

NINETEENTH-CENTURY FRENCH LIBERAL ECONOMISTS' READING OF RICARDO THROUGH THE LENSES OF THEIR FEAR OF SOCIALISM

Nathalie Sigot

PHARE, Université Paris I Panthéon-Sorbonne
Maison des Sciences Economiques
106-112 Boulevard de l'Hôpital
75647 Paris Cedex 13
E-mail : nsigot@univ-paris1.fr

Second draft – Do not quote.

“[...] les socialistes aussi s'appuient sur Ricardo, non sans perfidie, il est vrai »¹

In the beginning of the 19th century, Ricardo's writings met in France at best with indifference, at worst with criticism. At that time, there was a constant reference to Adam Smith, who was considered to be closer to the “economic system” of the Physiocrats that most of the French economists admired². The publication of Ricardo's *Principles* hardly changed this course of things: now, it is true that Ricardo's *Essay on the high price of bullion* had been translated in French the year of its publication (1810), in the *Moniteur Universel* (cf. Béraud, Gislain and Steiner, p. 20), helping Ricardo to acquire a name as a monetary economist; but the French translation of his *Principles* in 1817 received little attention, except for Say's notes which were added to this edition (*ibid.*). If the poor quality of this translation may partly explain this lack of interest, the reasons were probably more fundamental.

Thereafter, the references to Ricardo by P. Rossi, appointed to the Jean-Baptiste Say Chair at the College de France, did not gain greater acceptance: Ricardo's theory remained highly criticized. The influence of Say's point of view on Ricardo might be noticed; but what was striking in the criticism made by French Liberal economists after Say's death was the role of ideological considerations³. Even

¹ Block, 1882, p. viii.

² According to Baudrillart (1888: iv), for instance, the “economic system” of the Physiocrats “was summed up in the following ideas: *property* and *liberty*, as foundation of social order and expression of *individual rights*”. French liberals' admiration for Smith's theory followed, since, according to them, Smith was in the continuity of the Physiocrats: in particular, he admitted the existence of natural laws, while at the same time he corrected some of their errors, such as the belief in land being the sole cause of wealth (*Ibid.*: vi).

³ Though focused on the analysis of liberal 19th century French economists, this article excludes Jean-Baptiste Say, and considers only the period after his death, which marked the beginning of what Le Van Lesmelle (2004: 79 and f.) has qualified the “liberal lobby”. This lobby dominated the French scene during the nineteenth century: in 1841, they created the *Journal des Economistes*, which was the main review in economics at this time; they founded the Guillaumin publishing house in 1835; and they edited the *Dictionnaire d'économie politique* in 1852.

Ricardo's monetary theory, which was welcomed by them at first, was criticized later for allowing too much scope for State monetary intervention.

More precisely, their reading of Ricardo evolved according to their concerns regarding socialism: in a first stage, it provides witness to their fear of a challenge to the social order. The absence in Ricardo's theory and more generally in what they called the "British School" of political economy of any consideration of what would come to be called "social issues" was assumed by some to have encouraged the rise of socialism. In this context, they underlined Ricardo's errors regarding his method and his rent theory (I).

After 1848, as the fear of socialism as a political force decreased, their main concerns changed. First, socialism was now being linked to the issue of wage levels: capitalism was accused of aggravating the already difficult situation of the working class. Consequently, Liberals tried to advocate Bastiat's belief that "all men' impulses, when motivated by legitimate self-interest, fall into a harmonious social pattern" (1850, p. 2). This led them to discuss Ricardo's theory of rent again, but from another perspective (II.1): now, they ought to prove that this theory was not inconsistent with the growth of real wages; so doing, they fought Lassalle's "iron law of wages" (II.2).

The rise of workers' movements had a second consequence: now, socialism turned towards protectionism much more clearly; on the opposite, economic liberalism was accused for impoverishing workers. Consequently, French liberals tried to underline the benefits of liberalism: from the point of view of international relation, liberalism was viewed as an important factor for ensuring peace among countries; but liberalism also means that the role of the State in national economy should be reduced: most of the French liberals then developed several critiques relating to the State. Actually, they reacted to new development that they faced in economic theory and political facts; economic thinking posed a challenge that they tried to fight against: the emergence of the historical school and its corollary, the questioning of economic universal laws by socialists, led them to reevaluate their position vis-à-vis Ricardo's method (III.1). Marx' theory led them to discuss the issue of wages and capital (III.3). And, from a political point of view, the implementation of social insurance in Germany worried them and led them to defense liberalism (III.2).

It should be noted, however, that the chronology of the debates to which I am referring was not so simple, since French Liberals hardly changed their mind throughout the period considered: there were different opinions at the same time amongst them, and I will try to show how particular aspects of the debate were put forward at a given moment. But their fight against socialism was continuous, as proved for instance by Molinari's article (1891), celebrating the fiftieth anniversary of the *Journal des Economistes*, which was entirely devoted to the criticism of socialist ideas.

I/ FACING THE DEVELOPMENT OF SOCIALISM AS A POLITICAL FORCE: A MOTIVATION FOR THE CRITIQUE OF RICARDO'S METHOD AND HIS RENT THEORY

The strands of Socialist schools were very numerous in the beginning of the nineteenth century in France: from 1815 to 1848, "France was unquestionably the country of socialism" (Bruhat, 1972a, p. 331). From the point of view of Liberals, the 1848 Revolution proved their importance, but also their dangerous nature. This Revolution significantly marked the then dominant school of economic thought: the liberal economists worked to convince people that economic improvement guarantees their well-being and safeguards social harmony. Their critique of Ricardo's method (I.1) and rent theory (I.2.) came out in this context.

I.1. The critique of Ricardo's method.

The majority of French liberals rejected Ricardo's method that they considered as a prime example of the mathematical method. The way they presented Ricardo in their books or articles illustrated their strong opposition to this method: De Puynode, for instance, stressed Ricardo's interest in chemistry, which "stood for a long time as his favorite science" (1866a, p. 10). No doubt that, for

liberals, this interest in natural science explained Ricardo's disregard for observation, facts and more generally for real-world phenomena. Consequently, Ricardo was accused to be dogmatic, "living in the world of abstractions" (*ibid.*, p. 11) which led him, "on the basis of skilful deductions, innovative nuances, worthy assumptions" (*ibid.*), to come to "wrong conclusions".

For French economists, this method was linked to an inadequate conception of economics: it reduced the motivations of the individual to a simple search for personal self-interest, ignored "language, custom, prejudice, [and] distance" and created an "imaginary world" in which humanity lost its "moral" aspect and was reduced to its "economic" aspect" (Baudrillart, 1866, pp. 14-15). They illustrated this badly conception by quoting and criticizing the always same extract from Ricardo's *Principles* (1821, p. 348):

"If five millions of men could produce as much food and clothing as was necessary for ten millions, food and clothing for five millions would be the net revenue. Would it be of any advantage to the country, that to produce this same net revenue, seven millions of men should be required, that is to say, that seven millions should be employed to produce food and clothing sufficient for twelve millions?"

This extract was first commented by J-B. Say, and his comment was included as a footnote in the French translation of *Principles* (Ricardo, 1882, n.1, pp. 285-6): Ricardo, he wrote, "draws that conclusion that an industry which provides jobs for seven millions of workers is not more advantageous than an industry which provides jobs for five millions [...]". Then, this extract was commented by Droz (1846, p. 59; italics added) as follows: Ricardo "establishes that, in a country where 10 million inhabitants can be found, if the work of 5 million of them suffices to nourish and clothe them, this country takes no advantage from having 12 million inhabitants if the work of 7 million becomes necessary to obtain the same result". He added: Ricardo "*is thus indifferent to the existence or non-existence of 2 million inhabitants, if the product is the same*" (*ibid.*; see also Fouillé, 1899, p. 51). Afterward, this interpretation became dominant among French liberals, to the exception of Garnier.

One may question the link between this reading of Ricardo and socialist thought. Three elements are to be noted. First, this disregard for human aspects led workers to drift away from the study of the true principles of political economy; consequently, they were not able to realize what these true principles proved: that the improvement of their situation is a necessary consequence of economic growth and "a result of their personal action" (Renouard, 1862, p. 330). On the opposite, they were attracted to socialist ideas which emphasized the inhumanity of political economy and sought to make them think that their situation was a result of social institutions rather than people's bad habits. Second, the "natural fruit of the speculative spirit" was socialism, since it allowed developing "under the pretext of the ideal, the most inept utopias" (Gouraud, 1852, p. 276)⁴. And third, Ricardo's method strengthened the influence of material motives, instead of spiritual considerations. By this way, it enabled the development of socialism, since egoism was viewed by Liberals as the main characteristic of socialism (see for instance Block, 1896, p. 712). For instance, according to Reybaud (1873, p. 633), the success of socialism was the consequence of the "lessening of concern for moral considerations":

"For the last century and early in this century, there was a development of systems aimed at improving man's fate on this earth, the satisfaction of his desires and the improvement of his condition. These systems were based on a crude sensualism: the needs of the body were so important that spiritual ones were almost excluded. It leads to the resurgence of instinct, and it would be no surprise for anyone that taking this doctrine to the extreme means ignoring freedom and will of the individual, and challenging his merit when doing good and his responsibility when doing bad"⁵.

⁴ In 1899, Fouillé developed the exact opposite criticism towards Marx, accusing him to love power and to hate ideas.

⁵ « Dans le cours du dernier siècle et les débuts de celui-ci, il s'est produit des systèmes qui ont eu pour objet le sort de l'homme sur cette terre, la satisfaction de ses désirs et l'amélioration de sa condition. Ces systèmes

This lengthy quote allows linking the critique of Ricardo's method with the "pessimistic conclusions" of his analysis – in particular, his theory of rent. In fact, the critique of Ricardo's method not only reveals a different approach to political economy. Of course, in the 19th century, there was a great consensus among French Liberals that their conception of economics as a "moral science", whose goal was the well-being of the person, was to be opposed to the British one, which was only concerned with wealth. But generally, they also considered that Ricardo's method had important analytical and political consequences: Ricardo's conclusions depended heavily on the assumptions adopted by him. But Socialists forgot these basic assumptions, and generalized his conclusions in order to prove that private interests diverge.

I.2. The first challenge to Ricardo's law

The second theme of French economists' critiques of Ricardo's thought was linked to what they called "Ricardo's law", that is Ricardo's rent theory. This theory was much debated in France, since, for these economists, it appeared to raise the issue of the legitimacy of private property (see Breton, 1984). With the exception of Rossi (1836-37, p. 80) for whom Ricardo's rent theory constituted "the glory of modern political economy", French Liberals were worried about the conclusions socialists drew from it; despite this common concern, there was a strong disagreement among them on the nature and the existence of rent. For nearly a century, ideological implications blocked scientific discussion about this issue, and it is an excellent example of how French Liberals' fear of socialism determined their reading of Ricardo's theory. Few of them, for instance, understood the link between this theory and liberalism, because they focused on the issue of property rights. From this viewpoint, Molinari's analysis was interesting: in 1851, he defended Ricardo's rent theory by stating that it proved the superiority of free trade. On the one hand, he underlined that there was only a downward trend in real wage if the importation of wheat was prohibited. On the other hand, he noted that "if poor lands are first brought into production [...] then, to ban the importation of foreign wheat would be useful to protect the national production" (Molinari, in *Société d'économie politique*, 1851, p. 297-298)⁶. But, very surprisingly, it did not appear that this analysis has been taken up subsequently: on the opposite, in a footnote to the French translation of his *Essay on the Influence of a Low Price of Corn on the Profits of Stock*, Fontenay underlined that Ricardo's statement (1815, p. 37) that "a fall in the price of corn, [...] lowers the wages of labor, and therefore raises profits" is a "disappointing conclusion", which ought to lead to "a plea [...] in favor of monopolies, restrictions, taxes; in short, of everything that increases the value of things" (n.1, p. 524).

In fact, the rejection of Ricardo's rent theory is to be linked with the development of socialist thought, as proved for instance by the following quotation by Leroy-Beaulieu (1881, p. vi; italics added): "Ricardo's famous law about land rents has no application in the present time, and *the corollary that Proudhon extracted from this law – 'Property is theft' – collapses with it*" (see also Fontenay, 1851a, p. 95; Batbie, 1861, p. 250; Le Hardy de Beaulieu, 1861, p. 274)⁷. Thus, it appears that the consequences of this theory, which were thought to be "quite inauspicious for humanity" (Leroy-Beaulieu, 1896, I, pp. 731-2), provoked its rejection by French Liberals: by linking the existence of rent to differences in land fertility, and by declaring that the price of a good depended on the

reposaient sur un sensualisme étroit : les besoins du corps y occupaient une telle place que l'âme en était presque exclue. C'était la réhabilitation de l'instinct, et il n'y a pas à s'étonner qu'en poussant cette doctrine à l'extrême, on en soit arrivé à faire bon marché de la liberté, de la volonté de l'individu, qu'on ait contesté son mérite dans le bien, sa responsabilité dans le mal ».

⁶ « Si l'on commence par mettre en culture les mauvaises terres, de préférence aux bonnes, il sera utile, dans l'intérêt de la production nationale, de repousser les blés étrangers »

⁷ In *Qu'est-ce que la propriété ?* (1840, p. 123), Proudhon wrote : "According to Ricardo, MacCulloch and [James] Mill, farm-rent, properly speaking, is simply *the excess of the produce of the most fertile land over that of an inferior quality*; so that farm-rent is not demanded for the former until the increase of population makes the cultivation of the latter necessary. It is difficult to see any sense in this. How can a right to the land be based upon a difference in the quality of the land? How can varieties of soil engender a principle of legislation and politics?"

production costs that it generated, the rent theory led to two conclusions that Liberals could not accept.

The first was related to the notion of rent itself and its relation to property. In *Société d'économie politique* (1852, p. 107), Fontenay asked "how can property be legitimized from the point of view of justice, if it is acceptable that the Rent comes from an advantage of fertility or of situation to which Man, the owner, doesn't contribute?". While French Liberals tried to defend property, by stating that it originated only from labor, the reference made to differences in fertility meant that rent was a kind of "seigniorial privilege" or a "windfall, as said by Proudhon" (Fontenay, 1851a, p. 96). Moreover, in Ricardo's theory, the rent was paid by the most fertile lands, that is, by lands which needed much less labor for a same output. Consequently, rent constituted a "decreasing reward with merit and difficulty" (*ibid.*, p. 103). Since this conclusion was inconsistent with their belief in a system of reward that depends on individual efforts, some French liberals contested the fact that the more fertile estates were cultivated first (Fontenay, 1854, pp. 53 ff.; Chevalier, 1850, pp. 71-72; Leroy-Beaulieu, 1881, pp. 21 and 81; Beauregard, 1888, p. 89; Guyot, 1895, p. 22). And, above all, they tried to redefine the concept of rent. This attempt gave rise to two types of argument. In order to defend the property right, most of French Liberals assumed that rent constituted a payment for a service (on that point, see Sigot, 2010, pp. 772-3). So doing, they legitimized land ownership: as stated by Fontenay (1851b, p. 207), there is not to deny the existence of rent, but "to prove its legitimacy". For instance, Le Hardy de Beaulieu stated that rent was the "just remuneration for dangerous difficult work with random results", which meant that "land appropriation doesn't harm non-landowners and doesn't deprive anyone of his legitimate rights" (Le Hardy de Beaulieu, 1861, p. 281; see also Fontenay, 1851b, p. 211; Passy, in *Société d'Economie Politique*, 1866, p. 453)⁸. Thus, these economists provided an answer to the contestation of property right by Proudhon. But another argument was also put forward: rent was "the special product of nature", resulting from "the natural force" (Block, 1897, p. 205; 208). This led Block to conclude that there was no unfairness in rent, since "nobody refuses to enjoy free gifts of nature [...] or natural advantages of any kind, beauty, strength, memory, skill" (*ibid.*, p. 209)⁹. In other words, rent exists in many sectors, and not only in agriculture.

The second conclusion was related to the fact that the Ricardian rent theory resulted in a "progressive and continuous rise in land revenues, to the detriment of other productive agents" (Molinari, 1863, p. 384). On the contrary, French economists all agreed that this "fatalist" theory should be countered because "what would be the use of developing commerce and industry, of simplifying work with machine and of multiplying this work by accumulating capital, if the men, [caught] in the middle of all this movement, become each day poorer and more unhappy?" (Faucher, 1852, p. 572). This conclusion will become increasingly important, as the objection of the property right was weakening (see below).

III/ FACING THE CHALLENGE TO THE HARMONY OF INTERESTS BY SOCIALISM: A MOTIVATION FOR THE CRITIQUE OF RICARDO'S RENT THEORY AGAIN, AND OF HIS THEORY OF DISTRIBUTION.

After 1848 and the 1850s, the main concern of French Liberals changed. From the view-point of socialism, this change was to be seen in the context of the failure of the national workshops [*Ateliers Nationaux*] and the April 1849 election defeat. Socialism was no more a political force: until the early 1860s, socialism was faced by a "dearth of ideology" (Bruhat, 1972b, p. 511): "socialism is dead. To speak of it is to pronounce its funeral oration", Reybaud wrote in 1854 (p. 429).

⁸ This line of defense was criticized by Garnier, who underlined that "the communists do not recognize the legitimacy of the appropriation of the fruits of labor" (in *Société d'Economie Politique*, 1866, p. 449); he upheld a definition of rent as revenue of a "natural monopoly".

⁹ « Personne ne se refuse de jouir des dons gratuits de la nature 'qu'on n'a pas gagnés' [...] ni des avantages naturels quelconques, de la beauté, de la force, de la mémoire, de l'adresse ».

But, during the 1860s, socialism revived: “Since a quarter century”, Leroy-Beaulieu wrote in 1884 (p.v), “the social chimera took a new form. It renounced sentiment and threw it into dialectic. [...] The so-called scientific socialism followed romantic socialism”¹⁰. French Liberals saw the progress of socialism in Germany: Germany “became the classic land of socialism”, Leroy-Beaulieu noted in 1890 (p. 16); they were particularly concerned about the influence of Lassalle, which forced them to discuss the issue of wage. Now the question of improving the well-being of the working class was in focus. This change led French Liberals to assert the existence of a harmony of interests that socialists denied: the development of pauperism was called into question, and Liberals tried to show that as society grows, the well-being of workers was getting better. The way how they dealt with Ricardo’s theory of rent was framed by this concern (II.1); but more generally, it forced them to revisit all Ricardo’s theory of distribution (II.2).

II.1. From the rent theory ...

As previously noted, for Liberals Ricardo’s theory of rent not only challenged the property right; it also highlighted the divergence of interests in society. By contrast, French liberals defended the idea that prices are decreasing while society becomes wealthier; as a consequence, demand raises, allowing an increase in welfare both of workers and capitalists. In order to prove this movement called by Fonteyraud a “perpetual miracle of the production” (Fonteyraud, 1882,...réf?), those French Liberals who assumed that rent constituted a payment for a service underlined that this labor or this capital¹¹ enhanced labor productivity (Garin, 1885, p. 114). As a consequence, according to Leroy-Beaulieu (1896, p. 21), for instance, rent was decreasing in modern society, so that Ricardo’s rent theory was of no relevance. Most of the time, indeed, French Liberals considered that Ricardo disregarded the increasing productivity in industry: in his review of the French one-volume edition of Ricardo’s works, Courcelle-Seneuil for instance wrote that “[Ricardo’s] law of rent is undeniable, but at one condition that we considered the progressive mobility of the art of industry”¹² (1889, p. 426). They argued that growth in economic activity resulted in a significant increase in the average real incomes of the population. From the viewpoint of their interpretation of Ricardo, it proved either that he was wrong, or that he was misunderstood. This was this second interpretation that, for instance, Wolowki (in *Société d’économie politique*, 1867, p. 231), defended:

“Ricardo could consider only a given production sharing. But as production is not a *constant*, but is on the opposite a *variable*, which expands as enlightenment increases, industry strengthens with the help of science, and a less effort is required to obtain a more important output, labor and capital harmonize wonderfully”¹³.

Whatever be the reasons French Liberals gave to explain this “perpetual miracle”, it allowed them to defend the idea of “natural harmonies” of interests: the development of society improved the position each class. If, in the first period of the development of their school, French Liberals’ critique of Ricardo’s theory of rent was above all linked to their defense of the property right, this theme of natural harmonies of interests subsequently will be of growing importance for them.

¹⁰ “Depuis un quart de siècle, la chimère sociale a pris une autre apparence. Elle a renoncé au sentiment et s’est jetée dans la dialectique. [...] Au socialisme romanesque a donc succédé le socialisme prétendument scientifique ». Dameth (1877, p. 185) called this new socialism, « erudit socialism », since “it originated in the higher education in German Universities”.

¹¹ Le Hardy de Beaulieu (1861, p. 281) considered that rent was the “just remuneration for dangerous difficult work with random results”, while Fonteyraud (1847, liv) and Dameth (1859, p. 391) assumed that it is a revenue from capital.

¹² « La loi de la rente est incontestable, mais à une condition [...] c’est qu’on tienne compte de la mobilité progressive de l’art industriel ».

¹³ « Ricardo ne pouvait avoir en vue que le partage d’une certaine production donnée. Mais comme celle-ci n’est point une *constante*, qu’elle est au contraire une *variable*, qui grandit d’autant plus que les lumières s’étendent, que l’industrie se fortifie au contact de la science, et qu’un résultat plus large correspond à un effort moindre, les avantages du travail et du capital se concilient à merveille. »

This evolution must be linked with the development of socialist thought, as Liberals interpreted it. In 1869, they published in the *Journal des Economistes* a series of articles written about socialist thought; in the third one, Molinari (1869, pp. 330-1) explained that now Socialists took an interest in the issue of how wage rates are settled: "For a long time, socialists did not raise this issue [...]. If workforce is, as they supposed to be, a simple transformation of servitude, there is no reason to seek ways of improving it. It is not possible to improve slavery, nor it is possible to improve plague or cholera, one eliminates them"¹⁴. This statement reflected the development of the labor movement, which resulted in a series of strikes in the 1860s.

II.2. ...to the "iron law of wages"

The social unrest prompted French Liberals to clarify their position on the determination of wage rates. They did that from two points of view.

First, as they considered that political economy must be based on facts, they tried to provide some data about the purchasing power of wage earners in France. Statistical analysis was then utilized in an attempt to show the improvement of the material condition of the working class: for instance, according to Fontenay, workers' salaries had tripled over the past century while Beauregard (1888, p. xxiii) estimated that, for France, this rise was "at least 40 or 50%, even after deducting the increase in the price of subsistence"¹⁵. The issue was important enough to give birth to two contests organized by the *Académie des Sciences Morales et Politiques*, in 1886; both were dedicated to the issue of wage. For one of them, the first prize was awarded to Emile Chevallier. The jury then considered that "the best part of [his] work" was the one which "stressed the conclusion that agricultural wages have grown up faster and more strongly than the cost of subsistence goods in every region of the world" (Chevallier, 1887, p. 3): indeed, Chevallier (*ibid.*, p. 38) stated that agricultural wages rose by 100% from 1850 to 1885 in France. Some economists tried also to prove the betterment of workers' well-being by dealing with the growth of the saving rate (xx). Finally, Leroy-Beaulieu (in *Société d'Economie Politique*, 1883, p. 465) considered that the improvement of workers' condition was proved by their ability to strike: "workers go on strike; they suspend their work during weeks and months, without dying of hunger and thirst and, most often, they win"¹⁶.

Secondly, from an analytical point of view, French Liberals endeavored to give a theoretical explanation to their empirical evidence. As noted before, they first objected Ricardo's theory of rent, and generally concluded that the development of society did not increase the price of subsistence. But this conclusion was not enough to assert the fundamental commonality of interests between the classes of society: it disputed only the necessary conclusion of Ricardo's theory, as summed up by Bastiat (1851, pp. 288-289), that the effect of landed property "is to render the rich inevitably richer and the poor ever *poore*". What concerned them was Ricardo's theory of wages, and they abundantly commented his "grim prophecy" (Villey, 1883, p. 15) about the decreasing trend of the wage rate: they rejected the wage-fund theory and underlined the role of the labor productivity.

In order to highlight the harmony of interests, French Liberals also called into question "Ricardo's tragic idea" (Villey, 1887, p. 137) that there was an inverse relationship between wage and profit. They considered that the salary level did not depend on the price of subsistence goods, but on the supply and demand of labor. By this way, they tried to face the "iron law" stated by the "agitator Lassalle" (Block, 1890, p. 293; see also Block, 1877b, p. 326), which denied the possibility for a working man to better his condition by his own effort: according to this "law", the worker's average

¹⁴ « Cette question, les socialistes ont longtemps dédaigné de s'en occuper et ils se montraient en cela conséquents avec eux-mêmes. En effet, si le salariat est, comme ils le prétendent, une simple transformation de la servitude, il n'y a pas lieu de chercher les moyens de l'améliorer. On n'améliore pas l'esclavage, pas plus qu'on n'améliore la peste ou le choléra, on le supprime ».

¹⁵ Several other economists provided varying estimates of wage increases: for instance, in 1890, Du Puynode wrote that nominal wages "increased, in France, by 42 % since 1853, and by 60 % since 1826" (1890, p. 170)

¹⁶ "Les ouvriers se mettent en grève; ils suspendent leur travail pendant des semaines et des mois, sans mourir ni de faim ni de soif, et, le plus souvent, ce sont eux qui font triompher leurs exigences".

wage was reduced to the minimum necessary for his subsistence and reproduction. Now, the iron law was “demonstrated” by Ricardo, Laveleye underlined (1878, p. 425).

Disputing Lassalle’s reasoning led French Liberals to examine the determinants of wage rate: they rejected the concept of natural wage. More generally, this implied to develop a new theory of wages: “the whole theory of wages must be rebuilt”, stated Leroy-Beaulieu in 1896 (see also Levasseur, 1888, p. 26), who developed a “productivist theory of wages” (Charbit, 2009, p. 76) according to which labor productivity plays a central role in wage determination. For instance, according to Fonteyraud (1882, n. 1 p. 235; see also Levasseur, 1898), Ricardo “did not notice that”, as productivity increased, prices decreased; then, demand for goods grew; this led to higher demand for labor, and thus the real wage rate rose along with profit. This reasoning rendered the “iron law of wages” meaningless (Block, 1890, p. 293). If Block conceded that “this was Ricardo who seems to have inspired Lassalle”, he stipulated however that “it would be wrong to conclude that Ricardo was an opponent to workers” (*ibid.*, p. 298). Such a statement fully illustrated the ideological tone of the discussion. It also explained why, according to Fontenay, Ricardo did not deserve the respect of economists. His fatalism “would introduce struggle and hatred between workers” (Fonteyraud, 1882, n. 1, p. 236) and “would urge manufacturers to an impossible generosity [*convierait les manufacturiers à une générosité impossible*]”. What does it mean? Though Fonteyraud never specified what was meant by “impossible charity”, two possible interpretations are worth mentioning. The first one is that the antagonism between wage and profit may justify that the employer paid wages higher than the equilibrium rate, since equilibrium wage condemned workers to misery and death; another possible interpretation is that there was a need for the State to give workers a wage subsidy. In both cases, practices of this kind were incompatible with the principle of individual responsibility that French economists defended.

III. FACING THE GERMAN SOCIALISM: THE DEFENSE OF LIBERALISM AND THE ISSUE OF LABOR

The signing of the 1860 free-trade agreement between France and England and its being called into question in 1892 led the French Liberals to seek above all to underline the benefits of liberalism and the perils of a growing State involvement in economics. Alongside this (and linked with this), new dangers were emerging at the end of the period: the development of “German socialism”, based on the historical method (III.1): for the first time, Socialism was not seen as a “utopia”, rooted in “sentimentalism” or “romantism” (Leroy-Beaulieu, 1884, p. v) but a “consistent alternative theory [...] of political economy, challenging it on its own terms” (Cahen, 1994, p. 26): “Socialism, which was in the cloudy area of utopias a mid-century again, comes down to earth now, and longs to seize the State in order to make it serve the covetousness of the multitude” (Molinari, 1891, p. 322). Again, this Socialism was rooted in Ricardo’s theories: according to Guyot (1908), for instance, “German socialism is derived from two sources”, the second being¹⁷ “[t]hree formulae of Ricardo, viz. (a) labor is the measure of value; (b) the price of labor is that which provides the laborer in general with the means of subsistence and of perpetuating his species without either increase or diminution; (c) profits decrease in proportion as wages increase”. In fact, this “new socialism” (Dameth, 1877, p. 208; Leroy-Beaulieu, 1884; Fontenay, 1891, p. 321) referred to two schools of thought that Liberals rarely distinguished: on the one hand Marx and on the other the “socialists of the Chair”. The former convinced Liberals of the pressing need to reexamine Ricardo’s theory of value (III.2); the latter contributed to call liberalism into question, by giving State an active role in the economy (III.3).

III.1. Natural laws versus historical method.

The emergence of new forms of Socialism putted on the fore the issue of the method, with the development of the Historical school of thought. This school was introduced in France as a result of

¹⁷ The first source is “the French doctrine of Saint-Simon, ‘the way to grow rich is to make others work for oneself” (*ibid.*).

the translation by Wolowski of the second edition of W. Roscher's *Principes d'économie politique* (see Breton, 1988). This led French Liberals to raise questions concerning what method to employ in economics; for Wolowski, history then appeared as a mean to "temper [...] the too absolute and too abstract sides of the English school" (quoted by Breton, 1988, p. 409; this viewpoint was shared by Levasseur). The debate was revived after 1880, following the controversy between Carl Menger and G. Schmoller in Germany¹⁸. Then it became clear that one of the important issues of this debate was the negation of universal laws in political economy: Baudrillart, for instance, stated that the Historical method, as well as Socialism, "prevented from seeing that free trade is an absolute truth that applies fully and at any time" (1885, quoted by Breton, 1988, p. 404). Fontenay linked historical method and socialism more strongly, when stating that the former was "imagined" by German economists in order to renew socialism ideas (1891, ppp. 322-323).

By contrast, French Liberals endeavored to defend the existence of economic natural laws. Then, they partially changed their mind about Ricardo's method. Some of them reconsidered their opinion concerning the abstract character of his method: Dameth (1877, fn. p. 192) for instance stated that "even Ricardo, the most speculative and abstract-minded [economists among old ones] [...] originated his theory of rent from two historical or alleged historical facts: the *historical* order of exploitation of lands and the *historical* evolution of the price of corn on the market"¹⁹. Others underlined the scientific character of Ricardo's method. As a consequence, under the pen of Pinard (1901, pp. 12-13), the "dogmatic" approach of Ricardo's economics that was previously criticized turned out to be an "illusion [*apparence*]". Pinard added: "Economics cannot be claimed to be scientific if it does not recognize the existence of laws. [...] Ricardo's economic meanderings show that there is a clear conception that economics is a science and as such it has its laws that combine to give consequences"²⁰ (see also Block, 1882, pp. x-xi). The mathematical method was now understood to be valuable, since "real-world phenomena [are] always too complicated for it being possible to draw firm conclusions" (Courcelle-Seneuil, 1889, p. 427). Consequently, Ricardo's method was considered by Courcelle-Seneuil to be "a most important service provided by [him]" to political economy (*ibid.*).

Indeed, not everyone agreed with this view and in 1880, Perin, for instance, continued to criticize Ricardo's method. But many French Liberals considered that the development of the Historical school of thought fuelled the new form of contention represented by German socialism. According to Molinari (1884, p. 371), "economists" could be characterized by their belief in the existence of natural laws, while "socialists of all schools [...] deny the existence of natural laws and attribute to the State the mission of compensating [for this lack by creating] artificial laws which it was their responsibility to dictate to the State". If, as stated by Rambaud, economists shared the "belief that there is a natural and permanent order in societies" (p. 83), they might have differing views about the characteristics of this order, but they all rejected the "illusion" of the advocates of the Historical school that "nothing is absolute in the world" (*ibid.*). Such a belief appeared to have been at the root of some socialists' doctrines: for instance, Le Play was linked with it (cf. Jourdan, 1882, p. 363); according to Fontenay, the historical method was also used by Marx, in order to prove that "the *origins* of capital" date back to "the end of the 16th century" (1891, p. 321), while this "economic category [was] in fact as old as humanity". But above all, historical method was adopted by the "Socialists of the Chair", who defended an "idolatry for the State" (Leroy-Beaulieu, 1889, p. 14), a "Cult of the State" (Leroy-Beaulieu, 1890, p.

¹⁸ Molinari (1891, p. 325) spoke of « an alleged gradual schism in German school », which may refer to this controversy.

¹⁹ « ... mais quant à ne pas procéder historiquement, dans leurs études, c'est un reproche que nul des anciens économistes ne mérite pas même Ricardo, le plus spéculatif et le plus abstrait de tous, et qui pourtant tire sa théorie de la rente foncière de deux données historiques ou soi-disant telles : l'ordre *historique* de mise en culture du sol et la progression *historique* du prix du blé sur le marché. »

²⁰ « L'économie ne peut [...] prétendre au caractère scientifique, si elle ne pose pas de lois. [...] Lorsqu'on a suivi Ricardo dans les méandres de ses raisonnements, n'a-t-on pas la conception bien nette que l'économie politique est une science, qu'elle possède des lois qui se combinent pour donner une résultante ? »

16), and whose “aim is to replace the natural and universal laws by national institutions, which the State is the cornerstone of”²¹ (Dameth, 1877, p. 193).

III.2. Critics towards State intervention and protectionism

Thus the main concern that now Liberals faced was the increased state functions: in this context, they were particularly worried about the development of the “Socialism of the Chair”. They had in mind the implementation of social insurance in Germany (Molinari, 1891, p. 325), where the State was considered as an insurance company. As noted by Faccarello (2010, pp. 747-8), the debate about this conception was not new: in 1849, Girardin’s stance that « The State must only be a national company for mutual insurance against all the risks susceptible of being anticipated » (quoted by Faccarello, 2010, p. 747) provoked a lot of critiques. But the danger was now considered as higher: Bismark’s reforms illustrated the influence of socialist ideas. And the danger was wider, since state control extended also in other countries, like France: Leroy-Beaulieu (1884, fn2 p. 10) for instance referred to a bill introduced in 1884 by a Member of Parliament named Girodet, for nationalizing mine²².

According to the French Liberals, there was a necessary link between protectionism and the demand for more state government support: high public spending required government to resort to tax increases, a move that undermined competitiveness; consequently, there was a stronger request for protection everywhere in the world – a “rising tide of protectionism” (Molinari, 1885, p. 468). There were private interests behind this wish to see the role of the State increased: “the State is a body left in the hands of certain people”, Leroy-Beaulieu wrote (1889, p. 29).

French economists’ defense of liberalism may explain their mixed opinion about Ricardo’s monetary theory. At first, they were impressed by Ricardo’s method in these writings: contrasting with his abstract method in his *Principles* that they criticized, here he mobilized facts. As stated by Fonteyraud (1847, p. xxiv), for instance, in Ricardo’s monetary writings, “there are no disappointing formulas, nor naïve utopias outlined on paper; nor excursions into the endless set of assumptions; everywhere do facts support idea”²³. But at the same time, they denounced his proposal to create a National Bank. For de Puynode (1866, p. 12), for instance, this monopoly is “iniquitous”; according to Fonteyraud (1847, p. xxvii), it proves Ricardo’s inability to “recognize the credit’s ability to regulate, to control, itself” that led him to “ask for help and assistance from the State, and to seek in illusory regulation the equilibrium that would naturally derive from a system of liberty”. This opinion was due to a number of different elements. The first one was the critique of monopolies in general terms. The second element was of a different nature: it reflected a clash of opinions about the ability of credit to self-regulation. Most French Liberals – with the notable exception of Wolowski – disputed the possibility for a public institution to adapt credit to the needs of trade and industry.

But the issue of liberalism also led French Economists to get back to Ricardo’s rent theory: they faced a new socialist reaction vis-à-vis this theory. Indeed, several economists proposed nationalizing land – Stuart Mill, Walras – and they discussed principally the proposal by Henry George of a “single tax” on land in *Progress and Property* [1879]. With this new development, based again explicitly on Ricardo’s theory of rent, this theory “has become a weapon of war: socialists get hold of

²¹ “L’école nouvelle a pour point de mire le remplacement des lois naturelles et universelles par les institutions nationales dont l’Etat est la clé de voute”. While Block focused on German socialists, Dameth also mentioned the British Historical School.

²² By contrast, Dameth (1877, pp. 188-189) considered that the socialism of the Chair did not spread in France.

²³ « point de formules décevantes, point d’utopies naïvement dessinées sur le papier ; point d’excursions dans le champ infini de l’hypothèse ; partout le fait supportant l’idée, comme le socle supporte la statue »

that theory and argued that man should not benefit a favorable chance, all the output of the chance must increase funds held by the public treasury²⁴ (Block, 1877, p. 117).

French liberals developed a detailed critique of the State: Block (1877) for instance listed several negative effects that State intervention generated, such as taxes growing, a decreasing freedom for people (p. 337) or the lack of progress since civil servants are assumed to be routine-minded (p. 341). Leroy-Beaulieu theorized this criticism (see Faccarello, pp. 742-3). In this context, Ricardo became less important as a noted author: now the point was to show the possibility of improvement of the situation of workers, without any intervention of the State: "It is important that man should make some efforts in order to achieve absolute security, to prevent his mind to be numbed; and this numbness has an impact on all civil acts" (Leroy-Beaulieu, 1890, p. 361)²⁵. This relates to the issue of individual responsibility, which was at the heart of French Liberalism. In this context, associations and cooperatives began to raise interest among Liberals: no consensus was reached on this topic among them, but their discussion showed a common concern – to affirm the future of the wage system.

III.3. Wage and capital

This last issue reflected their defensive reaction to Marx' theory. At first, and very surprisingly, Marx' theory did not really attract their attention, as witnessed by the fact that he was not identified as an entry in the *Dictionnaire d'économie politique* while Roscher for instance was²⁶; this may be explained by the fact that, as wrote by Leroy-Beaulieu (1884, p. 18), Marx' "observations, surprisingly subtle [...] become quite incomprehensible" By contrast, French Liberals were very anxious about the Socialism of the Chair, to which they dedicated a number of articles in the *Journal des Economistes*: "from 1872 to 1878, while there is only one article of substance about Marx in the *JDE*, there are eight devoted to the Socialism of the Chair", Cahen underlined (1994, p. 34). It was in the 1880s and after that Marx' theory began to be discussed by Liberals: in 1884, Leroy-Beaulieu called him the "main contemporaneous socialist writer" (p. 3), and in 1891, several articles were devoted to him in the *Journal des Economistes*.

Marx' theory led them to discuss Ricardo's theory of labor. More precisely, they tried to show that Marx failed by ignoring intellectual and moral labor: he considered only manual labor, wrote Fouillé (1900, p. 109). On the opposite, it is necessary to take into account the "work of saving, which created and maintained capital" (Pinard, p. 16; see also Courcelle-Seneuil, p. 426): "here is a man who, instead of spending, imposes a deprivation; how could you deny that this deprivation, due to its voluntary nature and arduousness, equals the effort corresponding to the fund of labor? Thus, capitalizing is working²⁷", wrote Fouillé (1900, p. 129).

CONCLUSION

For French Liberals, Ricardo was linked with Socialism: his theory had long been seen as dangerous, since it was assumed to have constituted a theoretical framework for socialists. Such an

²⁴ « La théorie de la rente est devenue un engin de guerre : les socialistes s'emparent de cette théorie et soutiennent que l'homme ne doit pas profiter d'un hasard favorable, tous les produits du hasard devant entrer dans la caisse de l'Etat ».

²⁵ « Il importe de laisser l'homme faire quelques efforts pour atteindre à la sécurité absolue, sinon l'on engourdit son esprit, et tous les actes de la vie civile finissent par se ressentir de cet engourdissement ».

²⁶ It should also be noted that in 1891 Fontenay described Marx's socialism as a "new socialism", adding that "not everyone has to read K. Marx's books [*tout le monde n'est pas obligé d'avoir lu les ouvrages de K. Marx*]" (1891, p. 321). He failed to mention Block's long article devoted to Marx, published in 1872 in *Journal des Economistes* (see Block, 1872) – *i.e.* the same year as the publication of the French translation of Marx' *Le Capital* (Paris: Maurice Lachatre), .

²⁷ « Voici un homme qui, au lieu de tout dépenser, s'impose une privation ; pouvez-vous nier que cette privation ne soit analogue, par son caractère d'effort volontaire et pénible, à l'effort même qui fait le fond du travail ? Capitaliser est donc bien travailler ».

opinion evolved at the end of the 19th century: the development of the “Socialism of the Chair” led Liberals to take interest into the issue of association and cooperation. Thus, they switched to John Stuart Mill and lost interest in Ricardo.

BIBLIOGRAPHY

- Bastiat, F. (1851), « Question de la rente [Lettre de Bastiat au *Journal des économistes*] », *Journal des économistes*, janvier, pp. 288-289.
- Batbie, A. (1861), *Turgot, philosophe, économiste et administrateur*, Paris : Cotillon.
- Baudrillart, H. (1866), « De la méthode en économie politique », *Journal des économistes*, pp. 11-31.
- Baudrillart, H. (1888), « Introduction ». In J.-B. Say *Economie politique*, Paris : Guillaumin, pp. i-iv.
- Beauregard, P. (1888), « Introduction and [Observations sur la théorie de la rente] », in *Ricardo, rente, salaires et profits*, Paris : Guillaumin, pp. i-xxviii and 85-92.
- Béraud, A., Gislain, J.J. and Steiner, Ph. (sd), « L'économie politique néo-smithienne en France (1803-1848) », *working paper*, available online, <http://www3.u-cergy.fr/beraud/smith.pdf> (2012/01/16)
- Block, M. (1877), « Revue des principales publications économiques de l'étranger », *Journal des économistes*, avril, pp. 111-132.
- Block, M. (1882), « Préface ». In *Œuvres Complètes de David Ricardo*, Paris : Guillaumin, pp. vii-xiii.
- Block, M. (1890), *Les progrès de la science économique depuis Adam Smith. Révision des doctrines économiques*. Paris : Guillaumin, 2^{ème} édition, tome 1.
- Block, M. (1896), *Petit dictionnaire politique et social*, Paris : Perrin et C^{ie}.
- Block, M. (1897), *Les progrès de la science économique depuis Adam Smith. Révision des doctrines économiques*. Paris : Guillaumin, 2^{ème} édition, tome 2.
- Breton, Y. (1984), « Les économistes français et la rente foncière entre 1830 et 1970 », *Economie rurale*, 161(1), pp. 10-14.
- Breton, Y. (1988), « Les économistes français et les écoles historiques allemandes », *Histoire, économie et société*, 7(3), pp. 399-417.
- Bruhat, J. (1972a), « Le socialisme français de 1815 à 1848 », in J. Droz, *Histoire générale du socialisme*, Paris : Presse Universitaire de France, vol. I, 1997, pp. 331-406.
- Bruhat, J. (1972b), « Le socialisme français de 1848 à 1871 », in J. Droz, *Histoire générale du socialisme*, Paris : Presse Universitaire de France, vol. I, 1997, pp. 501-534.
- Cahen, J. (1994), « La réception de l'œuvre de Karl Marx par les économistes français (1871-1883) », *Mil neuf cent*, 12, pp. 19-50.
- Charbit, Y. (2009), *Economic, Social and Demographic Thought in the XIXth Century*, Springer.
- Chevalier, M. (1850), *Cours d'économie politique fait au collège de France*, vol. 3, Paris : Capelle.
- Chevallier, E. (1887), *Les salaires au XIX^e siècle*, Paris : Librairie nouvelle de droit et de jurisprudence.

- Courcelle-Seneuil (1889), « [Compte-rendu] Petite bibliothèque économique. VII^e volume. Ricardo. Introduction par M. Beauregard. — 1 vol. in-32. — Paris, Guillaumin et Cie, éditeurs. », *Journal des Economistes*, Avril-juin, pp. 427-8.
- Dameth, (1859), *Le juste et l'utile ou rapport de l'économie politique avec la morale*, Paris : Guillaumin and Genève : Joël Cherbuliez.
- Dameth (1877), « Les nouvelles doctrines économiques désignées sous le titre de socialisme de la chaire », *Journal des Economistes*, 15 nov., pp. 183-230.
- Droz, J. (1846), *Economie politique ou principe de la science des richesses*, 2th edition, Paris : Jules Renouard.
- Du Puynode, G. (1866a), "Etudes sur les divers systèmes d'économie politique et sur les principaux économistes. Ricardo", *Journal des Economistes*, 15 avril, pp. 1-29.
- Du Puynode, G. (1866b), « Etudes sur les divers systèmes d'économie politique et sur les principaux économistes. Ricardo », *Journal des Economistes*, Juillet-septembre, pp. 12-33.
- Faccarello, G. (2010), « Bold Ideas. French liberals economists and the state: Say to Leroy-Beaulieu », *European Journal of the History of Economics*, 17(4), pp. 719-758.
- Faucher, (1852), « Propriété ». In Ch. Coquelin and Ch. Guillaumin (eds), *Dictionnaire d'économie politique*, Paris : Guillaumin, t. II, 4th printing, 1873, pp. 460-473.
- Fontenay, R. de (1851a), « De la théorie de la rente foncière selon Ricardo », *Journal des Economistes*, 15 oct., pp. 93-114.
- Fontenay, R. de (1851b), « De la théorie de la rente foncière selon Ricardo », *Journal des Economistes*, 15 nov., pp. 206-223.
- Fontenay, R. de (1854), *Du revenu foncier*, Paris : Guillaumin.
- Fontenay, R. de (1891), « Un paradoxe historique de Karl Marx », *Journal des Economistes*, mars, pp. 321-340.
- Fonteyraud, A. (1847), « Notice sur la vie et les écrits de David Ricardo ». In *Œuvres Complètes de David Ricardo traduites en français par MM. Constancio et Alc. Fonteyraud*, Paris : Guillaumin, tome 13, 1882, pp. i-xlvi.
- Garin, J. (1885), *L'anarchie et les anarchistes*, Paris : Guillaumin.
- Gouraud, Ch. (1852), « Tendances de l'économie politique en Angleterre et en France », *Revue des deux mondes*, XIV, pp. 256-286.
- Guyot, Y. (1895), *La propriété. Origine et évolution. Thèse communiste par Paul Laffargue. Réfutation par Yves Guyot*, Paris : Ch. Delagrave.
- Guyot, Y. (1908), *Sophismes socialistes et faits économiques*, Paris : Felix Alcan.
- Le Hardy de Beaulieu, (1861), *Du salaire*, 2nd ed., Paris : Guillaumin, 1862.
- Jourdan, A. (1882), *Cours analytique d'économie politique*, Paris : Librairie nouvelle de droit et de jurisprudence Arthur Rousseau.
- Leroy-Beaulieu, P. (1881), *Essai sur la répartition des richesses et sur la tendance à une moindre inégalité des conditions*, Paris : Guillaumin.
- Leroy-Beaulieu, P. (1884), *Le Collectivisme. Examen critique du nouveau socialisme*, Paris : Guillaumin.
- Leroy-Beaulieu, P. (1896), *Traité d'Economie politique*, Paris : Guillaumin, 4 vols.

- Levasseur, M. (1898), *Le salariat et le salaire*, Paris : Au siège du Comité.
- Molinari, G. de (1863), *Cours d'Economie politique*, Bruxelles : Bruxelles and Leipzig and Paris : Guillaumin, 2th ed., vol. I.
- Molinari, G. de (1869), « Le socialisme en 1869 (2^{ème} article) », *Journal des Economistes*, 15 août, pp. 161-175.
- Molinari, G. de (1884), « Des lois naturelles de l'économie politique », *Journal des économistes*, 28(12), pp. 353-71.
- Molinari, G. de (1885), « Chronique », *Journal des Economistes*, Juin, pp. 465-473.
- Molinari, G. de (1891), « Le cinquantenaire du Journal des économistes », *Journal des Economistes*, Déc., pp. 321-326.
- Pinard, A. (1901), « Ricardo », *Journal des Economistes*, juillet-septembre, pp. 12-20.
- Proudhon, (1840), *Qu'est-ce que la propriété [What is Property ?]*, Cambridge : Cambridge University Press, 1994.
- Rambaud, J. (1899), *Histoire des doctrines économiques*, Paris-Lyon : Larose-Cote.
- Renouard, Ch. (1862), « Considération sur l'influence du taux de salaire », *Journal des Economistes*, pp. 329-338.
- Reybaud, L. (1873), « Socialistes, Socialisme », in Ch. Coquelin et Ch. Guillaumin, *Dictionnaire de l'Economie politique*, Paris : Guillaumin, tome second, pp. 629-641.
- Ricardo, D. (1815), *An Essay on the Influence of a Low Price of Corn on the Profit of Stock*, Cambridge: Cambridge University Press, vol. IV, 1951, pp. 9-41.
- Ricardo, D. (1821), *On the Principles of Political Economy and Taxation*, Cambridge: Cambridge University Press, vol. I, 1995.
- Ricardo, D. (1882), *Oeuvres complètes de David Ricardo, traduites en français par MM. Constancio et Alc. Fonteyraud, augmentées de notes de J.-B. Say, Sismondi, Rossi, Blanqui, etc.*, Paris : Guillaumin.
- Rossi (1836-37), *Cours d'économie politique*, Bruxelles : Société typographique Belge, 1840.
- Sigot, N. (2010), « Utility and Justice: French Liberal Economists in the Nineteenth Century », *Journal of the History of Economic Thought*, 17(4), pp. 759-792.
- Société d'Economie politique* (1851), « Question de la rente du sol », *Journal des économistes*, sept.-déc., pp. 288-298.
- Société d'Economie politique* (1866), « Nature et caractère de la rente foncière », *Journal des Economistes*, pp. 447-467.
- Société d'économie politique* (1867), « Séance du 5 juillet [Du rapport du taux d'intérêt avec la prospérité publique]. In A. Courtois (dir.), *Annales de la Société d'économie politique*, tome 7 [1867-1868], Paris : Guillaumin, 1895, pp. 207-232.