



Munich Personal RePEc Archive

**“Italian Economists of the 20th
Century”, edited by Ferdinando Meacci,
Cheltenham: Edward Elgar, 1998**

Meacci, Ferdinando

University of Padova

1998

Online at <https://mpra.ub.uni-muenchen.de/11694/>

MPRA Paper No. 11694, posted 03 Jan 2009 13:09 UTC

“Italian Economists of the 20th Century”, edited by
Ferdinando Meacci, Cheltenham: Edward Elgar,
1998

1. Introduction: Two Glimpses

by

Ferdinando Meacci

Robert K. Merton’s thesis that ‘all scientific discoveries are in principle multiples, including those that on the surface appear to be singletons’ (1973), though devised to demonstrate the interaction between different individuals in the development of any science, may be applied to economics to demonstrate the existence of unrecognized multiples between the economists not only of different countries but also of different generations.¹ In particular, if one looks at the contributions of 20th-century Italian economists to world economic theory, one may realize that they provide a corroboration of Merton’s thesis in each of these directions. For, in spite of the barriers interposed by the Italian language and by a closed and unfair academic system, the Italian economists of the 20th century have eventually managed to enrich not only the ‘Anglo Saxon’ but also – through a radical critique in recent times – the ‘neoclassical’ singleton. Since, however, the very history of world economic thought in the 20th century is the history of an increasing dissolution of the complex unity reached at the end of the previous century, it is no wonder that the history of Italian economics in this century appears in turn as a local reflection and pull of a worldwide process of fragmentation.

The essays collected in this volume highlight the contributions of 12 Italian economists to the unfolding of this process. This number is neither exhaustive nor are their names exclusive.² Indeed the number would have been larger and the names might have been different if only the project had not been circumscribed by two constraints. One was the ceiling imposed by the publisher on the size of the volume. The other was the non-Italian affiliation of contributors sought by the editor. The second constraint proved harder to meet than the first. Thus after a long, and in some cases unfruitful, search for contributors some entries were cancelled. A single exception was eventually made in the case and in honour of Luigi Einaudi, perhaps the least known outside Italy, and certainly the least translated, of the economists of this volume.³

The reader will find in each particular chapter details concerning the thought of each particular economist and the assessment made by each

particular contributor. The aim of this introduction is more general. Written after reading the 12 essays, it is an attempt to treat the thoughts of the economists of this volume as a *sample* from which to infer a brief outline of Italian economics in the 20th century and of its links with economics in general.

This outline is sketched below in two glimpses. One looks at the economists one *after* the other according to the period in which they lived (and is accordingly called ‘vertical’). The other looks at them one *next* to the other according to the methods they have in common (and is accordingly called ‘horizontal’). The two glimpses provide different views of the thoughts of the economists considered and establish different relations between their works. But even when their works look mutually exclusive, it will be argued below that an unconscious unity of purpose emerges, in spite of all differences and beyond some intentions, across individuals, schools and generations.⁴

A VERTICAL GLIMPSE

Although it was Pantaleoni who initiated Pareto and Barone into economics it may be convenient to look at the relations between their contributions as if Pantaleoni came after Pareto and Barone. While revealing a weakness in the vertical glimpse, this reversal is justified by the role played by general equilibrium theory (GET) in the evolution of economic thought at the turn of the century. For while Pareto and Barone brought this theory to the peak indicated by Walras, Pantaleoni eventually led the descent from it – a descent that is still continuing in a number of ways. What motivated his new approach was perhaps the feeling (which seems to have been shared by the ‘lone thinker of Céligny’) that ‘generalisations had already been carried to the extreme limit, and that what was necessary was to discover the nature and actual form of the functions with which economics deals’ (Sraffa, 1924, 651).

This point is implicit in Schumpeter’s well-known praise of Italian economics at the turn of the century.⁵ This praise, it should be noted, is not restricted to the work of Pareto. It rather encompasses the variety of lines of thought, applied fields included, which in Italy ‘fertilized general economics and did not, as in Germany, conflict with “theory”’; the kind of general economics – Schumpeter adds – ‘that may be represented by the work of Luigi Einaudi, although it was only after 1914 that he rose to a leading position’ (1954, 855–6). Schumpeter’s assessment, however, tells only part of the story. For not only is the role of Pantaleoni in promoting the very lines of thought which culminated in Einaudi’s work neglected in this assessment but, when he comes to Sraffa’s 1925 article, Schumpeter confines himself to

regarding this article as the source of 'the English branch of the theory of imperfect competition' (*ibid.*, 1047).

Now that the role of Sraffa is becoming clearer from the standpoint of the evolution of his thought and of its impact on further research, the roles played by Pantaleoni and Sraffa from the beginning to the end of the 20th century can be better ascertained than Schumpeter did around 1950. These roles can be traced, in the case of Pantaleoni, to his articles *Nota sui caratteri delle posizioni iniziali e sull'influenza che le posizioni iniziali esercitano sulle terminali* (1901) and *Di alcuni fenomeni di dinamica economica* (1909); and, in the case of Sraffa, to his article *Sulle relazioni fra costo e quantità prodotta* (1925). While Pantaleoni's contributions heralded the demise of GET and the rise of dynamics, Sraffa's article was a challenge to the consistency of partial equilibrium theory (PET) and paved the way for the unfolding of thought which eventually led to *Production of Commodities by Means of Commodities* (1960).

In this sense Pantaleoni and Sraffa can be regarded as the pioneers of Italian economics in the 20th century. If, however, their works are considered from within, they also appear to be the pioneers of a long *escape*. What they initially escaped from was, in the case of Pantaleoni, Pareto's GET and, in the case of Sraffa, Marshall's PET. The forms and destinations of the two escapes, however, have been different. While Pantaleoni's escape was prompted by the *outside* limits of GET (and, more generally, of pure theory) Sraffa's was initiated by his early perception of the *inside* limits of PET (and, in particular, of the laws of returns). The two destinations, therefore, could not stand in the same relation to their respective origins: while Pantaleoni's destination was eventually centred on the problems of dynamics and applied economics – and was never meant to be incompatible with its origin⁶ – Sraffa's final target was to become the internal consistency of neoclassical theory – of which Marshall's PET was just a part – and its replacement by, and reconstruction of, the theory of the classics.

These different destinations were subsequently pursued by two different groups of economists in the two halves of the century. Thus while De Viti de Marco, Fanno, Bresciani Turrone and Einaudi may be said to belong – to expand Schumpeter's hint and to limit ourselves to the sample considered in this volume – to the group which came first; Sylos Labini, Pasinetti and Garegnani may be said to belong to the group which came later. Demarcation lines, however, are blurred even in this case. Modigliani, for instance, though contemporary with the members of the second group, can be regarded, in view of his celebrated work in applied economics, econometrics and stabilization policies, and partly along with Sylos Labini himself, as an ideal member of the group which came first.

While the endeavours of the first group were often occasioned by the upheavals of the times, those of the second group have been oriented partly

by the rising star of Keynes and partly by the fixed stars of the classics. It is known, however, that the classics are not interchangeable stars. Hence the rise of three lines of reconstruction within the second group depending on whether the star worth rediscovering was thought to be Smith (Sylos Labini), Ricardo (Pasinetti) or Marx (Garegnani).⁷ In each case, however, the rediscovery was not pursued for its own sake. Rather, it was used to add further light and depth to the new lines of research which were being developed in the meantime. These lines point towards the new fields of market forms and market behaviour, structural change, vertical and horizontal integration, determinants of savings and investment, methodology and consistency, institutions and historical time.

A HORIZONTAL GLIMPSE

If the economists examined in this volume are separated from their thoughts, and if their thoughts are considered as intersecting branches emanating from a single trunk, a completely new picture emerges. This picture brings to light the elements these economists have in common rather than the differences they have developed as a reaction to, or as an improvement of, the theories inherited from those who had come before.

If this picture is scrutinized in the light of economic analysis one might notice that what it ultimately shows us is an ideal three-mullioned window. This window provides three different vistas of the region of Italian economics in the 20th century and, further beyond, of economics in general: one looks out on it as an *aristocratic* discipline; the other faces it as *pure* theory; the third presents it to us as a discipline for *reforms*.

Indeed these three views could also be obtained if, instead of cross-examining the 'this' and 'that' of the economists of this volume, one were to cross-examine the 'this' and 'that' of the great economists of the past. This is a proof, in general, that similarities among economists of different countries, schools and generations may be stronger than their specific differences; and, in particular, that the contribution of Italian economists belongs to the living core of our discipline even when their thoughts point in opposite directions.

The following subsections provide a brief outline of the three views as they emerge from the essays collected in this volume and irrespective of the times in which the 12 economists have lived.

Economics as an Aristocratic Discipline

Economics is an aristocratic discipline in the sense that it has a past and that this past matters. Its past, however, matters in a different sense than the past of other branches of learning. For if, say, the study of the sky is one of the

most ancient activities of the human mind, the history of these activities is not as relevant to modern astronomy as the history of economic thought is to modern economics. This may result from the fact that economics, unlike astronomy, is a 'discipline' rather than a 'science' (Hicks, 1983).

If the thought of the 12 economists is examined in this context one may notice that they have been keen to trace the past of our discipline, and to show in what sense this past matters. This feature is already evident in Pantaleoni's view of the history of economics as the progress of a great division of labour (1907).⁸ But it is implicit in the very formation of Pareto as an economist if it is true that his initiation did not occur through the economics manuals of his day but through the volumes of *Biblioteca dell' Economista*, a series of classical writings edited by the 19th-century Italian economist Francesco Ferrara. Furthermore, Pareto's insight about those who know this and those who know that provides a method for placing in their proper perspectives not only the 'this' and 'that' of the past (which is the first task of the history of economic thought) but also the 'this' and 'that' of the present (which is the most fruitful consequence of such a history).

This feature reaches a climax in Sraffa. For Sraffa showed, more directly than anyone before, how to link economic analysis with the history of economics, the endeavours of today with the efforts of the past. This feature is particularly evident – within this volume – in Sylos Labini's, Pasinetti's and Garegnani's works; and – outside this volume – in the works of a growing number of Italian economists of a younger generation.

Economics as Pure Theory

Unlike aristocrats, who are known for being eccentric, economists have a yearning for rigorous analysis. The result of this yearning is pure theory. The object of pure theory is exactness of thought. Mathematics has provided the economists of the 20th century with one method by which they could reach this target. The great pioneer of this method in Italy was Pareto. Next to him are Pantaleoni and Barone. Mathematics, however, is not the only method available for this purpose. Ricardo, for instance, may be regarded as the originator of pure theory without mathematics. Mathematics may indeed turn out to be useless or counterproductive when it comes to dealing with social reality or historical time. Thus if Pareto brought pure theory with mathematics to a much higher level than did Pantaleoni, the subsequent evolution of Italian economic thought has shown that neither mathematics nor GET are necessary conditions for exactness of thought.

Consider, for instance, De Viti de Marco's arguments in fiscal theory (1939) or, moving to economics proper, Fanno's essays on joint products and rival goods (1914, 1926) and, more thoroughly, Sraffa's 1925 article and 1960 book. These contributions prove, if anything, that the search for

consistency matters as much as – and may be more effective than – the search for originality. They also prove that the search for consistency is even more demanding – and may be more devastating – than the very use of mathematics. This can best be seen in Sraffa (1960). Through his distinction between ‘genuine’ and ‘spurious’ margins, for instance, we are able to discern the high from the low target of his ‘critique of political economy’ as well as the internal from the external implications of it. A crucial issue in this connection is circularity in reasoning. First highlighted by Joan Robinson, under Sraffa’s influence, with regard to the neoclassical theory of capital and distribution, the possibility of this vice has since become to economists what computer viruses are to computer users. The yearning for rigorous analysis has thus spread among Sraffa’s followers and critics alike, irrespective not only of the use of mathematics but also of their diverging conclusions.

Economics as a Discipline for Reforms

Schumpeter’s statement that ‘no theory in the sense of pure theory can ever be a theory in the sense of complete analysis of the phenomena to which it refers’ unless it is coupled with applied economics (1954, 919) paves the way for looking at the escape from Pareto as a complement to, rather than a substitute for, the origin of the escape. This is proved by the fact that many studies in the field of applied economics (including Bresciani Turrone’s initiation) were occasioned by Pareto’s law of distribution, and that the link between pure theory and applied economics was practised in Italy before and after Pareto. This may be the reason, for instance, why it was up to two Italian economists – Benini and Gini – to lay the early foundations of econometrics as a 20th-century branch of economics (see Stone, 1980 and Stigler, 1987). And it might be one of the reasons why, once this link had been practised and encouraged by Fanno, Einaudi and Bresciani Turrone in the first half of the century, it was up to Modigliani to bring it to a climax on the world scene in the second half of it.

Applied economics, however, has seldom been practised or advocated for its own sake. It would indeed boil down to nothing – or to little more than an idle form of curiosity – if its accomplishments were not instrumental in providing food for a broader aim. This aim is the drive for *reforms*.

Unlike aristocrats, who are usually content with the *status quo*, economists have been sensitive to the call for reforms all over the world and in all ages. This call, which is a prominent feature of the Italian tradition, has become more evident in the 20th century than at any time before. From Pareto to Modigliani, the concerns of Italian economists have been continuously related to the economic problems of their country and to the obstacles that obstruct its development in the short or in the long run.

The drive for reforms in the 20th century was championed by Luigi Einaudi. In this sense Einaudi ranks high under at least two accounts. First, because he provided the essential *method* for arguing in favour of reforms. Second, because – as regards the reforms worth arguing for – he fought the essential *battles*. For, concerning the method, it was Einaudi who highlighted the distinction between ‘theorem’ and ‘advice’ without which the link between pure theory, applied economics and economic policy (and their often contrasting or diverging conclusions) would become impossible (with the result that the drive for reforms would fall into the hands of unprincipled men). As for the battles, it was Einaudi again who fought longer, with more determination and in more difficult times, than any other the two standard battles of classical economists: the battle against the spirit of monopoly, and the battle for the spirit of saving. While the object of the first battle was extended by Einaudi to the evils of protectionism and autarky (the two demons of Italy’s past), the object of the second (the traditional key of Italy’s future) was not confused by him (at least not as much as by his supercilious detractors) with the problems posed in a monetary economy by the unexpected or uncoordinated changes of the annual decisions to save (*ex ante* saving) relative to the annual decisions to invest (*ex ante* investment).

NOTES

1. For a discussion and application to economics of Merton’s thesis, see Stigler (1982, 98–103) and Niehans (1995).
2. A more comprehensive view of Italian economists can be obtained from consulting other works, such as Fusco (1997), Bociarelli and Ciocca (1994), Scazzieri (1992), Graziani (1991), AA.VV. (1990), Becattini (1990), Blaug (1986), Finoia (1980, 1984), Faucci (1982), Lunghini (1981), Caffè (1975), Einaudi (1950), Del Vecchio (1930) and Bartoli’s annual survey ‘Cronique de la pensée économique en Italie’ in *Revue Economique* since 1954. Of particular relevance are the volumes *Italian Economic Papers* edited by Luigi Pasinetti for Il Mulino–Oxford University Press. These volumes contain outstanding articles, originally published in Italian, by economists of previous and current generations. See also the proceedings of the *Società Italiana degli Economisti* with particular regard to the series *Alle origini del pensiero economico in Italia* and the journal *Rivista Italiana degli Economisti*. Other useful sources are the journals *Il Pensiero Economico Italiano* and, with regard to the writings of Italian economists on the Italian economy, *Economia Italiana*. In this connection, see also the *Considerazioni finali* of the Annual Reports of the Bank of Italy which convey the wisdom of *Governatori* about the changing economic problems of the country throughout the century. A sample of this wisdom can be found in Carli (1993).
3. A minor difficulty was encountered with regard to the line to be drawn between ‘Italian’ and ‘non-Italian’ economists. Granted that the increasing internationalization of academic systems will make this issue more and more intractable in the future, the inclusion in this volume of Sraffa and Modigliani results from the consideration that both of them were born and educated – up to (Modigliani) or long after (Sraffa) their graduation – in Italy. Sraffa’s preservation of the Italian citizenship and Modigliani’s continuous involvement with Italian economic problems confirmed or supported the case for their inclusion.

However, it may be that the high quality of Italian high schools (*licei*) is ultimately responsible for the identity and success of most Italian economists of the past and, barring a further weakening of their humanities-oriented syllabus, of the foreseeable future. Concerning, for instance, Pareto's familiarity with Greek and Roman literature and languages, and concerning his view of their fruitfulness in the formation of a modern economist, see Pantaleoni (1924) and Giacalone-Monaco's Introduction to Pareto (1968, Vol. I, li–lx).

4. We are told that in the house where Calvino died it was found that different tables had been set with the purpose to write on them mutually exclusive novels (see Calvino, *Romanzi e racconti*, Milan: Mondadori, 1991, xxxvii). Pareto's objection to Pantaleoni's well-known observation that there are no schools of economics but only the school of those who know and that of those who do not know it (1897) may be interpreted in this spirit. For this objection was that one should, rather, distinguish between the school of those who know *this* and that of those who know *that*; see Pareto's letter to Pantaleoni of 19 February 1897 in Pareto (1962). In this letter Pareto also warns against confounding *persons* and *things*; a warning that, in the context of this introduction and particularly of the horizontal glimpse given below, is tantamount to a recommendation to keep *economists* apart from *theories*, and *theories* + *economists* apart from *economics*. See also note 8.
5. 'The most malevolent observer' – he writes – 'could not have denied that it was second to none by 1914' (Schumpeter, 1954, 855).
6. Hence Schumpeter's remark that Pantaleoni 'was anything but a "pure theorist", although he understood "pure theory" as few people ever did' (1954, 857, n.4). It should however be noted that the escape from Pareto took a variety of directions, some of which resulted in increasingly sophisticated returns to its very point of departure. For instance, while the Italian GET school was developed in the direction of dynamic equilibrium by Amoroso (1932), La Volpe (1936 [1993]) and others, Demaria (1932, 1962–74), the most prolific of these writers, took a prominent part in the escape towards applied economics, institutions, original time and history. Yet his separatism is not enough to disintegrate the possibility of a Pareto–Pantaleoni–Amoroso–Demaria line. To infer this line, see Demaria (1962–74, Vol. II, Part IV). On the role of La Volpe in the development of the Italian GET school, see Morishima's and Di Matteo's Forewords to La Volpe (1936 [1993]).
7. A detailed treatment of these three lines, which are not exclusive and allow for intersections and interruptions, is provided by Roncaglia (1990).
8. This view seems to endorse Pareto's objection to Pantaleoni's previous remark on economists as divided into those who know economics and those who do not, and may be utilized to assess Pantaleoni's own contribution to economics in the light of Pirou's thesis that he was a *unifier* rather than an *eclectic* (Pirou, 1926). On this issue, see Busino (1963) and Ricci (1939).

REFERENCES

- AA.VV. (1990), 'Il pensiero economico italiano tra le due guerre', *Quaderni di Storia dell'Economia Politica*, **VIII**, 181–491.
- Amoroso, L. (1932), 'Contributo alla teoria matematica della dinamica economica', *Nuova Collana di Economisti*, **V**: *Dinamica Economica*, 419–40.
- Becattini, G. (ed.) (1990), *Il pensiero economico: temi, problemi e scuole*, Turin: Utet.
- Blaug, M. (ed.) (1986), *Who's Who in Economics*, Brighton: Wheatsheaf Books.
- Busino, G. (1963), 'Maffeo Pantaleoni et l'enseignement de l'économie politique à Genève au début du XX siècle', *Cahiers Vilfredo Pareto*, **I**, 49–60.

- Bocciarelli, R. and Ciocca, P. (eds) (1994), *Scrittori italiani di economia*, Bari: Laterza.
- Caffè, F. (1975), *Frammenti per lo studio del pensiero economico italiano*, Milan: Giuffrè.
- Carli, G. (1993), 'Concluding Remarks to the Annual Reports of the Bank of Italy 1960–1974', *Banca Nazionale del Lavoro Quarterly Review*, Special Issue, 1–520.
- De Viti de Marco, A. (1939), *Principi di economia finanziaria*, Turin: Einaudi.
- Del Vecchio, G. (1930), 'Osservazioni sopra le relazioni tra gli economisti italiani e gli economisti inglesi', in Del Vecchio, G. (1933), *Vecchie e nuove teorie economiche*, Turin: Utet, 1956, 293–9.
- Demaria, G. (1932), 'Di un principio di indeterminazione in economia dinamica', *Rivista Internazionale di Scienze Sociali e Discipline Ausiliarie*, **XLV**, 597–636. Translated into English as 'On a Principle of Indetermination in Economic Dynamics', in Pasinetti, L.L. (1997), *Italian Economic Papers*, Bologna: Il Mulino–Oxford University Press, **III**, 149–82.
- (1962–74), *Trattato di logica economica*, 3 Vols, Padua: Cedam.
- Einaudi, L. (1950), 'La scienza economica. Reminiscenze', in Finio, M. (ed.) (1980, 93–115).
- Fanno, M. (1914), 'Contributo alla teoria dell'offerta a costi congiunti', *Giornale degli Economisti e Rivista di Statistica*, 3rd Series, **49**, Supplement, 1–42. Reprinted in Fanno, M. (1954, 83–133).
- (1926), 'Contributo alla teoria economica dei beni succedanei', *Annali di Economia*, **II**, 331–471. Revised and edited by Fanno in German as 'Die Elastizität der Nachfrage nach Ersatzgütern', *Zeitschrift für Nationalökonomie*, 1930, 51–74. Revised and re-edited in Italian by Fanno as 'L'elasticità della domanda dei beni succedanei', in Fanno, M. (1954, 135–54). Translated into English as 'The Elasticity of Demand of Substitute Goods', in Pasinetti, L.L. (ed.) (1997), *Italian Economic Papers*, Bologna: Il Mulino–Oxford University Press, **III**, 99–116.
- (1954), *Scritti vari di economia e finanza*, Padua: Cedam.
- Faucci, R. (1982), *La scienza economica in Italia (1850–1943)*, Naples: Guida.
- Finio, M. (1980), *Il pensiero economico italiano (1850–1950)*, Bologna: Capelli.
- (1984), 'Gli studi di economia applicata in Italia (1880–1940)', *Rivista Milanese di Economia*, **11**, 103–35.
- Fusco, A.M. (1997), 'Gli studi di economia in Italia: momenti di riflessione teorica (1946–1996)', *Economia Italiana*, **1/2**, 107–65.
- Graziani, A. (1991), 'The Italian Economic Journals and Some Major Turning-Points in Economic Theory', *Economic Notes*, **20**, 117–34.
- Hicks, J. (1983), 'A Discipline not a Science', in *Collected Essays on Economic Theory*, Oxford: Basil Blackwell, **III**, 365–75.
- Lunghini, G. (ed.) (1981), *Scelte politiche e teorie economiche in Italia 1945–1978*, Turin: Einaudi.
- La Volpe, G. (1936 [1993]), *Studi sulla teoria dell'equilibrio economico dinamico generale*, Napoli: Jovene. Translated into English and edited by M. Morishima as *Studies on the Theory of General Dynamic Economic Equilibrium*, London: Macmillan.

- Merton, R.K. (1973), *The Sociology of Science*, Chicago: University of Chicago Press.
- Niehans, J. (1995), 'Multiple Discoveries in Economic Theory', *The European Journal of the History of Economic Thought*, **2**, 1–28.
- Pantaleoni, M. (1897), 'Del carattere delle divergenze d'opinione esistenti tra economisti', in Pantaleoni, M. (1963–64, **I**, 147–76).
- (1901), 'Nota sui caratteri delle posizioni iniziali e sulla influenza che le posizioni iniziali esercitano sulle terminali', *Giornale degli Economisti*, **23**, 333–55. Reprinted in Pantaleoni, M. (1963–64, **II**, 49–73).
- (1907), 'Una visione cinematografica del progresso della scienza economica', *Giornale degli Economisti*, **35**, 964–92. Reprinted in Pantaleoni, M. (1963–64, **I**, 177–209).
- (1909), 'Di alcuni fenomeni di dinamica economica', *Giornale degli Economisti*, **39**, 211–54. Reprinted in Pantaleoni, M. (1963–64, **II**, 75–125) and translated into English in *International Economic Papers*, **5**, London: Macmillan, 1955, 26–57.
- (1924), 'In occasione della morte di Pareto. Riflessioni', *Giornale degli Economisti e Rivista di Statistica*, 4th Series, **64**, 1–19.
- (1963–64), *Erotemi di economia*, 2 Vols, Padua: Cedam.
- Pareto, V. (1962), *Lettere a Maffeo Pantaleoni 1890–1923* (a cura di G. De Rosa), 3 Vols, Rome: Edizioni di Storia e Letteratura.
- (1968), *Lettere ai Peruzzi 1872–1900* (a cura di T. Giacalone-Monaco), 2 Vols, Rome: Edizioni di Storia e Letteratura.
- Pirou, G. (1926), 'Pantaleoni et la théorie économique', *Revue d'économie politique*, **XL**, 1144–65.
- Ricci, U. (1939), *Tre economisti italiani: Pantaleoni, Pareto, Loria*, Bari: Laterza.
- Roncaglia, A. (1990), 'Le scuole sraffiane', in Becattini, G. (ed.) (1990, 233–74).
- Scazzieri, R. (1992), 'Sull'economia politica del Novecento in Italia', *Economia Politica*, **IX**, 377–85.
- Schumpeter, A. (1954), *History of Economic Analysis*, London: Allen & Unwin.
- Sraffa, P. (1924), 'Maffeo Pantaleoni', *The Economic Journal*, **34**, 648–53.
- (1925), 'Sulle relazioni fra costo e quantità prodotta', *Annali di Economia*, **II**, 277–328. Reprinted in Sraffa, P. (1986), *Saggi*, Bologna: Il Mulino, 15–65. Translated into English as 'On the Relations between Cost and Quantity Produced', in Pasinetti L.L. (ed.) (1997), *Italian Economic Papers*, Bologna: Il Mulino–Oxford University Press, **III**, 323–64.
- (1960), *Production of Commodities by Means of Commodities*, Cambridge: Cambridge University Press.
- Stigler, G.J. (1982), *The Economist as Preacher and Other Essays*, Chicago: University of Chicago Press.
- (1987), *Essays in the History of Economics*, Chicago: University of Chicago Press.
- Stone, R. (1980), 'Political Economy, Economics and Beyond', *The Economic Journal*, **90**, 719–36.

