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PIGOU, DEL VECCHIO AND SRAFFA: THE 1955 INTERNATIONAL 'ANTONIO FELTRINELLI' PRIZE FOR THE ECONOMIC AND SOCIAL SCIENCES

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DISCUSSION PAPER 14.32

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Abstract: In 1955 the *Accademia Nazionale dei Lincei* awarded the inaugural *Internazionale "Antonio Feltrinelli" Premio per le Scienze Economiche e Sociali* to Arthur Cecil Pigou. This paper provides some context to the episode and considers the establishment of the prize; the membership of the 1955 selection committee; the activities of this committee, especially those of its secretary, Gustavo Del Vecchio. Correspondence between A. C. Pigou, Piero Sraffa and Del Vecchio pertaining to this prize is also examined. The most significant findings reported in this paper concern the discovery of Del Vecchio's active role in supporting the nomination of Pigou for this prize; as well as Sraffa's contention that Pigou had 'never been honoured in proportion to his merits' and his characterisation of the decision to award the International Antonio Feltrinelli Prize to Pigou as a 'great act of justice'.

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1. Introduction

Pigou is one of the great economic thinkers of the 20th century. He also gave considerable service to government through his involvement in various important public committees – including the 1919 Cunliffe Committee and the 1924-25 Chamberlain-Bradbury Committee, both of which dealt with post war monetary arrangements in Britain, the 1919 Royal Commission on the Income-Tax and the 1930 Committee of Economists. But in spite of his major original contributions to the intellectual world, and also his service to public policy, Pigou went largely unhonoured in Britain: there was no peerage – we do not speak of Lord Pigou – and no knighthood was forthcoming either – we do not speak of Sir Arthur Cecil. Indeed, as Donald Winch (2014) has recently revealed, Pigou was even excluded from membership of the British Academy on political grounds until 1927.¹

But Pigou was not completely overlooked for honours during his lifetime because, in 1955, the Italian *Accademia Nazionale dei Lincei* awarded him the *Internazionale 'Antonio Feltrinelli' Premio per le Scienze Economiche e Sociali*. Prima facie, it may appear unusual that a prominent scholar like Pigou should be honoured by the scientific community of Italy and not by his peers in Britain, although it is perhaps less surprising when one reflects on the relationship that Italian economists have had with Britain. In that regard, Italian economists have long had a deep and profound interest in both the Lausanne school, noticeably in the general equilibrium of Walras-Pareto, and the Cambridge School, from Marshall, Pigou to Keynes. Of these three prominent economists, Pigou was the only one to make a concerted effort to incorporate the product of Italian scientific culture within the pages of his scholarship, with *Wealth and Welfare* (1912), for example, including citations to the works of Rodolfo Benini, Alfredo Niceforo, Vilfredo Pareto and Eugenio Rignano (Pigou, 1912, pp. 22, 24, 25, 28, 29, 41, 64, 65, 71-77, 168n, 180, 239). Prior to that, Pigou had already reviewed the work of some Italian economists such as the books *Commercio Internazionale e Politica Commerciale* (Pigou, 1907a) by Giovanni de F. Gerbini, *Trattato di Politica Commerciale* (Pigou, 1907b), by Luigi Fontana-Russo and *L'Imposta sul Trasporto* (Pigou, 1908), by Pasquale Jannacone. Furthermore, Piero Sraffa, the well-known Italian Cantabrigian, represented a concrete manifestation of the broader Italian-Cambridge connection.²

The purpose of this paper is to provide some context to Pigou being made the recipient of the inaugural 'International Feltrinelli Prize' for the Economic and Social

¹ Winch's educated guess is that the 'political grounds' for the long delay in Pigou's election to the British Academy, which J. M. Keynes regarded as 'discreditable to the electing body', were related to a general distaste for Pigou's public expression of pacifist sympathies during the Great War (Winch 2014, p. 760).

² The Italian link with Cambridge, and Pigou's place in that link, did not pass unnoticed at the time. Martin Bernal, a student at King's College from the late 1950s who became a noted political historian, recalled in his autobiography: "For many decades, Cambridge economics and Italy have had a special connection – at least since the brilliant Piero Sraffa, a refugee from fascism, moved into Trinity. The connection with King's was particularly close. ... I remember an Italian prime-minister insisting that we find the bust of Pigou for him to pay his respect" (Bernal, 2012, p. 278).

Sciences, which was a significant episode in his life scarcely noticed in the literature.³ To that end, part 2 offers an outline of both the *Accademia dei Lincei's* and the prize's history. In part 3, the membership of the 1955 selection committee is overviewed, with particular attention given to its reports on the nominees for the prize, and to Gustavo Del Vecchio for his active role on the committee in favour of Pigou. In part 4, the correspondence – from Pigou to Piero Sraffa, on the one hand, and from Sraffa to Gustavo Del Vecchio, on the other – pertaining to that prize is examined. The contributions of the paper are fourfold: firstly, it provides the historical context to the International Feltrinelli Prize in the Economic and Social Sciences; secondly, it notes the general Marshallian, as distinct from Paretian, leaning of the distinguished members of the committee charged with selecting the prize winner for 1955; thirdly, it provides evidence of the particular efforts by Gustavo Del Vecchio towards securing the committee's endorsement of Pigou for the award; fourthly, it reveals that Sraffa advised Del Vecchio that Pigou had 'never been honoured in proportion to his merits', and, lastly, it highlights the light-hearted and playful tone of Pigou's letters to Sraffa, from which it appears that a genuine and lasting friendship had developed between these two great scholars.

2. The Accademia dei Lincei and the Feltrinelli Prize

2.1 *The Accademia dei Lincei*

One of the first societies for the promotion of science in Europe, the *Accademia dei Lincei*,⁴ was established in Rome on the 17 August of 1603. Its founders were four young friends – the Italians Federico Cesi, Francesco Stelluti, the Count Anastasio de Filiis and the Dutchman Johannes Eck – who were intent on promoting the rational knowledge of nature. Their inquiries covered almost anything falling within the broad fields of botany, astronomy, mathematics, philosophy, metaphysics and history. Despite some initial difficulties, the academy grew steadily in membership, with its most famous associate, Galileo Galileo, joining the group on 25 April 1611. In addition to their tireless efforts to publish their own books, the Linceans not only edited and published Galileo's works, such as *Letter on Sunspots* (1613) and *Asseger* (1623), but they also helped Galileo in his battles, firstly, against other contenders to the priority of his scientific discoveries and, secondly, against the Church in its opposition to the ascendancy of the Copernican heliocentric view of astronomy over the Ptolemaic cosmology. In 1625, the *Accademia dei Lincei* was comprised of 32 fellows, including men of science and letters, poets, lawyers and philologists from many Italian cities and abroad. Five years later, however, following Cesi's death and the complications resulting from the group's support of Galileo's ideas, the original *Accademia dei Lincei* petered out. Galileo would eventually be convicted of heresy by the Holy Office on 22 June 1633 (Artigas and Shea, 2003, pp. 19-197; Freedberg, 2002, pp. 81-147).

³ The only known reference to Pigou being awarded the Feltrinelli prize is a one line mention by Saltmarsh and Wilkinson (1960).

⁴ Academy of the Linxes. The name was a tribute to the wild cat with keen vision which illustrated the cover of the book *Magia Naturalis* (1558) from one of the future *Lincei's* member, Giambattista della Porta, a famous Neopolitan philosopher known by his studies on cryptography, optics, physics and other subjects (Clubb, 1965, p. 37; Carutti, 1883, p. 8).

After a failed attempt at reviving the academy undertaken by the physician Giovanni Paolo Bianchi, in Rimini in 1745, a group of physicists and mathematicians constituted in Rome, in 1795, the *Accademia Fisico-Matematica*. Its name was changed to *Nuovi Lincei* in 1801 and it ceased its activities altogether in 1830 by determination of Gregory XVI after the liberal risings of the time. The same Pope reinstated the institution briefly in 1838 under the name of *Pontificia Accademia*, only to suppress it again in 1840. Sometime later, in 1847, when the first liberal constitutions were adopted in Italy, Pope Pious IX created the *Accademia Pontificia dei Nuovi Lincei*. As Rome became capital of unified Italy, the academy manifested its support to the new Kingdom, and soon after that, its designation was changed to *Regia Accademia dei Lincei* on 2 October 1870. The organization received a new charter on 24 February 1875, which added a Moral, Historical and Philological section to the already existing Physical, Mathematical and Natural Sciences section. In 1883 the Corsini Palace, in Villa della Lungara, was bought by King Umberto I, to act as the academy's official headquarters (Morghen, 1990, pp. 33-60; Carutti, 1883, pp. 96-158).

By 1884, the *Regia Accademia dei Lincei* had more than 100 national members and 225 foreign or corresponding members. With the advent of the fascist regime in the 1920s, however, the situation was to change radically. Discontented by the challenging behaviour of Italian intellectuals and willing to have an institution capable of developing the corporative ideology, the government, in 1926, formed the *Reale Accademia d'Italia* to give support to its official initiatives of cultural and scientific character. The autonomy of the other national institutions of science would not last long. In 1933, a new law was enacted forcing the participants in all Italian scientific associations to swear allegiance to the regime and allow the government to choose their new members. Eventually, on 8 June 1939, a decree was enacted merging the old *Accademia dei Lincei* into the new *Accademia d'Italia*, which was put in charge of coordinating the activities of all scientific associations across the Kingdom.⁵ After the liberation of Rome, however, a decree from 28 September 1944 set up a special committee to fully reinstitute the *Accademia dei Lincei* under its pre-war charter, and new national members were soon elected. At the occasion, the *Accademia d'Italia* was definitively suppressed (Azevedo and Gerardi, 2005, pp. XI-LXVII; Morghen, 1990, pp. 61-70; Ferrarotto, 1977, pp. 20-39).

2.2 Antonio Feltrinelli and the International Prize Named in his Honour

Antonio Feltrinelli, after whom the *Accademia dei Lincei's* prize is named, was born on 1 July 1887, the youngest of four brothers. His grandfather Carlo Feltrinelli, along with his brothers Giacomo and Angelo, founded the Feltrinelli dynasty, which initially thrived by supplying sleepers and timber to the rapidly expanding national railway network after Italy's unification. The *Società Colletiva Feltrinelli* was created in 1869 (converted to *Fratelli Feltrinelli*, a joint-stock company, in 1919), in Milan, and soon acquired large tracts of forests in the Austro-Hungarian Empire and Transylvania. In

⁵ As noted by Ferrarotto (1977, p. 44): "The *Lincei's* main defect, to the eyes and under the logic of the regime, was not that of aiming at its own autonomy but, instead, that of seeming to be in direct competition with the *Accademia d'Italia*. This dualism involving both institutions often manifested itself in favour of the more antique body, which, by tradition and scientific value, continued to be the chief interlocutor of foreign academies" (see also Azevedo and Gerardi, 2005, p. XX).

1892, the financial house *Banca Feltrinelli* (later *Banca Unione*, 1919) started operating in association with the *Società Italiana di Eletticità*, one of the main providers of electrical power in Italy at the time. The family also expanded its business to the real estate and construction sectors, while its bank had as its costumers some of the most important Italian industrial concerns (Segretto, 2011, pp. 49-141).

The interwar years witnessed the apex of the Feltrinelli conglomerate. Its chief executive at the time, Carlo, Antonio's oldest brother, was nominated 'Great Official of the Italian Crown' in 1924, being also designated counsellor at the bank Italian Credit and representative of the country at the General Board of the *Reischbank* during the Dawes Plan. After Carlos' death, in 1935, Antonio became the head of the Feltrinelli consortium, although he constantly clashed with his sister-in-law, Giannalisa Giansana, over the management of the heritage. Among the family members, Antonio had actually been the least involved in the operations of the family business, cultivating rather an active life within Milan's cultural circles, either as a painter himself or by promoting artistic exhibitions and sponsoring cultural books and theatrical plays. Having no immediate heirs and deeply disheartened by the loss of his brother, Antonio decided to leave the perpetual and inalienable shareholding control of the Feltrinelli empire to the *Accademia d'Italia*. That eventually took place after his death in a motor vehicle accident on 23 June 1942, at the age of 55 years (Segretto, 2011, pp. 317-415; Pezzica, 2009; Accademia, 1968, pp. 6-9).⁶

When the *Accademia dei Lincei* regained its legal status following the liberation of Rome, it took control of the endowment, which was converted into the *Fondazione Antonio Feltrinelli* on 20 October 1949 by a presidential decree. The following year the Feltrinelli Prize began to be granted on an annual basis to personalities with lifetime achievements in arts and science in general. The prize was offered at two levels (a national prize and an international prize) across a range of disciplines, with the 'international prize', by statute, keeping its pecuniary reward commensurate with that of the Nobel Prize (Azevedo and Gerardi, 2005, p. LIV). The international Feltrinelli prizes awarded in 1955 to the various fields of scholarship are summarised in Table 1.

Table 1. The 1955 International Feltrinelli Prizes

Fields	Honoured	Country
Philology and Literary History	Leo Spitzer	Austria
History	Gaetano Salvemini	Italy
Law	Ernst Rabel	Germany, émigré United States
Philosophy	Werner Jaeger	West Germany
Economic and Social Sciences	Arthur Cecil Pigou	Britain

Source: *Accademia dei Lincei* (1968, 75-76).

⁶ Antonio's will was dated from 15 March 1936, or about four months after Carlos' death (8 November 1935) stating that the patrimony left by his family should be directed to "reward labor, study, intelligence, in brief, the men who distinguished themselves by high achievements in arts and sciences, for they are the true benefactors of their country and of mankind" (Accademia, 1968, p. 8). He most likely had been shaken by the loss of his brother, attributed to a cardiac arrest, who was about to be indicted by the Fascist government on counts of keeping undisclosed 165 kilograms of gold, along with foreign securities valued at 2 million lire, in Swiss banks in name of their elderly mother, Maria Pretz. Antonio's other brothers, Pietro and Giuseppe, had died, respectively, in 1913 and in 1918 (Segretto, 2011, pp. 369-383).

3. The 1955 Lincei Committee on the Economic and Social Sciences and its report

3.1 The 1955 Accademia dei Lincei Committee

The selection committee (*comissione*) responsible for deliberating over the inaugural International Feltrinelli Prize for the Economic and Social Sciences in 1955 was comprised of seven members. The presidency was conferred on Vincenzo Arangio Ruiz (1884-1964), a jurist and politician, scholar in Roman Law and papyrology who was appointed President of the *Accademia dei Lincei* in 1952 and continued in that post until 1958 (Montevecchi, 1963). The six remaining participants of the *comissione* were Pasquale Jannacone (1872-1959), Gino Luzzatto (1878-1964), Alfredo Niceforo (1876-1960), Giuseppe Ugo Papi (1893-1989), Marco Fanno (1878-1965) and Gustavo Del Vecchio (1883-1972).

Leaving aside the presiding chairperson, as that role is given to the President of the *Accademia dei Lincei*, the composition of the selection committee reveals three main attributes. First, it is dominated by economists (Jannacone, Papi, Fanno and Del Vecchio) and economic historians (Luzzatto⁷). Second, that the economists on the committee were eminent figures within Italian national economics. Third, notwithstanding the eminence of these economists, the committee did not include any representatives of the Italian Paretian school. The only non-economist or economic historian on the committee was Alfredo Niceforo (1876-1960), a scholar of anthropology and author of many books, including *Antropologia Delle Classi Povere* (1908) – the French version of which was cited by Pigou in his *Wealth and Welfare* (1912) – and *Lezioni di Demografia* (1924) (Guarnieri, 2013). In view of this, the likelihood that the prize would be awarded to a social scientist from outside the field of economics was low. The economists on the committee were eminent, but they all had their roots in the work of Marshall.

As Mario Pomini (2014, p. 7; see also Legris, 1995; Galegatti, 1990) has indicated, the Marshallian tradition in Italy was based around Maffeo Pantaleoni, Umberto Ricci Luigi Einaudi, as well as Jannacone and Fanno. Jannacone came to prominence in Italy as the third generation leader of the 'Turin School' of economics, established by Salvatore Cognetti de Martiis and ably developed by Einaudi (Marchionatti *et al.*, 2013; Cantono, Marchionatti, 2012; Zaccagnini, 1961).⁸ Fanno held the chair of political economy at the University of Padova (1920-1945)⁹ and he is known, internationally as well as within Italy, for his 'overinvestment' theory of business cycles, which drew on

⁷ Gino Luzzatto (1878-1964) was an economic historian and editorial director of the *Nuova Rivista Storica*. After World War II, he was appointed as the Rector of the Ca' Foscari University of Venice (Lanaro, 2007; Berengo, 1966).

⁸ It is to be mentioned here that early in the 1910s, Pasquale Jannacone had been involved in a famous controversy over the nature of economics in Italy. One of Pareto's followers, Guido Sensini, in his book *Teoria de la Rendita* (1912), claimed that the only meaningful way of enhancing economic theory was to do so mathematically, as advocated by Pareto, dismissing the discursive and graphic approaches à la Marshall as mere literature. Jannacone replied to Sensini's charge through *Il Paretaio* (1912), accusing him and his fellow Paretian adepts of simply parroting their leader. Pareto and Pantaleoni also got engaged in this episode, which went on well into the 1920s (McLure, 2007, pp. 106-113; Magnani, 2004).

⁹ However, as he came from a Jewish family, Fanno was barred under Italian racial laws from teaching in Italian universities from 1939 to 1945 (Arena 1998, p. 114).

Knut Wickell's idea of a cumulative process ignited by differences between the natural and the banking interest rates in a credit economy (Davanzati and Realfonzo, 2001; Faucci, 2000, pp. 289-293; Arena, 1998). Significantly, Fanno regarded the whole idea of system wide equilibrium as conducive to a "dead end" with respect to the development of economics (Fanno, 1914, 1925).¹⁰ Papi, who was also loosely linked to the Marshallian economists in Italy, gained his professional reputation as an international trade economist who provided careful microeconomic analysis of the 1930s depression, including 'corporativist' studies of economic fluctuations. By the 1950s, he was a prominent advisor to the government on economic policy (Faucci, 2014, p. 199) and, in 1954, he was appointed as the Rector of the University of Rome.

Del Vecchio held a chair in political economy at the Bocconi University of Milan, where he became Rector in 1934 and remained in that post until 1939. From 1926 to 1939 he was also co-editorial director of the *Giornale degli Economisti*, being designated Treasurer during 1947 to 1950. Although Del Vecchio is sometimes called the "Italian Schumpeter" for his evolutionary view on the development of economic thought, his theories on money, capital accumulation, international commerce and finances were built on the analytical foundations of Marshall's partial equilibrium and on the economic dynamics of Maffeo Pantaleoni. Like Fanno, Del Vecchio saw the Marshallian way of looking at economics as more promising than the Walrasian metaphysical construct at linking historical studies, statistical research and theoretical argument; a blend he felt better fitted to the limits of human forces (Del Vecchio, 1924, 1938).¹¹ His greatest original contribution is in the field of money economics and interest rates, in which he reflected on expectations, institutions and uncertainty (Tusset, 2013; Faucci, 2000, pp. 293-296; Caffè, 1983).

3.2 Del Vecchio on Pigou and the Short List of Candidates for the Prize

Del Vecchio was the 'relatore', or secretary, of the selection committee and, in that capacity, he drafted the report that communicated the committee's recommendation to the *Accademia dei Lincei*. In view of this it is relevant that Del Vecchio came to the committee with a deep familiarity and admiration for Pigou's work, which is evident from a series of book reviews that he wrote, starting with a review of *Wealth and Welfare* for the *Rivista di Sociologia*. In that piece, Del Vecchio classified the book as a most original contribution to modern economics that was

¹⁰ In his obituary notice dedicated to Marshall, Fanno held the contribution of the British economist to be "original" and "definitive" for providing a stricter correspondence with reality than the ingenious, but purely mechanical, Paretian general equilibrium approach: "Precisely because it [Paretian theory] has put its head into a closed path for the development of economic science, it is not, in itself, capable of further development. The work of Marshall instead is analytical and synthetic at the same time and because of that it opens a wide avenue to new analyses and developments" (Fanno, 1925, p. 177).

¹¹ Consider, for example, Del Vecchio's opinion on the comparative fecundity of the Paretian grandiose scheme of thinking about economics *vis-à-vis* the more realistic and less general Marshallian approach: "Marshall's modesty probably corresponds better to the limits of human strength. And in all probability, historical studies and statistical research, relying on his theory, which has a simpler structure, will bear the most fruitful results in the near future, since this structure already brings us very close to the limits established by the power of abstraction in the modern phase of our science" (Del Vecchio, 1924, p. 644). Also, when reviewing the *Official Papers of Alfred Marshall* (1927), Del Vecchio praised the British master as an economist of 'powerful genius' who had devoted all of his skills to the sole purpose of promoting 'social harmony' and an 'elevation of the poorer classes' (Del Vecchio, 1927c).

bound to become a classic of the science. Also, he stressed Pigou's innovative effort to examine the subject of income distribution among the factors of production within the analytical framework of the neoclassical theory (Del Vecchio, 1914a [1956]). Subsequently, in a paper that discusses the relationship between British and Italian economists, Del Vecchio (1930c) praised *Wealth and Welfare* as the first major British treatise to give due credit to the Italian contribution to economics. *The Economics of Welfare* (1920) was later reviewed by him in the *Giornale degli Economisti*, with the book being commended as 'profound' and 'original', although he considered it to be, in certain parts, somewhat 'fatiguing' because of its excessive size (Del Vecchio, 1921).

In an overview of the state of economic theory during the 1920s, Del Vecchio judged *A Study in Public Finance* (1928) as the best available work in the field, adding though that the book had some limitations due to its purely static framework (Del Vecchio, 1930a). When reviewing the first edition of Pigou's *Industrial Fluctuations* (1927), Del Vecchio declared himself impressed by the unique power of Pigou's 'subtle and inflexible' logical reasoning. That virtue, according to the review, had been most conspicuously employed in the deductive examination of the causal factors behind economic oscillations, providing thus the theoretical foundations for historically effective-proven countercyclical policies, such as the manipulation of interest rate, the limitation of working hours and the implementation of public works during depressions (Del Vecchio, 1927b). But, again Del Vecchio objected to the static framing of, what he called, Pigou's 'eminent' contribution to business cycles theory:

"Economic fluctuations can surely be studied (as Pigou has done following the best tradition of economic doctrine) as a secondary phenomenon in comparison with static economics. One just needs to take this book to hand to see how this point of view has been so rich in results. But they can also be regarded as secondary phenomena of a progressive economy and, as we have tried to show elsewhere, with much greater ease and effectiveness" (Del Vecchio, 1927b, p. 153).¹²

In his post war survey of the theories of economic crises, Del Vecchio contended that the severe economic disturbances caused by the war – and their enduring effects on demography, capital accumulation, income distribution and prices in general – had rendered the purely mechanical static approach to economics totally inadequate to apprehend this new reality. He suggested that an enhanced understanding of economic crises required instead a multi field analysis, with statistics, history, sociology and law coming to the aid of economic science in studying the volatility of the markets¹³ (Del Vecchio, 1927a). Given Del Vecchio's strong interest in the dynamics of material progress, it is significant then that his review of the second edition of *Industrial Fluctuations* (1929) was nothing less than enthusiastic; voicing

¹² Although Pigou does account for an important dimension of a 'progressive economy' in the first edition of *Industrial Fluctuations*, namely the proposition that: "there is a continuing *trend* towards increased output of consumption goods, due to the growth of capital relatively to population. There is, thus, in each year, a *new* flow, which rentiers, ordinary shareholders, and so on, have available either for increased consumption or for investment" (Pigou, 1927, p. 111, italics in the original; see also pp. 83-84, 103-104, 207-208, 300).

¹³ Del Vecchio had previously explored the same subject in a pre-war paper where he outlined a theory of business cycles based on a growing disproportion among the different kinds of productive resources, particularly through an excessive production of fixed capital, during the phases of prosperity. At that time, he expounded as well his preference for a multidisciplinary approach to the study of economic crises (Del Vecchio, 1914b).

deep 'satisfaction' with Pigou's additions to the original edition (Del Vecchio, 1930b). Pigou's new discussion of oscillations around a trend line, the changing productivity of industry and the relationship between credit and economic progress appears to have situated his overall treatment of fluctuations closer to what Del Vecchio conceived of as a true dynamic economic theory.

It is clear, from the above considerations, firstly, that the four economists on the committee all were known to have links to the Marshallian tradition as it developed in Italy (through Pantaleoni in the first instance and Einaudi, Ricci and others after that), and, secondly, that the committee's secretary, Gustavo Del Vecchio, had a life-long knowledge and profound appreciation of the Marshallian school and Pigou's work within that school. Many of the most prominent Italian Paretians were still alive and active in 1955, such as Guido Sensini, Luigi Amoroso, Eraldo Fossati and Giulio La Volpe, but none of them were appointed to the committee. Of course, this circumstance does not imply that Pigou was not a worthy winner of this prize, but it does suggest that the one to be singled out was highly unlikely to have been a non-economist; and that the economist winner was unlikely to have been a theorist who further developed the Walras-Pareto system of general equilibrium. John Hicks and Maurice Allais would not be shortlisted by this committee.

According to the *Accademia dei Lincei's* archival records, the committee considered five nominees for the prize, namely, (1) Léon Hugo Dupriez (1901-1896), Belgium economist and Professor at the University of Louvain; (2) Corrado Gini (1884-1965), Italian statistician and Professor of Statistics and Sociology at La Sapienza University of Rome; (3) Jean Polydore J. C. Haesaert (1892-1961), Belgium Professor of Sociology and Law at the University of Gent; (4) Arthur Cecil Pigou, retired Professor of Economics at Cambridge, and (5) Hendrik Johannes C. van Werveke (1898-1974), Belgium Professor of History at the University of Gent (Accademia, 1955a).

3.3 *The Committee's Proceedings and its Final Report*

Before arriving at their decision, some members of the committee were individually chosen to evaluate a particular nominee. In a brief handwritten piece with an indecipherable signature, one of the committee members commended Haesaert for the diversity of his writings, but set his candidature aside because the scope of his work did not match that of the prize:

"Professor of Sociology at the University of Gent, he is author of numerous [books] on Penal Law, Philosophy, general theory and methodology of Law, Sociology. It does not seem to me that his studies cover the field for which the prize has been announced" (Accademia, 1955b).

As the prize is for 'the economic and social sciences', the committee appears to have interpreted the inclusion of 'and' as meaning that some contribution to economic science (and not a social science in isolation from economic science) is necessary to be eligible for this award. There is also a brief and unsigned handwritten evaluation of the historical work of van Werveke by another member of the committee, most likely Gino Luzatto (an economic historian), lauding the candidate's academic background but rightly observing that his inquiries did not comprise general history:

"Excellent writer on the economic history of the Flemish city [Gent] from the XI to the XV century, he is one of the best former students and followers of Pirenne [Henri Pirenne (1862-1935), famous Belgium medievalist]. But his favourite line of research is in the form of short contributions over specific themes: he does not deal with wide-ranging historical work" (Accademia, 1955b).

Unfortunately, no record of evaluation for Corrado Gini's candidature has been found, possibly because his work would have been well known to all members of the committee. For Dupriez, however, a two page typewritten account was prepared, and signed, by Marco Fanno. That report starts with a detailed summary of the candidate's academic record, pointing out that he had been Professor of Economics at the University of Louvain and at other foreign institutions, such as the University of Rome. With respect to Dupriez's scientific accomplishments, the report mentions the copiousness of his writings after 1930, underlining however that they were mostly composed of papers and working notes confined to current monetary problems, the employment level and economic fluctuations. While Fanno noted that the two-volume *Mouvements Économiques Generaux* (1947) was Dupriez's most important work, in which he put forward a quite interesting statistical approach to long-run economic fluctuations at the international scale, he cast doubt upon the anchoring of such analysis in a theory based on the Walrasian general equilibrium.¹⁴ In the end, Dupriez is deemed a strong and worthy scholar, but unsurprisingly, given Fanno's concerns with the Walras-Pareto systems, one whose line of investigation and overall contribution to economics were too limited to be eligible for such a prize:

"However, given the one-sidedness of his research and the dubious fertility of some of his theoretical formulations, the contributions brought to science by him cannot be considered as exceptional. About him it may be said, therefore, without in any way impairing the favourable judgement already put forth, that within the constellation of great living foreign economists, he does not stand as one of the major stars" (Fanno in Accademia, 1955b).

Gustavo Del Vecchio was in charge of assessing Pigou's suitability for the prize; and he did so in a two-page typewritten communication that carries his signature. The initials of all the other members of the committee are also shown in the margins of that assessment, clearly indicating the agreement of all members of the committee with Del Vecchio's assessment. That document served as the basis for the committee's final report, which is the version considered here. It opens by stressing Pigou's position as heir of the Marshallian legacy, listing the books *Principles of Industrial Peace* (1905), *Wealth and Welfare* and *The Economics of Welfare* as genuine contributions to promote the welfare of society. It details also the conditions specified by Pigou to achieve such an end, that is, the abundance of the national dividend, its

¹⁴ Dupriez claimed that no partial disequilibrium, as suggested by Marshallian theories, could produce a systemic instability since localized disturbances would ultimately be dumped by the inertial force of the whole economy. Long term fluctuations around an ever mutable general equilibrium resulted instead from both bottlenecks in the supply of productive factors during the phases of expansion and the differences in the speed of adjustments in prices and costs, while the existence of a lower limit for consumption expenditures, the introduction of innovations by firms and state-orientated spending programs together set a floor to downward economic movements during recessions. Dupriez's theory was admittedly Walrasian, since his self-professed goal was to provide some real content to the *tâtonnement* process (Dupriez 1947, Vol. I, pp. 17-22, 40-45, 82-89, Vol. II, pp. 294-295, 493-494; for his explanation of long-haul cycles through variations in aggregate price and output elasticities of demand, see volume II, chapters XVII and XX).

stability over time and a diminution of the inequality in the distribution of that dividend. The report highlighted also the active role of fiscal policy advocated by Pigou to maximize welfare, but respecting the principles of private property and free enterprise.

Furthermore, the document underlined the importance of Pigou's monetary writings, his pertinent reflections on public policy during the wars; and, in an implicit reference to *Industrial Fluctuations*, highlighted the fundamental role of expectations in generating alternate waves of pessimism and optimism, a factor treated by the British economist as key in the explanation of business cycles. Del Vecchio pointed out as well that Pigou had kept a bridge open between the old and the new way of thinking about economics: "These writings of Pigou contained all features of elaborate economic theory; classical and marginalist, always enlivened, however, by the ferment of doctrine and new phenomena" (Accademia, 1955c, p. 593).

Finally, Del Vecchio's report notes that Pigou's *Theory of Unemployment* (1933) played a prolific role in the debates motivated by the advent of the Keynesian theory. In that regard, it mentioned that the controversy lasted for almost ten years, encompassing contenders from several countries, and, by the end of the debate, Pigou had managed to conceive a modern and more sophisticated version of the traditional theory. The committee's concluding recommendation, that Pigou be awarded the prize, was framed in the following words:

"After examining the scientific contribution of the most eminent economists of various countries, the Committee has found that Pigou's works stand above the others by the largeness of horizons he had unveiled from the early essays; by the author's dedication to a research pursued with a fervour that is always renewed; by the care to treat all determinations as possible contributions, which, little by little, have become milestones in the evolution of contemporary economic thought. In consequence, the committee is honoured to propose that Professor Pigou be awarded the International Feltrinelli Prize of 5 million Lire for the Economic and Social Sciences" (Accademia, 1955c, p. 593).

To appreciate the importance of Pigou winning the International Feltrinelli Prize for the Economic and Social Sciences in 1955, it is useful to recall that he was the inaugural winner; the Prize was, at the time, the most important award in economics for the whole Europe;¹⁵ and the prize is awarded on merit, and not annually. In total, the International 'Antonio Feltrinelli' Prize for the Economic and Social Sciences has only been awarded three times, with Pigou being joined in this honour by Gottfried Haberler, in 1980, and William J. Baumol, in 2005.¹⁶

¹⁵ The Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel was not introduced until 1969.

¹⁶ Ragnar Frisch, though, received the International 'Feltrinelli' Prize in 1961 for his contribution to Political and Social Sciences.

4. Pigou, Sraffa and the 1955 Feltrinelli Prize

As noted by Alberto Zanni (1996, 100), Gustavo Del Vecchio and Piero Sraffa were on friendly terms with each other.¹⁷ So it is, perhaps, not surprising that Del Vecchio's initial enquiries with Cambridge regarding the 1955 International Feltrinelli Prize were channelled through Sraffa. This manner of approach is evident from the letters that Del Vecchio received from both Sraffa and Pigou. Sraffa wrote to Del Vecchio on 26 May: "Thank you for your letter and the welcome task that you have given me. I immediately went to Pigou to bring him the news". Pigou, wrote to Del Vecchio two days later,¹⁸ stating that "Sraffa has told [me] of the great kindness and honours which [the] *Accademia dei Lincei* propose to confer upon me". A beautifully human picture of Pigou's appreciative, but typically self-effacing, reaction to the award is also painted by Sraffa in his letter:

"Because of this [news], as is his habit, he said to me that he is more dead than alive, and that he has lost all his intelligence, and who knows if he will still be here by mid-June, but I am certain that it has given him the greatest pleasure and almost moved him [to tears]. In reality he is not unwell, notwithstanding his melancholy: he is currently preparing a new book (*Income Revisited*) and within a few days he will go to the country, and after that to Switzerland." (Sraffa, 1955, folio 1).

Pigou's letter to Del Vecchio is more formal and restrained on this matter, but it too does not conceal the pleasure that the award gave Pigou. "Please accept the expression of my highest appreciation of what the *Accademia* is doing." (Pigou 1955a). But, given Pigou's isolationist tendency, Sraffa advised Del Vecchio that the idea of a ceremony to confer the award "would have made him a little frightened" (Sraffa, 1955, folio 2) so Sraffa reassured Pigou that "he will not be required to attend any ceremony" (Sraffa, 1955, folio 2).

The most important aspect of the correspondence on this matter for historians, however, concerns Sraffa's comments on Pigou's merits as a scholar. To that end, Sraffa advises Del Vecchio that:

"Pigou has always been so modest and shy the result is that he has never been honoured in proportion to his merits: and this great prize is a great act of justice" (Sraffa, 1955, folio 2).

In the following two months Pigou wrote letters to Sraffa about the transfer of his prize money on two occasions. On 29 June he wrote, from Lower Gatesgarth, Buttermere, to advise that he had received a wire and letter from the President of the *Accademia dei Lincei* on 11 June, which confirmed his prize and associated money, and asked Pigou if he could attend a [bank] branch about it on the 15 of June, but 'fortunately' he was unable to do so because of a railway strike. He then went on to write in a manner that underlined both his pleasure, at receiving the prize, and his playful manner, when dealings with Sraffa:

¹⁷ Professor Zanni (1996) indicates that the friendly rapport between Del Vecchio and Sraffa has been confirmed by Professor Sergio Steve.

¹⁸ However, Pigou's letter to Del Vecchio was included with Sraffa's in the same envelope. For the contents of the other extant letters between Sraffa and Pigou, see Naldi (2005).

"I wired [the Accademia dei Lincei] and wrote gratefulness etc, but wished you had been available to hold my hand. The 5 million lire are, no doubt, en route under escort of Italian and British fleets! But not responded yet." (Pigou, 1955b).

Pigou's final letter to Sraffa on the subject, written on 11 July, continues along similar lines when he writes that "I'm getting rather perplexed about my millions!" (Pigou 1955c). The issue identified in this letter is that Pigou has to leave for Switzerland on 1 August and he does not want "to have the millions charging around Europe" while he is away. However, he does not wish to suggest a desired course of action to prevent that from happening, as that would look like he is "trying to bustle them up"; and he asks whether Sraffa could help (Pigou, 1955c).

Given the purpose of this paper, these letters reveal two pertinent points. First, notwithstanding the diverse character of their respective contributions to economics, Sraffa recognised Pigou's importance as a scholar and was open about this with a distinguished Italian economist. Second, notwithstanding Pigou's reputation for isolation and melancholy, his mature one-to-one written exchanges with Sraffa on the 'Feltrinelli' Prize were remarkably friendly, with some light hearted comments reflective of a man with genuine wit. Part of this would have been due to the pleasure Pigou derived from winning the award, but, no doubt, part of it too would have been due to personal regard and friendship.

It should perhaps also be recalled that Pigou was very impressed with Sraffa's work from the first moment he published his 'The Laws of Returns under Competitive Conditions' (Sraffa, 1926) in the *Economic Journal*. Indeed, Keynes wrote to Sraffa in 1927 to advise him that "Pigou is extremely interested, and he has been looking up your Italian article. You may be interested to know that he feels he must, in light of it, reconsider his whole position." (Keynes, cited by Aslanbeigui, 1996, p. 286; and by Cozzi and Marchionatti, 2001, p. 77).

Aslanbeigui (1996) has already reflected on Pigou's direct response to Sraffa's article in "The Laws of Diminishing and Increasing Cost" (Pigou, 1927), and the subsequent related paper "An Analysis of Supply" (Pigou, 1928). But in January 1928, Pigou also provided direct comment in a letter to Sraffa about the 1927 draft of what would, after a very long delay, evolve into the *Production of Commodities by Means of Commodities* (Sraffa, 1960).¹⁹ That letter made two substantive points on the degree of generalisation in economic theory. First, ordinary (Marshallian) supply and demand analysis is still applicable when the impact of a change in tastes on satisfaction in respect of all other goods is of 'second order of smalls', a point that is similar to, and consistent with, the argument outlined in Pigou (1927, p. 192). Second, after noting that Sraffa's equations appear to be a special case of general analysis that assumes constant returns to scale, Pigou suggested that elaborate systems of supply and demand are not required for constant returns, which can be treated by a more limiting case than that provided by the general theory being proposed by Sraffa.

¹⁹ In his preface to the *Production of Commodities by Means of Commodities*, Sraffa noted that the central propositions of the book were being developed in the late 1920s (Sraffa 1960, p. iv). Panico (1991, p. 561, note 15) has reported that Sraffa had shown a preliminary draft to Keynes in 1927-28, which takes as evidence that Sraffa was, by that time, already pursuing the solution to prices through simultaneous equations.

In short then, when interdependencies can be ignored – when variations are of ‘second order of smalls’ and returns to scale are constant – there is a continued and important role for particular or partial equilibrium and Sraffa’s new framework for treating the ‘value problem’ appears unnecessary. But even on these matters, Pigou is deferential to Sraffa by prefacing his comments with the following remark: “I don’t suspect that I have really understood the nature of your value problem. But here, for what it is worth, is what occurs to me about it” (Pigou 1928b). He also closes his letter with “I don’t suppose for a moment that I have half got your point, but may as well send this along on the off chance.” (Pigou, 1928b).

Irrespective of whether or not Pigou was genuinely confessing to his failure to understand the significance of Sraffa’s equations, or whether or not he appreciated Sraffa’s re-orientation of value theory to reflect objective rather than subjective factors, it is clear that Pigou was too faithful to Marshall to consider abandoning particular equilibrium wholesale. But he prefaced and closed his judgement to that effect in such a way that Sraffa would be neither offended nor dissuaded from developing his approach as there is no wholesale rejection of the need to account for interdependencies in economic theory.

6. Concluding remarks

The prizes that Pigou was awarded in Britain as a student at Cambridge, and within the five years following his graduation, reflected the merit of particular monographs that anticipated the brilliance of his future performance as economist. Although Pigou subsequently developed into a somewhat reclusive character and was generally unwilling to participate in economic conferences or meet with foreign colleagues, his published works were well received by the international community of economists. Invariably, the several books he published had a warm welcome in many different countries, so much so that he was elected a foreign fellow of the American Academy of Arts and Sciences in 1928.

The importance of his being awarded the 1955 International Feltrinelli Prize for the Economic and Social Sciences, after his retirement, lies, firstly, on the fact that it came as result of a thorough assessment of the relevance of Pigou’s contribution as a whole in comparison with other contemporary candidates, and secondly, on the scholarly – and largely non-Paretian – composition of the selection committee. The advocacy of Gustavo Del Vecchio, a distinguished Italian scholar, in favour of Pigou within the confines of the section committee is illustrative of the depth of Pigou’s influence on economic ideas beyond Cambridge, but especially in Italy. For historians on thought, the importance of the surviving 1955 letters from Pigou to Sraffa and from Sraffa to Del Vecchio on the Feltrinelli Prize is the suggestion that a mutual respect and friendship between Pigou and Sraffa had developed over the years regardless of what are now regarded as fundamental differences in their approaches to the theory of value.

References

Archival and Unpublished Documents

From the Archivio dell'Accademia Nazionale dei Lincei

Accademia Nazionale dei Lincei. 1955a, *Premi Feltrinelli 1955*. Titolo 32, busta 6, fasc. 12, sfasc 5a.

Accademia Nazionale dei Lincei. 1955b, *Premio Internazionale per le Scienze Economiche e Sociali: Biografie del Segnalati e Relazione della Commissione*, Titolo 32, busta 6, fasc. 12, sfasc 5a.

Accademia Nazionale dei Lincei. 1955c, *Estrato dai Rendiconti delle Adunanze Solenni* (Seduta del 15 Giugno 1955), Titolo 32, busta 6, fasc. 12, sfasc. 5.

Letters

Sraffa, P. 1955, Letter to Gustavo Del Vecchio, 26 May 1955, collection of Gustavo Del Vecchio correspondence held privately by Alberto Zanni.

Pigou, P. 1928b, Letter to Piero Sraffa, January 1928, Trinity College Library Archive, Cambridge, A 239.1.

Pigou, P. 1955a, Letter to Gustavo Del Vecchio, 28 May 1955; collection of Gustavo Del Vecchio correspondence held privately by Alberto Zanni.

Pigou, P. 1955b, Letter to Piero Sraffa, 29 June 1955, Trinity College Library Archive, Cambridge, A 239.6.

Pigou, P. 1955c, Letter to Piero Sraffa, 11 July 1955, Trinity College Library Archive, Cambridge, A 239.9.

Published Documents

Accademia Nazionale dei Lincei. 1968, *Antonio Feltrinelli. Celebrazione del XXV Anniversario della Morte*, Roma: Accademia Nazionale dei Lincei.

Arena, Richard. 1998, "Marco Fanno", In F. Meacci (Ed.). *Italian Economists of the Twentieth Century*. Cheltenham: Edward Elgar, pp. 114-133.

Artigas, Mariano and Shea, William R. 2003, *Galileo in Rome. The Rise and Fall of a Troublesome Genius*, Oxford: Oxford University Press.

Aslanbeigui, Nahid. 1996, "The Cost Controversy: Pigouvian Economics in Disequilibrium", *The European Journal of the History of Economic Thought*, Vol. 3, No. 2, Summer, pp. 275-295.

Azevedo, Paola C. and Gerardi, Elvira. 2005, *Reale Accademia d'Italia*. Inventario dell'Archivio, Roma: Ministero per i Beni e le Attività Culturali.

Berengo, Marino. 1966, "Profilo di Gino Luzzato", *Rivista Storica Italiana*, Anno LXXVI, No. IV, pp. 879-895.

Bernal, Martin. 2012, *Geography of a Life*, Bloomington: Xlibris Corporation.

- Caffè, Federico. 1983, "Il Pensiero di Gustavo del Vecchio nel Centenario della Nascita", *Giornale degli Economisti e Annali di Economia*, Nuova Serie, No. 11/12, Anno 42, Novembre-Dicembre, pp. 705-717.
- Cantono, Simona and Marchionatti, Roberto. 2012, "Dumping as Price Discrimination: Jannaccone's Classic Theory before Viner", *Journal of the History of Economic Thought*, Vol. 34, No. 2, June, pp. 193-218.
- Carutti, Domenico. 1883, *Breve Storia dell'Accademia dei Lincei*, Roma: Salviucci.
- Clubb, Louise G. 1965, *Giambattista Della Porta Dramatist*, Princeton: Princeton University Press.
- Cozzi, Terenzio and Marchionatti, Roberto (Eds.) 2001, *Piero Sraffa's Political Economy: A Centenary Estimate*, London: Routledge.
- Davanzati, Guglielmo Forges and Realfonzo, Riccardo. 2001, "An Overinvestment (but Anti-Austrian) Explanation of the Turning Points of the Cycle: Italian Contributions of the Early 20th Century", *History of Economics Review*, No. 33, pp. 17-32.
- Del Vecchio, Gustavo. 1914a, "Rassegne Analitiche. Per la Teoria Economica della Politica Sociale", *Rivista Italiana di Sociologia*, No. 2, Anno XVIII, Marzo-Aprile, pp. 258-268, reprinted in G. Del Vecchio, 1956, *Vecchie e Nuove Teorie Economiche*, Torino, UTET, pp. 308-318.
- Del Vecchio, Gustavo. 1914b, "Sulla Teoria Economica delle Crisi", *Giornale degli Economisti e Rivista di Statistica*, Serie Terza, Vol. 48, No. 6, Anno 25, Giugno, pp. 425-452.
- Del Vecchio, Gustavo. 1921, "The Economics of Welfare by A. C. Pigou", *Giornale degli Economisti e Rivista di Statistica*, Serie Terza, Vol. 61, No. 10, Anno 32, Ottobre, p. 355.
- Del Vecchio, Gustavo. 1924, "L'Opera di Alfred Marshall", *Giornale degli Economisti e Rivista di Statistica*, Serie Quarta, Vol. 65, No. 12, Anno 39, Dicembre, pp. 642-645.
- Del Vecchio, Gustavo. 1927a, "Le Crisi e le Teorie Economiche", *Giornale degli Economisti e Rivista di Statistica*, Serie quarta, Vol. 68, No. 3, Anno 42, Marzo, pp. 109-119.
- Del Vecchio, Gustavo. 1927b. "La Teoria delle Crisi Economiche", *Bollettino dell'Istituto Statistico-Economico*, Anno III, No. 7-8, Luglio-Agosto, pp. 149-153.
- Del Vecchio, Gustavo. 1927c, "Official Papers by A. Marshall", *Giornale degli Economisti e Rivista di Statistica*, Serie Quarta, Vol. 68, No. 7, Anno 42, Luglio, pp. 414-415.
- Del Vecchio, Gustavo. 1930a, "Le Odierne Tendenze dell'Economia Politica", *Giornale degli Economisti e Rivista di Statistica*, Serie Quarta, Vol. 70, No. 2, Anno 45, Febbraio, pp. 127-137.
- Del Vecchio, Gustavo del. 1930b, "Industrial Fluctuations II Ed. by A. C. Pigou; The Functions of Economic Analysis by A. C. Pigou", *Giornale degli Economisti e Rivista di Statistica*, Serie Quarta, Vol. 70, No. 1, Anno 45, Gennaio, p. 79.

- Del Vecchio, Gustavo. 1930c, "Osservazioni sopra le Relazioni tra gli Economisti Italiani e gli Economisti Inglesi", *Annali di Economia*, Vol. 6, No. 2, Luglio, pp. 293-299.
- Del Vecchio, Gustavo. 1938, "Abrégé des Éléments d'Économie Politique Pure by L. Walras. De la Nature de la Richesse et de l'Origine de la Valeur by A. Walras", *Giornale degli Economisti e Rivista di Statistica*, Serie Quarta, Vol. 78, No. 10, Anno 53, Ottobre, pp. 809-810.
- Dupriez, Léon H. 1947, *Des Mouvements Économiques Generaux*, Louvain: Université de Louvain, Institut des Recherches Économiques et Sociales, 2 Vols.
- Fanno, Marco. 1914, "Contributo alla Teoria dell'Ofertta a Costi Congiunti", *Giornale degli Economisti e Rivista di Statistica*, Serie Terza, Vol. 49, No. 4, Anno 25, pp. 1-142.
- Fanno, Marco. 1925, "Alfredo Marshall", *Annali di Economia*, Vol. 2, No. 1., pp. 167-181.
- Faucci, Riccardo. 2000, *L'Economia Politica in Italia*, Torino: UTET.
- Faucci, Riccardo. 2014, *A History of Italian Economic Thought*, London: Routledge
- Ferrarotto, Marinella. 1977, *L'Accademia d'Italia. Intellectualli e Potere durante il Fascismo*, Napoli: Liguori.
- Freedberg, David. 2002, *The Eye of the Lynx: Galileo, his Friends and the Beginnings of Modern Natural History*, Chicago: University of Chicago Press.
- Gallegati, Mauro. 1990, "The Spread of Marshall's Economics in Italy, 1885-1925", In R. M. Tullberg (Ed.), *Alfred Marshall in Retrospect*, Aldershot: Edward Elgar.
- Guarnieri, Patrizia. 2013, "Alfredo Niceforo", In *Dizionario Biografico Degli Italiani Treccani*, Vol. 78. Available at: [http://www.treccani.it/enciclopedia/alfredo-niceforo_\(Dizionario-Biografico\)](http://www.treccani.it/enciclopedia/alfredo-niceforo_(Dizionario-Biografico)). Captured in June 2014.
- Lanaro, Paola. 2007, "Gino Luzzato", *Dizionario Biografico degli Italiani*, Vol. 66. Available at: [http://www.treccani.it/enciclopedia/gino-luzzatto_\(Dizionario-Biografico\)](http://www.treccani.it/enciclopedia/gino-luzzatto_(Dizionario-Biografico)). Captured in June 2014.
- Legris, André. 1995, "La Théorie Économique Italienne de l'Entre-Deux-Guerres. Enquête sur un Oubli Historiographique", *Revue Économique*, Vol. 46, No. 1, Jan, pp. 91-113.
- Magnani, Italo. 2004, "Il Paretaio", *Quaderni del Dipartimento di Economia Pubblica e Territoriale*, No. 1/2004, Università degli Studi di Pavia.
- McLure, Michael. 2007, *The Paretian School and Italian Fiscal Sociology*, Houndmills: Palgrave Macmillan.
- Montevecchi, O. 1963, "Vincenzo Arangio Ruiz", *Aegyptus*, No. 3-4, Anno 43, Luglio-Dicembre, pp. 401-403.
- Morghen, Raffaello. 1990, *The Accademia Nazionale dei Lincei in the Life and Culture of United Italy in the 368th Anniversary of its Foundation (1871-1971)*, Rome: Accademia Nazionale dei Lincei.
- Naldi, Nerio. 2005, "The Prof and his Younger Colleagues. Pigou and the Correspondence with Kahn, Kaldor, J. Robinson and Sraffa", in M.C. Marcuzzo and

- A. Rosselli (Eds.), *Economists in Cambridge. A Study Through their Correspondence, 1907-1946*, Abingdon: Routledge, pp. 331-345.
- Pezzica, Lorenzo. 2009, *Cataloghi dagli Archivi della Famiglia Feltrinelli*, Milano: Fondazione Giangiacomo Feltrinelli.
- Panico, Carlo 1991, "Some Notes on Marshallian Supply Functions", *The Economic Journal*, Vol. 101, No. 406, May, pp. 557-569.
- Pigou, Arthur C. 1907a, "Commercio Internazionale by G. de Francisi Gerbino", *The Economic Journal*, Vol. 17, No. 66, June, pp. 262-263.
- Pigou, Arthur C. 1907b, "Trattato di Politica Commerciale by Luigi Fontana-Russo", *The Economic Journal*, Vol. 17, No. 67, Sep, pp. 414-415.
- Pigou, Arthur C. 1908, "L'Imposta sul Trasporto degli Emigranti by Pasquale Jannaccone", *The Economic Journal*, Vol. 18, No. 69, Mar, p. 95.
- Pigou, Arthur C. 1912, *Wealth and Welfare*, London: Macmillan.
- Pigou, Arthur C. 1927a, "The Laws of Diminishing and Increasing Cost", *Economic Journal*, reprinted in D. Collard (Ed.), *A.C. Pigou Journal Articles 1923-1953*, 2002, Basingstoke: Palgrave Macmillan, pp. 312-321.
- Pigou, Arthur C. 1927b, *Industrial Fluctuations*, London: Macmillan, 1st ed.
- Pigou, Arthur C. 1928, "An Analysis of Supply", *Economic Journal*, reprinted in D. Collard (Ed.), *A.C. Pigou Journal Articles 1923-1953*, 2002, Basingstoke: Palgrave Macmillan, pp. 336-356.
- Pomini, Mario. 2014, *The Paretian Tradition during the Interwar Period: from Dynamics to Growth*, Abingdon: Routledge.
- Saltmarsh, John and Wilkinson, Patrick. 1960, *Arthur Cecil Pigou 1877-1959. Fellow and Professor of Political Economy*, Cambridge: King's College.
- Segretto, Luciano. 2011, *Il Feltrinelli. Storia di una Dinastia Imprenditoriale (1854-1942)*, Milano: Giangiacomo Feltrinelli Editore.
- Sraffa, Piero. 1960, *Production of Commodities by Means of Commodities*, Cambridge: Cambridge University Press.
- Tusset, Gianfranco. 2012, "The Organizational Properties of Money: Gustavo Del Vecchio's Theory", *Journal of the History of Economic Thought*. Vol. 34, No. 2, June, pp. 243-260.
- Winch, Donald 2014, "Keynes and the Academy", *The Historical Journal*, Vol. 57, No. 3, pp. 751-771.
- Zaccagnini, Emilio. 1961, "Le Mète Ultime dell'Economista, in Memoria di Pasquale Jannaccone", *Giornale degli Economisti e Annali di Economia*, Nuova Serie, No. 9-10, Anno 20, Settembre-Ottobre, pp. 527-558.
- Zanni, Alberto. 1996, "Demaria negli Anni Trenta Attroverso un Epistolario (Giugno 1930-Febbraio 1939)", *Storia del Pensiero Economico*, No. 31-32, pp. 27-127.

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