeoisie that give in without a fight, and towards the common people that win power. De Rosa (1960, vol. III, p. 9) explains that “He would prefer not to witness the spectacle of the higher classes abdicating before the proletariat”.

⁷³ Busino (1974) deals with the relationship between Pareto and socialism. On Pareto’s attitude to socialism until 1901, see Mornati (2001).

maintained his (presumed) detachment, inevitably predicting, after the probable triumph, the future decline (Pareto 1919a)⁷⁴. We have already pointed out that he felt it was impossible for economic theory to provide a criterion for the choice between collectivism and the market (Ch. II, § 5.1), but when put to the test he said he was sure that no political regime, not even that of the socialists, could offer a “system more favourable to the utility of the people” than the system then in force (Pareto 1919b, p. 272).

Barone, too, in different terms from both Pantaleoni and Pareto, targets socialism. In his famous essay on the *Ministry of production in the collectivist state* (1908b) he affirms that the planned economy can *theoretically* be achieved, while demonstrating that it does not correspond at all to the Marxist idea of collectivism, since it would include the same economic categories found in the market economy. However, he reiterates its real impossibility, unless there were “higher beings, capable of achieving outcomes that are obtained with free competition” (Barone [1908a] 1936, p. 63). For mere mortals, reaching the collective optimum would require a process of trial and error and large-scale economic “experiments”⁷⁵, as we have already seen in § 4.2 of ch. II. All the same he claims that in practice this wouldn’t happen in the collectivist regime, because even the omniscient Ministry would be under political pressure to let “firms survive that it would be in the interests of society if they disappeared” ([1908a ed. 1909] 1936, p. 340). He therefore states the impossibility of economically efficient collectivism in practice.

⁷⁴ Avagliano (1975, p. 35) distinguishes between Pareto’s aversion for bureaucratic socialism and his undecided attitude towards socialist or trade unionist rules. In our opinion, Pareto was also opposed to the latter.

⁷⁵ Barone argues that ‘having to proceed by trial and error and experiments . . . the collectivist ministry of production could not in any way avoid for higher cost firms . . . those destructions that one thinks are an exclusive effect of the present economic régime’ (Barone [1908a, ed. 1909] 1936, p. 645). Michelini (2005) has gone very thoroughly into this subject.

A different attitude is found in the democratic-radical De Viti, who we have seen to be a consistent supporter of the right to strike and the right to form trade unions, of universal suffrage, of proportional representation and the list vote. After the breaking of the agreement between socialists and free traders, he did not miss a chance to denounce the collusion of the socialists with the government intended to extend the state's role in the economy. However, he continued to seek the consensus of the masses and defend the workers, especially those in the agricultural sector. These political positions also aroused criticism from Pareto (1960, vol. II, p. 102) who wrote of De Viti: "he is an *optimist*, i.e. one who believes that with fine words one may change a country's system for the better".

4.4. *The Great War*

Before examining, with examples, how the Italian marginalists used the categories of competition and monopoly power to deal with the issue of the Great War, it will be useful to sum up their political positions on the question. Pantaleoni was deeply anti-German: he saw in Germany a strong economic threat (1916b [1917], p. 67), but above all he considered it the epicenter of the spread of socialism⁷⁶. He was convinced that, with the support of Jewish high finance⁷⁷, the central powers were bankrolling the European socialist parties⁷⁸. Finance and socialism (along with journalism) for him were extremely powerful international organisations, due to their enormous influence over the

⁷⁶ In his words: "The gang has its epicenter in Germany [and] connects ... the ringleaders of socialism everywhere" (1917e, p. 232). Also: "the Germanic International, that is, German socialism, has devastated Russia's political, military and economic organism, and it very nearly brought Italy to its knees" ([1916b] 1917, p. 66).

⁷⁷ For example, Pantaleoni wrote: "The Jews ... dominated the world during this war [with] their operation in high finance in all countries and in the socialist movement in all countries" (1919b, pp. 223-224). On Pantaleoni's attitude towards the Jews see Micheli and Maccabelli (2015).

⁷⁸ Here are two of the many examples: "There are still Germans and Austrians in Italy .. they are in the official socialist party" (1917a, p. vii). And also: "The Bolsheviks were in the pay of Germany" (1919c, p. 179).

masses⁷⁹, and because they undermined the nationalist spirit of the allied countries. The first among them was Russia, devastated by the 1917 revolution, for which he blamed Germany⁸⁰; then there was Italy, where the socialists sabotaged the war⁸¹; France, too, seemed to be partly vulnerable to a similar danger⁸². As for the USA, Pantaleoni saw a threat to the “individualist industrial spirit” ([1916c] 1917, p. 206) from internal movements whether they be pro-German (due to the descendants of German immigrants), anti-English (due to the descendants of the Irish)⁸³, or internationalist (due to Jewish financial experts, linked on the one hand to Germany and on the other to Russia)⁸⁴. Against this disturbing background, let us now examine how his ideas on monopoly power and competition were applied to the war, pointing out yet again that in many of his political analyses he

⁷⁹ “By means of the triad: financial experts, journalists and socialists ... the total mass of innocent idiots will be entirely carried away by a movement simultaneously of growing violence and consonance and will gyrate, like a band of wild-eyed dervishes” (1917e, p. 221).

⁸⁰ Pantaleoni wrote, “A ... formidable blow has been suffered by the allies from the triumph of German socialism in Russia, which has profoundly perverted the mentality of the Russian masses” (1917a, p. xi). See also Pantaleoni (1918e).

⁸¹ Pantaleoni said: “The heads of the [socialist] party are the saboteurs of the war” (1917a, p. vii). He often returns to the attempts by socialist leaders “to sabotage our war” (1917f, p. 251).

⁸² For example, Pantaleoni talked about the danger of the “action of socialist officers in France” (1917a, p. xii).

⁸³ According to Pantaleoni, during the war in America there was “an anti-English and anti-Latino movement [supported] by about 30 million Americans of German descent and still German in spirit and in essence” (1916a, p. 133). Also, in the United States “there are the Irish and the descendants of the Irish” (1916c, p. 200).

⁸⁴ He explained that “after Germany, the country where the few giants of finance, journalism and socialism ... are better organised ... is the United States, and ... they are nearly all of German-Jewish origin” (1917e, p. 222). His tone got worse after the war: in America “Jews ... act as a bridge between Americans and Russians, and between Americans and Germans” (1919b, p. 231). Also, “The Israelite bank in New York and the Russian one, also Israelite, both of German origin, are extremely close” (1919c, p. 178). Also: “Lenin and Trotzki are in constant contact with American Israelitic and American-German high finance” (1919d, p. 205). His accusations of the Jews, Bolsheviks and Germans date to prior to the Great War, as can be seen from his reconstruction of the causes of the French revolution (Pantaleoni [1913a] 1925, pp. 46-47).

used economic theory⁸⁵. At the outset of the Great War, Pantaleoni, whose field of interest had in the meantime been further broadened, was still using the concept of equilibrium to indicate the state towards which the economic system converges after a shock, including the immense shock of war. By means of marginalist categories, he dealt with the adjustment of the markets after the new demand and supply generated by the war. The latter requires men and capital, and to procure them skilled technicians are replaced by incompetent bureaucrats, movable capital is used to obtain war weaponry, and the government requisitions what it needs. The remedies for the serious problem of public finance deriving from this include one proposed by Pantaleoni: “rough competition and selection, which afflicts humanity at every hour, making it just as hard to preserve wealth as it is to acquire it” ([1916b] 1917, p. 103). In his later writings, which are exclusively political and nonsensical, as we have seen, he used his theory about trusts as a metaphor to explain the possible post-war situation. For example, Pantaleoni ([1916a] 1917, pp. 135-136) stated that at the end of the war the central powers would behave like a failing firm that sells below cost damaging the other firms in the industry: just as the latter prefer to come to an agreement, similarly the allies would have to negotiate to adopt shared defensive measures. Furthermore, he believed that the peace treaties would create “new *initial positions*” for competition and future selection (Pantaleoni 1917d, p. 195). He also compared the central powers to an entrant who seeks an understanding with the organisation of allied countries: their peace proposals are dangerous because they “concern to different degrees the special interests of the members of the syndicate” (Pantaleoni 1917b, p. 258), thus triggering contrasting responses that divide the cartel. Moreover, Pantaleoni compared the perils of the moment when the agreements between firms are about to expire to the moment when commercial treaties are about to expire: “it is necessary to have made

⁸⁵ Pantaleoni’s economic theory of war is examined in Barucci (2016).

sure that the initial power relationships have not greatly changed in favour of one of the parties” (Pantaleoni [1918a] 1919, p. 123). In an interesting article on imperialism he distinguished on the one hand enormous corporations based on the international division of labour and on the other, autarkic businesses; to reach the optimal size, the former in his view require alliances between countries, while for autarkic firms it is necessary for the country, through conquest, to expand over all the territory needed by the business. He added: “International alliances are to an imperialist construction, as a cartel or industrial syndicate is to a trust, or to a complete merger of various anonymous firms into one” (Pantaleoni 1918f, p. 129). Pantaleoni (1919a) feared that the new geopolitical situation that came into being after the war could lead to autarky, and recalled that the pre-war territorial distribution of industries was regulated “by selection, or competition” (p. 75), so as to minimize costs “with no concern for the political divisions of the territory” (p. 76). After the war the state became the target of more and more violent gibes, in which Pantaleoni repeated that “from selection, from competition, from individualism” came inequality ([1918b] 1919, p. 147)⁸⁶. He still believed in the biological competition outlined in his early writings: the theory of “organic” equilibrium constantly upset by the “disturbing dynamism of the selecting environment” (1924, p. 331) therefore remained the fulcrum of his reflections until his death⁸⁷.

⁸⁶ In the same year he stated that laws must allow “the inequality in economic and social conditions that are the result of selection and competition” (1918d, p. 161). He also argued that economic theory had demonstrated the incompatibility of equality and freedom, showing the “effects of free competition, of selection, of the struggle for existence” (1918d, p. 188). Bellanca (1995, p. 125) talks about political doctrine deriving from his conception of competition.

⁸⁷ We are referring to the article in memory of Pareto, who died on 19 August 1923, written by Pantaleoni shortly before his own death on 29 October 1924 (Pantaleoni 1924).

Pareto, like Pantaleoni, was a nationalist interventionist⁸⁸, but unlike him he harbored doubts about the effectiveness of the war in defeating socialism⁸⁹. In his articles from 1913 to 1920 he saw a progressive growth in the power of the socialist leaders, fawned upon by governments; admittedly he saw them give ground before nationalism (Pareto [1913] 1920, p. 13), but he also saw the countries of the Entente poorly defended on a military level due to the waste of public money on electoral spending ([1915] 1920, p. 47). In 1919 he wrote that the Great War made promises it could not keep because it was too long and too costly, and that this gave rise to disillusionment ([1919d] 1920, p. 230). He derided the positions of democratic interventionists, a movement opposed to Italian neutralism and also to the interventionist nationalism to which De Viti de Marco belonged, which held positions in step with those of President Wilson⁹⁰. He also interpreted the war according to his theory of the circulation of *élites* (Pareto [1919d] 1920, p. 245)⁹¹: in the next chapter we will see the link that can be established between this theory and competition.

Nationalist from the start, Barone was in favour of Italy's entry into the First World War against the Triple Alliance⁹². The intervention

⁸⁸ See for instance the article *Realtà* (Reality, Pareto 1919c), one of the articles published by Pareto in the nationalist journal *Idea Nazionale*.

⁸⁹ Pareto wrote to Pantaleoni on 19 August 1914, "I don't know that it is so certain that the present war will harm socialism; it could instead be of not insignificant benefit to it" Pareto (1960, vol. III, p. 173).

⁹⁰ In the letter to C. Placci of 26 October 1914, with reference to the democratic interventionists, Pareto wrote: "I fear the war will be very long and that those who believe that afterwards there will be a lasting peace, are deceiving themselves" (Pareto 1973, p. 883). Pareto missed no opportunity to ridicule the ideals proposed by W. Wilson, even calling him, in a letter to his follower Guido Sensini of 2 July 1919, "a scientist (?) of the tenth rate" (Pareto 1973, p. 1024).

⁹¹ In a letter of 24 July 1917 to the economist Tullio Martello, a follower of Francesco Ferrara, Pareto said: "the war has hit the middle class who live on rent; the workers have huge pay-packets" (Pareto 1973, p. 976). And on 16 August 1920 to Arturo Linaker: "Not poverty, but greed moves the multitudes, the same greed that made many in the rich class want the war" (Pareto 1973, p. 1043).

⁹² It was the name of the secret agreement between Germany, Austria-Hungary and Italy. In 1915 Barone was the creator of the first full-length film filmed on the battlefields.

of the government in this circumstance is for him justified by the “suddenness of catastrophes, for which private initiative is either paralyzed or would arrive late” (Barone [1908a ed. 1919-20] 1936, p. 678). Commenting in detail on the measures adopted during the Great War, especially the fixing of a ceiling on prices, he stated that in time of war situations arise that reduce competition: more rigid demand, more limited supply of inputs, greater difficulty importing (p. 696); in these circumstances it is possible, by stockpiling goods, to determine price rises. According to Barone, to avoid such increases the state should when possible increase the supply of the scarcer goods, importing them at lower prices and reselling them where they are scarce; if this was not done, in order to rightly limit the damage suffered by the common people, the state should “take *directly* from some to give to others” (p. 697), for example by price discrimination. For Barone it would therefore be better to nationalise the production of those goods so as to do “what an intelligent minister of production and consumption would do in a collectivist state” (p. 699), thus reproducing the outcome of competition⁹³. In Barone’s view, imposing a price ceiling lower than the equilibrium price, however, has the opposite effect, which for him consists of triggering a chain of measures that “kill commerce and dry up production” (p. 692)⁹⁴.

A very different position was taken by De Viti on the question of the Great War. He too was interventionist, but in a democratic, anti-nationalist way and was convinced that the “free nations of Europe” were stronger than the Central Powers and would frustrate their

⁹³ The government “should have done what an intelligent ministry of production and consumption would do in a collectivist state ... It would have been a monstrous centralisation ... a mammoth bureaucracy . . . but at least, somehow or other, even if with more tortuous, cumbersome provisions, it would have finished by approaching that *maximum* that, automatically and without being aware of it, competition and speculation bring about” (Barone [1908a ed. 1919-20] 1936, p. 699).

⁹⁴ Barone was referring to requisition (to prevent the creation of secret stockpiles) and state supply, which meant the provision of goods where requested, thus replacing the free market.

“dream of dominance” (De Viti 1918)⁹⁵. His enemies continued to be “groups with the monopoly on industrial and grain-growing parasitism” who want to “obtain an increase in import duties” ([1914b] 1918, p. 31). From 1917 on, he was aligned with the positions of President Wilson; he would later remember the postwar period as a “fearful period of total anarchy”, essentially with the disappearance of the state and “phenomena typical of civil war” (1929, pp. v-ix). The theme of competition was recalled in his works on the war to illustrate the importance of having available various trade routes between nations ([1916] 1918, p. 73)⁹⁶, or the idea of allowing the development of national industries that were “natural, ... intelligently exploited by science and by vocational education” ([1917a] 1918, p. 113). Moreover, in recommending the subscription of the fourth public loan to finance the war, he admired the “colossal, perfectly organised factories” of German companies that have “been able to reduce costs and prices so much that the customs barriers have been overcome” ([1917b] 1918, p. 157). Lastly, he denounced the difficulty of introducing farm machinery with the observation that, “if the price of the machines had been lowered by competition, their use would have increased” (1918, p. 181). De Viti also pointed out that the war had accelerated the process of “municipalising public utilities” like lighting and the distribution of water⁹⁷, a subject on which his opinions will be examined in the next chapter.

We shall conclude this section by remembering Barone’s praise for the market economy for having held out during the upheaval of the war, both in practical terms and in theory; he wrote, “the ‘anarchic’ organising – as the socialists call it – created by individual initiative and competition” was robust enough to stand up to the turmoil of

⁹⁵ On this see Martelloni and Mosca (2017).

⁹⁶ The reference is to the Yugoslav problem and to communication between the Adriatic and the Danube.

⁹⁷ Among the services necessary for the community at that time, De Viti also included bread-making (1921, p. 92g).

events and, at the level of economic ideas, to avoid generating any “scientific revolution” ([1908a ed. 1919-20] 1936, p. 709).

5. Conclusions

In the moving, deeply-felt obituary written by De Viti on the death of Pantaleone we read:

For him science was a system of principles that had to explain the events of real life, historical events, the events in the business world, political events, as well as the behaviour of the men who were the actors ... [He] moved with lightning speed from the abstract principle to diagnosing the actual event, and from that to judging the men (1925, 165-166).

In this chapter we have found confirmation of the fact that theory, for the marginalists of that generation, was the inescapable basis on which they built their general vision of social reality; we have seen that for them the explicative capacity of theory was of the utmost importance. As we know, our four economists were champions of theoretical economics, but here we see that they never moved away from the real world: they never accepted economic theory without a grasp of facts, and when this seemed to be lacking, some of them were willing to abandon it.

We have seen that Pantaleoni believed in competition, initially even in static competition, but above all he believed in selection: in examining questions like gender phenomena, the labour market, the form of institutions, the geopolitical situation and many other issues, he trusted the market, which he used as a metaphor to find order in non-economic fields as well. De Viti, too, firmly believed in the free market, but the analysis we have conducted shows that for him it was more an ideal to aim for and a reference point to guide his political efforts than a mechanism operating spontaneously. Barone was convinced that theoretical economics would have the final word on

concrete phenomena, even very significant ones; just think of his path-breaking comparison of the capitalist economy with the planned economy. Pareto on the other hand ended up no longer believing either in competition or in general in the explicative power of economic theory: as a sociologist he saw pure economics as the realm of logical actions, while reality was dominated by non-logical actions. That's why he regarded economic theory as just the first stage from which he moved away in order to remain anchored to reality "by theories which are ever more in accord with it" ([1906] 1971, p. 9).

In this chapter we have seen that ideas of competition and market power have been applied in many different fields, and have been used by our economists as daring experiments at the cutting edge, in the belief that in the social world, even in non-economic domains, they could find laws to explain real phenomena. Since their work, intellectual exploration in these same fields has undergone significant developments: today the impact of the economic situation on the condition of women is the domain of gender economics, the labour market is studied by economists using bargaining models, the economic calculation problem is dealt with by experts in mechanical design theory, and political scientists make models of international relations. The method used to deal with all these cases is that of game theory, which - following the 2005 Nobel Prize-winner Schelling (2006) - is applied to "strategic activities, things like promises and threats, tacit bargaining, the role of communication, tactics of coordination, the design of enforceable contracts and rules, the use of agents, and all the tactics by which individuals or firms or governments committed themselves credibly". Today's experts will perhaps just find a few pointers in the ideas of these economists of the past; for that generation all these lines of research did not appear specialistic, but derived even then from the application of similar conceptual templates to various fields in the social sciences.

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