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**The Problem of Financial Accounting Measurement
in Italian Accounting Thought between the 19th and the 20th Century
From “Exchange Value” to “Historical Cost”**

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Abstract

The main subject of the paper is the theory of accounting measurement as observed in its historical development. More notably, the research concerns theoretical concepts of such discipline, as developed by the Italian doctrine in a very specific age, that is, between the second half of the nineteenth century and the first half of the twentieth century, i.e. from the theorization of the “exchange value rule” to the theorization of the “historical cost principle”.

As it was impossible to examine the thought of the many scholars who gave their contribution, each one in his own way, to the development of this subject, we deemed it appropriate to focus our attention on those scholars who left their mark on the accounting history in the analyzed period. We will mention in particular such scholars as Francesco Villa, Giovanni Rossi, Fabio Besta, Gino Zappa, the latter seen in the early stage of his thinking.

The analysis of the different theories devised by the above-mentioned masters, which cannot but be conducted within the limited length of this paper, led us to identify three logical steps in the evolution of the theories that have been developed on the subject in the considered phase.

The results of the study can be summarized in the following considerations.

In the second half of the nineteenth century, some of the best accounting experts, faced with the need to properly develop the problem of accounting measurement, thought it appropriate to rely on concepts that belonged to similar sciences, such as economics and real estate appraisal discipline, by blindly borrowing the theory of value from the former and the theory of valuation from the latter. During such age, everything hinged around the concept of “exchange value”.

At the dawn of the last century, the scholars’ attitude tended to become more critical. Doctrine in particular began to wonder about a subject that was crucial to the theory of accounting measurement, notably the informative purposes from which such theory takes inspiration. At the same time, a first principle took shape, which is still the basis of the theory of accounting measurement, which might be called the finalistic principle of value, which lays down that different measurement criteria must be applied to different informative purposes.

An alternative criterion to that of the “exchange value” thus makes its appearance on the scene of the accounting measurement, notably, the historical cost principle. With its introduction and above all with the relinquishment of the combination of economic cost that had been initially accepted by the doctrine and the later transition to the combination of manufacturing cost, the accounting world managed to get rid, once and for all, of economic and valuative assumptions, thus becoming independent in its accounting measurements. This is mainly due to the scholars’ ability to learn precious lessons from the observation of the accounting scene of the time.

Key words: Accounting History, Financial Accounting Measurement, Asset Valuation, Exchange Value, Cost Principle, Combinations of Costs, Italy.

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1. Introduction

The main subject of the paper is the theory of accounting measurement as observed in its historical development. More notably, the research concerns theoretical concepts of such discipline, as developed by the Italian doctrine in a very specific age – without accounting regulation –, that is, between the second half of the nineteenth century and the first half of the twentieth century, i.e. from the theorisation of the “exchange value rule” to the theorisation of the “historical cost principle”.

The goal of this research work is not so much a mere review of different theoretical positions but to understand the potential tendencies that underlie their evolution.

As it was impossible to examine the thought of the many scholars who gave their contribution, each one in his own way, to the development of this subject, we deemed it appropriate to focus our attention on those scholars who, as capable of developing the most innovative and distinctive assumptions, left their mark on the accounting history in the analyzed period. We will mention in particular such scholars as Francesco Villa, Giovanni Rossi, Fabio Besta, Gino Zappa, the latter seen in the early stage of his thinking.

The analysis of the different theories devised by the above-mentioned masters, which cannot but be conducted within the limited length of this paper, led us to identify three logical steps in the evolution of the theories that have been developed on the subject in the considered phase.

2. “Exchange value” as a universal principle of valuation: the thesis of Francesco Villa and Giovanni Rossi

Villa and Rossi are supporters of a very definite theoretical approach, the first one to become widespread in Italian scientific accounting regarding the subject at hand¹. Therefore this paper takes its cue from such authors.

Villa (1801-1884) is one of the first Italian scholars who took an interest in valuation as a subject. In particular, he focussed his attention on the discussed topic in his “Contabilità applicata alle amministrazioni private e pubbliche” (1840-41) and in the following work, “Elementi di amministrazione e contabilità” (1850)².

In his “Elementi”, which contains “...some beautiful pages on asset valuation” (Melis, 1950: 752), Villa feels the need to explain some economic theoretical concepts before the section about valuations, thus lingering on the notions of value, price and the causes that have an impact on pricing (Villa, 1870: 20-7). One would naturally wonder why he made such an introduction. This may be accounted for by the scholar’s attempt to offer appropriate theoretical support to the concept of value he

¹ Melis identifies Villa as the “pioneer of scientific accounting” in Italy (Melis, 1950: page 747).

² As to the fact Villa is one of the first Italian scholars who placed due emphasis on financial accounting measurements, see: Alfieri, 1918. In such book (page 64), Alfieri, speaking of Villa’s work on “Contabilità”, said that in it “one of the most relevant points of accounting, i.e. valuation, is appropriately dealt with”.

took up in asset valuations, which, as one can see later, is the concept of exchange value (Villa, 1870: 279).

In introducing the subject of “property valuation”, the scholar points at two classes of assets: the class of real estate, collection rights and the like, and then the class with all kinds of capitals, meaning “...that share of assets that is allocated to production” (Villa, 1870: 27 and 47). There is no doubt that this classification is in itself suggestive of a peculiar aspect of Villa’s thought. In dealing with valuation, the scholar does not limit his survey to firms, speaking only of capital assets, but he looks at a wider picture, in which he also deals with other kinds of assets, i.e. real estate. Saying that, it is interesting to discuss the methods of valuation that he proposed for both classes of assets. According to Villa, real estates must be appraised “... against the profit we can make from them”, while capitals “...be appraised according to their exchange value” (Villa, 1870: 27)³. In the approach suggested by the scholar, any valuation in the firm’s field, including financial accounting measurements, must be based on the principle of exchange value. As can be argued from these first brief details, when dealing with valuation, he basically takes inspiration from concepts drawn from other disciplines, mainly economics and real estate appraisal. It is no coincidence that the aforesaid work references the works of scholars in real estate appraisal and financial mathematics⁴. However, we should add that when he writes that “...to be able to accept or reject a valuation, the director of a property will need to know at least the general principles that an impartial expert must abide by” (Villa, 1870: 13), he suggests that making valuations is not the responsibility of a firm’s directors, who are only in charge of checking them for appropriateness, but the responsibility is of different persons. It is natural then to wonder as to who, according to the scholar, should be responsible for such valuations. “... For *new machines* or machines in a state of conservation – according to Villa – the appraisal must be done by an expert ...”, who might even be “... the mechanic who manufactured it” (Villa, 1870: 51). His works were full of references to the figure of the appraisal expert. Therefore appraisals must be entrusted to an external technician who is deeply conversant with the features of the valued asset. In doing so, of course the asset is only appraised in terms of its technical features, in other words, regardless of the relations that bind it to the other factors it mixes with, so as to form a productive combination of resources (Giannesi, 1980: 18)⁵. It is as if the asset were valued in the free state, by looking at it only individually,

³ Ferraris Franceschi comments: “The author makes no distinction between the valuations of going-concern firms and of winding-up firms, so we infer that with the measurement principle... he suggests, he intends to cover the whole problem of valuation...” (Ferraris Franceschi, 1970: 180).

⁴ Speaking of the valuation of real estate, Villa, for instance, quotes books by Pegoretti and Cantalupi for concepts of real estate appraisal, and work by Bourdon for concepts of financial mathematics (Villa, 1870: 31 and 33).

⁵ In addition, the above-mentioned scholar said: “If an «appraiser» could value free assets and firm resources using the same method, obviously the concept of complementarity and, with it, the concept of firm’s life would be lost. In other words, there would be no difference between a going-concern firm and a firm that is forming or that is winding-up” (Giannesi, 1960: 27).

instead of as a factor that is “a part of a whole”, the firm’s specific system of resources. In other words, the scholar misses the notion of *complementarity of factors of production*.

As to inventory valuations, he said, for instance, that “the products of the manufacturing industry, just like the goods in the trade sector, are to be valued... at current price” (Villa, 1870: 52). In this case, he makes no considerations on the effects that such valuation may have on the sharing of the expected profit from ongoing transactions between two financial periods.

Saying that, we can conclude that the scholar regards the principle of exchange value as a solution that can solve any kind of valuation. This is confirmed by that fact that none of his works makes any reference to the purpose of valuation⁶. The only principle to be applied for valuing assets and liabilities is the exchange value, regardless of the informative purposes for which the balance-sheet is drawn up.

On the other hand, this is perfectly in keeping with his view of the purposes of accounting. As to this, he says: “... *accounting is a science of application*, the teaching of which is to be associated with the teaching of the principles that are usually needed in any administration, for it to fulfil its purpose”, “... *theoretical-practical principles mainly argued from economic sciences ...*” (Villa, 1870: VII and VI).

Years later, another brilliant scholar took positions that were basically not too far from Villa’s: Giovanni Rossi (1845-1921). Rossi, one of the first accounting authors who proved to be perfectly familiar with the economic studies on the theory of value, dwelt on this subject in the late nineteenth century, when he wrote the entry “Valutazione economico-patrimoniale” in the “Enciclopedia di amministrazione, industria e commercio” edited by Giuseppe Cerboni (Rossi, 1895).

In such book, he firstly felt the need to explain the meaning of the word valuation. The definition proposed by the scholar seems to be unmistakable: valuation “... consists in assigning an economic value or an exchange value to one or more assets” (Rossi, 1895: 963). Then he built his reflections on such grounds.

In Rossi’s view, valuating means, therefore, applying the principle of exchange value⁷, regardless of the aim of such valuation. In other words, he seems to miss the bond between valuation criteria, informative purposes, and firm’s situation (going-concern vs. winding-up scenario). Actually, he does not suggest different methods for different kinds of statements. In the work cited above, there is no trace of any distinction between going-concern and liquidation valuation, therefore between the respective reports: financial statements and statement of affairs. He proposes instead one single principle

⁶ See also: Onida, 1935: 11 and Ferraris Franceschi, 1970: 180.

⁷ Rossi, in particular, divided “... the principles that inform valuation into three clearly separate classes, as follows: *a*) Valuation of each individual asset and general property rights ...; *b*) Valuation of net assets; *c*) Business valuation” (Rossi, 1895: 964).

for all kinds of valuation⁸. It would not be wrong, therefore, to say that, in the scholar's view, the exchange value is the real focus of his arguments on such subject. In addition, the exchange value was defined by Rossi himself as the "true value" (Rossi, 1895: 964 and 971). Therefore the scholar acknowledges the existence of such a value, thus advocating an assumption that, as we will see later, was harshly criticised by the Italian doctrine and eventually discarded: the existence of a *universal principle of valuation*.

Rossi's approach may be better understood if we look at his ideas about the scientific location of the matter at hand. Firstly, note that the scholar believes that the theory of value is solely under the province of economics (Rossi, 1895: 963), without even considering the appropriateness of the principles developed by such discipline for the specific needs of accounting. "But economic science – the author points out – is unable to provide a quantitative determination of the exchange value of an asset at a given time: it leaves this extremely important task to another specific discipline, which takes the specific name of real estate appraisal discipline" (Rossi, 1895: 963). Therefore he entrusts valuations, including ones made within the firm, to the above-mentioned discipline. It is no coincidence that Rossi refers those readers who are interested in learning more about the subject to the works of scholars of such discipline and, only as a last resource, to the accounting books by Villa and Besta (Rossi, 1895: 964). Therefore the subject of valuations is left outside the boundaries of accounting⁹. This clearly does not rule out that accounting scholars as well as accountants need to be familiar with valuations, as instrumental to the purposes of accounting¹⁰.

We said that, in the scholar's view, the subject of valuations pertains to real estate appraisal discipline. It is natural then to wonder what principles such discipline takes inspiration from. Rossi himself gave an answer to that, by pointing out that such discipline as well as economics have a "fundamental principle" one must refer to "... to determine, in figures, the value of any asset" (Rossi, 1895: 964): the empirical rule – *res valet tanti quanti vendi potest* – whereby things are as worthy as the profit that can be made from selling them¹¹. Therefore the aim of above-mentioned discipline is to "... determine the true exchange value or the selling value of the assets to be valued" (Rossi, 1895: 963). Now, since valuations fall within the scope of real estate appraisal, the purpose of which is precisely the one

⁸ Obviously, this by no means clashes with Rossi's idea of the valuation of firms that are to be transferred. "In such cases, the valuation can be upgraded, since this no longer means valuating each single asset but a firm, since it is an economic power that is capable of producing a given income" (Rossi, 1895: 970). Actually the difference lies in the goodwill, the exchange value of which is independently valued by capitalizing the historical excess earnings (Rossi, 1907).

⁹ It does not include either periodic accounting measurements or business valuations. As to the latter, for example, he said that "... the valuation of a firm leaves... the sphere of pure accounting and gets into the sphere of higher economic transactions" (Rossi, 1895: 970).

¹⁰ "... the principles, purposes and general rules of the asset valuation..., are important, ...not just for the economic life of all and any company but also for accounting studies and for the practical application of accounting to economic life" (Rossi, 1895: 964).

¹¹ "...the *art* of valuating consists in being able to determine at which price an asset may be sold to the highest bidder in a free market" (Rossi, 1895: 964).

mentioned above, valuating a given asset means assigning it its market value. This applies to financial statement measurements as well. As a logic consequence of this, he – like Villa – entrusts valuations to appraisers, i.e. external figures who have specific skills merely restricted to the technical features of the assets to be valuated (Rossi, 1895: 965-6, 969 and 970); figures who can only appraise the asset in its individuality, i.e. as if it were an independent asset instead of a complementary factor of production. Arguably, this is a strictly economic and appraisal view of the valuation problem. It is no coincidence that the scholar himself felt the need, on several occasions, to qualify valuations as “economic” (Rossi, 1895: 963, 964 and 971).

Aware that the income measurement is directly shaped by the value model used during valuation, the particular concept of income advocated by Rossi is not surprising. “Those who sell... – the scholar writes – replace a value they have... with the value they receive, the value of money. If they have made a profit or a loss, they made it before such sale ... In the simple fact of selling, there is no such thing as a profit or a loss. A sale is a deed of pure transformation or the replacement of equivalent values” (Rossi 1908: 46). Therefore, according to Rossi, income is unrelated to the deed of selling. In other words, he advocates the model of the “realizable income”¹². Later on, Rossi’s thesis would be criticised, mainly in Zappa’s early works, and eventually discarded when the (revenue) realization principle was theorised.

If we want to draw some brief considerations on the *first period*, of which Villa and Rossi are the main supporters, we might say that:

- the economic concept of exchange value is accepted;
- the concept of “actual value” or “true value”, that is a sort of absolute notion of value, prevails;
- the principle of exchange value is taken to be the only principle of valuation in every firm’s situation (going-concern vs. winding-up scenario);
- the rules and guiding principle of real estate appraisal: *res valet tanti quanti vendi potest*, apply to all kinds of measurements;
- the theory of value and the theory of valuation are basically left out of the scope of accounting;
- accounting is shown to be basically *dependent* not only on economics, as to the theory of value, but also on real estate appraisal discipline, as to the theory of valuation.

3. Opening up to the historical cost method and the enunciation of the “finalistic principle of value”: Fabio Besta

The next stage may be associated with Fabio Besta (1845-1922), in particular with his theories on

¹² As to the distinction between “accounting income” or “historical cost income” or “conventional income” and “realizable income”, see: Lee, 1985: 47-64, 91-104 and Campanini, 1991.

this subject, as contained in the second edition of his “Ragioneria” published in the early twentieth century (Besta, 1909).

Notwithstanding the prevalence of the idea of the existence of a “true” or “actual value”, a concept often referred to by the scholar (Besta, 1909, I: 57, 238, 260, 262, 264, 417) which may just be recognized in the “exchange value” (Besta, 1909, I: 225, 238, 260), in the aforesaid work Besta raises the first few doubts on the possibility of applying such principle to financial accounting measurements. While on one side he notices that “certainly the first rule to be followed in determining *accounting values* is... that they should be as close as possible to true values” (Besta, 1909, II: 345), yet he points out that financial accounting measurements based on exchange values “... would not even be rational, as it would assume that a company would be forced to wind up immediately, that is, a state in which it is not” (Besta, 1909, II: 13). We should add that his work expressly mentions a distinction between statements “...for liquidation of assets ...” and statements drawn up on closing a accounting period “... to measure the state of assets and liabilities at that time and the net income...” (Besta, 1909, II: 11 and 13); a mention then of the different informative purposes of valuations in the firm’s field. Here, then, as to financial statement measurement, he puts forward a principle of valuation as an alternative to that of the exchange value. According to the scholar, when drawing up a balance sheet, measurements “... may also be based on costs ...” (Besta, 1909, I: 238). But, if we look thoroughly into it, in Besta’s theoretical approach the adoption of the cost principle is more of an option than a pressing need. So much so that, elsewhere in his work, he stated without mincing his words that “if the true value of assets could always be determined with full certainty, accuracy and without too many difficulties, then we could not speak of purely historical cost valuations” (Besta, 1909, I: 264)¹³. I think this is a significant aspect, since, as we are going to see soon, here we can find a substantial difference from the assumptions supported by his pupil Zappa. But why does Besta suggest that such principle be applied? A reading of Besta’s work suggests that the adoption of the historical-cost method is dictated not so much by the alleged irrationality of the principle of exchange value as by the search for solutions that are more suitable for reducing the uncertainty of the results as well as ensuring that such results are determined in a conservative manner¹⁴. Whereas Besta was almost perfectly confident in the possibility of calculating “actual” costs¹⁵, provided one used appropriate recording

¹³ Here is the reason why Besta, like Rossi, claims that “ any change in the value, even temporarily, of an asset is in fact a profit or a loss...: future changes may increase, decrease or remove that profit or loss but will not be able to undo what has been done” (Besta, 1909, I: 263-4).

¹⁴ See also: Gonnella, 1994: 40.

¹⁵ According to Besta, “... costs generally depend on real facts, information about which may be more or less easily and accurately recorded and remembered... Indeed ..., the determination of the costs of our products... in most cases can be made by means of calculations based on real facts” (Besta, 1909, I: 223). The components of the purchase cost of assets or of manufacturing cost of products, he then added, “... derive, in virtually all cases, from other people’s money that has been counted or is to be counted, and therefore they are fully determined; and also the search for other items, i.e. interest on the capital used in the firm and the depreciation of the fixed assets, can be at least partly based on real information” (Besta, 1909, I: 224).

systems¹⁶, he then stated as to the former aspect that "... only uncertainty about possible exchange values can justify the application of the cost principle to the valuation of assets ...” (Besta, 1909, I: 417) and, as to the latter aspect, that “the reasons for being prudent are those that warrant such valuations and the need to prevent by all means any wrong determination of any profit that is not based on reality” (Besta, 1909, I: 264)¹⁷.

However we should say that, although he accepted the cost principle in lieu of the principle of exchange value, the combination of costs that Besta suggests should be applied to the valuation of inventories, as it also includes an imputed interest, shows clear economic features¹⁸. As if he wanted to resume, through this way, the principle of the exchange value¹⁹. Here then the goal of reducing the uncertainty of results, as well as making conservative determinations of such results, pursued just by opening up to the new rationale of valuation, cannot be fully met, because of the specific combination of cost he proposes. We will come back to this later in the discussion of Zappa’s theses.

An aspect I would like to emphasise is that Besta’s theses start to undermine the absolute concept of value, which sees in the exchange value the only basis of valuation. At the same time, a new principle comes to the fore, which would become the pillar of the future theory of financial accounting measurement, whereby it is the informative purpose of the valuation that informs the choice of the principle to be applied. In this connection, Besta stated that “... one should follow different principles and procedures of valuation, depending on the different causes and the different purposes that drive one to draw up a statement” (Besta, 1909, II: 11)²⁰. There is no such thing as one basis of value now, notably the exchange value, fit for any kind of measurement, but multiple bases are now available and

¹⁶ “... the calculation of the total cost of all the products being manufactured by a firm in a fairly long time can be done with great accuracy, provided full details of such costs are collected and recorded in an appropriate accounting system. The allocation of overheads to different products or different services turns out to be more difficult... We can already see no less than, when through an ordered accounting system all the single items of the overheads are collected and classed with appropriate criteria, such allocation and the ensuing determination of cost of individual products or services may be obtained with more or less effort and approximation” (Besta, 1909, I: 224).

¹⁷ Further confirmation of the reasons behind the scholar’s proposal of the cost principle is also provided by the passage in which he states that, “when drawing up balance sheets at the closing of successive financial years, rather than the exact valuation of each asset, what matters is to obtain a conservative, non-arbitrary determination of net income” (Besta, 1909, I: 264-5).

¹⁸ “In a firm of any kind, the cost of products it produces or the services it renders is composed of the purchase price of the raw materials, the wages for the directors, managers, employees, workers or agents, whatever they are, *the interest on the capital used within the firm* (our italics), the depreciation of the factories, machinery, instruments and the other components of the fixed assets as a consequence of their use, the remaining administrative expenses, etc.” (Besta, 1909, I: 224). Besta – who in addition does not seem to hint at the option of any other combination of costs – thus adds an imputed cost, which is precisely the interest on the capital invested in the firm, to the cost of products and services.

¹⁹ “Besta’s valuation of assets... is but the translation into accounting rules of the assumption of the «normal» state that is typical of the neoclassical general equilibrium theory, since when in a normal state the value in use (i.e. the recoverable results) of every economic component is exactly the same as its cost (which includes a reward for the factors used to produce it) and both are equal to the market value” (Faccipieri and Rullani, 1982: 116-7). See also: Gonnella, 1994: 78; Gonnella, 1995: 315.

²⁰ It must be said, at this point, that a decisive contribution to the introduction of such principle was also given by the famous economist Maffeo Pantaleoni. In his paper “*Alcune osservazioni sulle attribuzioni di valori in assenza di formazione di prezzi di mercato*” (1904), he stated, among other things, that “the purpose or the aim or the business for which a balance sheet is drawn up is that it solely and entirely gives a meaning to the measurements of its assets and liabilities” (Pantaleoni, 1904: 205).

may be selected according to the informative purpose pursued. A fundamental accounting principle, in its broadest sense, which can be named the *finalistic principle of value*, makes its appearance on the Italian accounting scene²¹.

It is natural to believe that Besta's theoretical approach to financial statement measurements is a direct result of his idea of the scientific location of the theory of value²² and the theory of valuations. In the section about "value and the measurement of value" in the first volume of his main work (Besta, 1909: 215-32), Besta begins his argument by firmly pointing out that the theory of value is outside the scope of accounting²³. Then as a logical consequence of this, this is followed by many references to the theories developed by the best-known economists of the time (Besta, 1909, I: 213-232). Note, however, that "... since – says Besta – accounting, as an art, studies and manages the life of the firms' assets,... thus one should enquire as to which principles and which rules are applied... to value such assets ..." (Besta, 1909, I: 215). There is clearly a problem there, that is, how to reconcile the role of accounting with the role of real estate appraisal, another discipline which deal with valuation. To be honest, this problem is highlighted by Besta himself when he wonders "... if the *valuation of assets* should not be assumed as being known to those who work in accounting; even the more so, because there is a special science that deals with such valuations, *the real estate appraisal discipline*" (Besta, 1909, I: 57).

Actually, after mentioning that there is a special science that deals with valuations, he takes care of immediately highlighting the major differences existing between real estate appraisal discipline and accounting. First and foremost, real estate appraisal, according to the scholar, "... does not cover all kinds of assets", because "... it is mainly limited to landed property and buildings"; then, "... it studies [such assets] in the state they are at a given time, not through their transformations ..."; finally, "... it considers just selling or exchange values" (Besta, 1909, I: 57). Accounting instead, Besta went on, "... needs to value assets of all shapes and kinds to achieve its purpose, and not only the assets as they are at a given time but also the changes they did or will undergo; and moreover, since true exchange values cannot always be easily found, it must make up for them through appropriate devices" (Besta, 1909, I: 57). It would probably not be wrong to think that, speaking of devices, he actually meant the historical-cost principle. Going back to the focus of the discussion, at this point, the scholar's idea about the scientific location of the theory of valuations seems clear. It falls within the scope of both disciplines: real estate appraisal and accounting. As such, it is the responsibility of both, depending on

²¹ Regarding the two potential valuative rationales that, in the face of different informative purposes, solve the problem of valuation by applying different principles according to the informative purpose pursued or, vice versa, the same principle, regardless of such purpose, Galassi makes a distinction between «teleological theory» and «non-teleological theory of valuation» (Galassi, 1978: 28).

²² Schumpeter, a famous economist of deep historical-doctrinal culture, regards the theory of value as the "causal explanation of the phenomenon of value" (Schumpeter, 1959: 376).

²³ "The theory of value... [falls] ...outside the boundaries of the discipline that I practice" (Besta, 1909, I: 215).

their respective interests. Unlike Rossi, then, Besta does not confine the whole matter of valuations to real estate appraisal discipline; actually, maybe to offer a better insight of the relation between the two spheres of knowledge, he actually points out that "... the valuation of assets in accounting has a more far-ranging scope than in real estate appraisal discipline, and sometimes a different one". Because of this, while "... its theory must have its own place, and not a little one, in the works that deal with that discipline", "... accounting, as well as in the points it shares with real estate appraisal discipline, must completely comply with its principles ... so that in those shared points it must be limited to expressing the fundamental criteria of valuation, leaving any application of such criteria to real estate appraisal discipline" (Besta, 1909, I: 57). In conclusion, note that, with Besta, Italian accounting tends to become aware of its own peculiar needs, undoubtedly different from those of real estate appraisal. Somehow we might even add that, at this point in history, we can see the doctrine raise its head for the first time and claim sole competence over valuations in the firm's field.

These are, then, the typical traits that seem to distinguish the *second stage*:

- The idea of the existence of a "true value" or "actual value" begins to be undermined, and so does the universal concept of exchange value;
- The economic concept of value survives, even if, with the introduction of the cost principle, an firm's view of the problem of financial statement measurements begins to gain ground;
- The fundamental idea that different principles of valuation must be applied to different informative purposes and, even more than that, to different situations of the firm (going-concern vs. winding-up scenario) makes its appearance;
- The theory of value is left out of the scope of accounting, as it falls under the province of economics;
- Accounting begins to develop its own theory of valuation, as real estate appraisal rules are associated with those expressly required by accounting itself;
- Finally, accounting is still basically *dependent* on economics in connection with the theory of value; it is instead *on equal terms* with real estate appraisal discipline in connection with valuations.

4. The final establishment of cost as the only general principle of financial accounting measurements: the "early" Gino Zappa

With the coming of Gino Zappa (1879-1960), the theory of financial accounting measurements takes a big step forward. As early as the first stage of his thinking²⁴, as expounded in his work "Valutazioni di bilancio" (1910) and the first instalment – published in 1920 – of his fundamental work

²⁴ Regarding the most mature phase of his thinking: Gonnella (2008: 31-36).

“Reddito” (1920-29), he firmly rejected the idea of the existence of a true value, as well as the possibility of applying one single principle to solve any valuative problem in the field of firm²⁵. A thesis, this one, that would soon be discarded. In this regard, Zappa points out that “the phrases actual values, real values, true values, right prices, fair prices, [which] not infrequently recur in those writings that deal with balance sheet valuations..., make no sense and refer back to economic utopias of bygone times” (Zappa, 1910: 54)²⁶. At the same time, following in his master’s footsteps, he firmly advocated the *finalistic principle of value*, stating for instance that “... balance-sheet values... must only be determined in connection with the purpose for which a balance-sheet is drawn up” (Zappa, 1910: 27). As a result, “the principles of valuation to be adhered to when drawing up statements having different purposes – we quote – ... shall be different” (Zappa, 1910: 30).

Speaking of the narrower subject of financial accounting measurements, Zappa seems to support his assumptions with an equal firmness of mind. First and foremost, he firmly criticises the economic methods of valuation, notably the principle of exchange value, and those accounting scholars who promoted them²⁷, clearly highlighting that they are unfit for financial accounting measurements. There are several reasons behind his rejection of the application of such principle when drawing up a financial statement: 1) the irrationality of dividing assets into independent entities as inherent in the adoption of such principle; 2) the impossibility of applying such principle to assets that cannot be independently transferred; 3) its clear irrationality when applied to assets that, although fit for exchange, are not destined for sale; 4) the need to steer clear of strictly personal principles of valuation which, like that one, would leave too much leeway to directors; 5) the need to avoid distributing purely hoped-for profits (Zappa, 1910: 25-6 and 61)²⁸.

The above-mentioned criticism would then be echoed by a very specific and fully consistent position on the valuation method suggested by Zappa for the purpose of determining income. The scholar – at this early stage of his thinking – took a firm position in favour of the application of the cost principle in its different shades, depending on the kind of assets to be valued²⁹, as a general principle for

²⁵ “A general measuring principle cannot be rationally pursued but for statements having one and the same purpose” (Zappa, 1910: VIII).

²⁶ “The frequent axioms on true value, which are not infrequently resorted to as to undisputable dogmas, are usually expressed in a peremptory form and, by sounding like undisputable maxims dictated by common sense, they soothe the ignorant into the easy beliefs of their poor knowledge, of their wishes or their interests. Because, once again, as the ancient philosopher used to say, what the man says is true is always his own truth, that is, the appearance in which things appear to him” (Zappa, 1920-29: 74).

²⁷ According to Zappa, “... the technical meaning of ‘valuation’ was not understood by those authors – and he includes Rossi among them – who thought they could explain, with purely economic principles, the procedures that are adhered to or could be rationally adhered to in valuing balance-sheet values” (Zappa, 1910: 25).

²⁸ With reference, in particular, to the effects that the application of the principle of exchange value would have on income, Zappa points out that “while... income is measured through current exchange values or net realizable values... income is reduced to something fluctuating, ephemeral, almost elusive, as uncertain, changeable, fleeting is that exchange ratio that is not determined by an actual transaction but by an assumed transaction” (Zappa, 1920-29: 285).

²⁹ Zappa notices, in this respect, that “the cost principle may offer just a guideline ...: such general principle, although unchanged in its fundamental informing concepts, must then be adapted to the specific intended use of the different assets it is

the financial accounting measurements (Zappa, 1910: 74). Such principle, although "... not devoid of major flaws ...", as he pointed out himself, looks to him "... the least imperfect ..." among those known back then (Zappa, 1910: 117). In the scholar's opinion, it is actually the one that leaves least leeway to the directors during their valuations, i.e. the least arbitrary one, and as such the most suitable for producing properly reliable measurements³⁰. This is because, and here we quote Zappa, the cost principle "... is the only one, the application of which is fairly largely based on real information, which can often be difficult to misrepresent ..." (Zappa, 1910: 110)³¹. At this point, we can conclude that the "early" Zappa, in perfect keeping with Besta, trusts almost unconditionally the possibility to calculate virtually inconvertible costs³²; an assumption, this one, that he would then dramatically revise at a more mature stage of his thinking, after the second instalment of his "Reddito"³³.

To be honest, Zappa's early assumptions do contain some cause for disagreement with the theoretical stances of his master, Fabio Besta.

A first significant difference can be found in the fact that Zappa's approach seems to rule out any potential alternative option to using the cost principle when drawing up a balance sheet. In other words, such principle is not a merely optional application, a sort of makeshift solution, it seems to be the only possible solution. In this respect, to Besta's statement that financial accounting measurements "... may also be based on costs ..." (Besta, 1909: 238), as well as – as everyone knows – on exchange values, Zappa answered that the cost principle is "... the only one... [that] can be applied to achieve the most accurate determination of possible profits to be distributed" (Zappa, 1910: 110). With the appearance of Zappa, such principle takes on an essential value, while in Besta's approach it seemed to be somehow confined to being 'second best'. And this is but the first innovation.

Speaking of different combinations of costs – a subject that was fairly controversial back then – in a special section of the first instalment of his "Reddito", aptly called "Il costo contabile, il costo complessivo, ed il costo economico-tecnico" (The accounting cost, the total cost and the economic

applied to" (Zappa, 1910: 74). Because of this, in his "Valutazioni di bilancio", he dealt with such principle by making a distinction between the "fixed assets" and the "assets for sale" (Zappa, 1910: 74-109).

³⁰ "The cost principle... – states the scholar – is the one that leaves least leeway to the more or less enlightened but always self-interested valuations of directors..." (Zappa, 1910: 110).

³¹ On the other hand, a few pages earlier he had pointed out: "Therefore the general principle of valuation I will choose shall be inspired by the principle of conservatism: it shall not make the determination of such values dependent on the mere appraisals of the balance-sheet writers and, to do this, within the bounds of legality and insofar as feasible, it must make abuse difficult for those interested" (Zappa, 1910: 42).

³² "... Even the cost of products – the search of which is particularly difficult within the manufacturing firms – can generally be obtained, if not in a perfectly accurate way, with great approximation, provided appropriate accounting systems are kept, provided that the firm follows its formation through their different moments" (Zappa, 1910: 73).

³³ In 1929, after noting that "the problem of determining costs is not as simple as those unfamiliar with the complex and complementary development of firm's operations can imagine" (Zappa, 1920-29: 599-600), Zappa will argue that "... nobody will ever be able to demonstrate that the inventory valuation at prime cost is the only rational ... both to the frequent uncertainty of the prime costs themselves ... and for the variety of firm's situations and of trends in the market" (Zappa, 1920-29: 604-5). See also Gonnella (2008: 31-36).

cost) (Zappa, 1920-29: 118-26)³⁴, he took position in favour of the application of a specific combination of costs to inventory valuations, that of “accounting cost”. Note, however, that, when he speaks of such combination, the scholar means a very specific combinations of costs, as opposed to that of total cost and economic cost. Zappa says: “...accounting cost... is but a first combination of costs”, then he adds that “this phrase aptly expresses that usually some cost items are not included in such «cost» ...” (Zappa, 1920-29: 118). In addition, he then further explained his thinking as he writes that “...accounting cost... is usually given, in industrial firms, by all or part of manufacturing costs, to which the selling costs are very rarely added” (Zappa, 1920-29: 118)³⁵. At this point, it is obvious that Zappa seems to have a penchant for a combination of costs, that of manufacturing cost, as an alternative to the economic cost suggested by his master.

Saying that, it is natural to wonder why Zappa harboured such a dislike for economic costs in inventory valuations.

As everybody knows, economic costs include imputed interests as well. The problem actually concerns just this specific cost item. It should be noted, first of all, that imputed interests have a specific feature: their quantity is usually very uncertain, since it is not measured by any outlay. It is, in fact, an opportunity cost. Zappa points this out when for example he writes that “... imputed interests or implicit interests or economic interests... as opposed to legal interests, are not actual outlays, they are not certain components of the total cost” (Zappa, 1920-29: 311). So, quoting the scholar again, “while it is not always so easy to determine the accounting cost, even on an actual basis, the many difficulties that hinder the estimate of economic costs and the uncertainties that weigh on the results achieved through it are unspeakable” (Zappa, 1920-29: 123). It ensues that the cost principle, which should have been in principle more objective than that of exchange value, when the applied combination of costs is the one at issue, loses such quality and also becomes significantly uncertain. Note that the level of uncertainty increases as we move from simpler, more limited combinations of costs to broader, more complex ones. The combination of the economic cost, as the broadest one ever, is therefore the most uncertain.

The adoption of an economic cost when drawing up a balance sheet causes another quite significant effect. It results in an overvaluation of the inventory, which may lead to a risky distribution of profits that have not yet been realized. Zappa, in this respect, states that “... the inclusion of imputed

³⁴ It is obvious then that the scholar was already aware of the need to adopt different combinations of costs for different informative purposes. “In the firms – he then said in the second part of such work – as many «cost» calculations can be found, according to as many principles, as are the purposes pursued, also in connection with the applied procedures” (Zappa, 1920-29: 352). You should not think the issue was so uncontroversial within the Italian scientific community of the time. Zappa himself reminds us of that, as he points out that “... the controversial doctrine ... does not acknowledge the concepts of accounting cost, total cost and economic cost ...” (Zappa, 1920-29: 311).

³⁵ In Zappa’s view, the “manufacturing costs” are “... incurred to produce the products in the industrial process proper, while the “selling costs” are “... borne once the products have been technically accomplished, until revenues are achieved” (Zappa, 1920-29: 89).

interests among accounting costs... is ... the cause, in the event of unsold products or work in progress, of an overvaluation of the assets and therefore of a possible distribution of «anticipated but not realized» profits” (Zappa, 1920-29: 314-315). In some other respects, Zappa is perfectly aware of the fact that applying the accounting cost, as he knows it, may result in an undervaluation of the inventory. He actually says that “...an inventory valuation based on such cost may result in the creation of inaccurate hidden reserves,... the extent of which is directly proportional to the size of such stocks” (Zappa, 1920-29: 120). But this, in his opinion, “... is perfectly rational” (Zappa, 1920-29: 278). It is true that a firm, without my meaning to comment on such quote, can thus finance itself, although in a hidden form.

In conclusion, when the combination of economic cost is used to measure final inventory, this raises again the problems that should have been overcome by replacing the principle of exchange value with the historic-cost principle.

Lastly, I think we should point out that Zappa’s ideas on the need to apply the cost principles and the particular combination of costs he suggested to inventory valuation are perfectly consistent with the notion of income that he proposed himself. Unlike Rossi and Besta, the early Zappa seems to be a strenuous defender of the realization principle. This can be argued from several passages from his books, not least the one that reads: “... the possibility to make a profit cannot by any means replace the actual making of such profit” (Zappa, 1910: 37)³⁶. Therefore, he is rather in favour of the « historical cost income» model rather than the « realizable income» model.

Another aspect worth mentioning is that Zappa’s theses, as outlined so far, are perfectly in harmony with his ideas on the scientific location of the theory of value and the associated theory of valuations. If we thoroughly look into them, such theses are but a last gesture of a far deeper and earlier reflection on the very foundations of accounting. In other words, it is the “highest orders” which are reviewed and eventually revised.

Zappa, unlike his master, entrusts financial accounting measurements solely and precisely to accounting. He has no doubt about this: “the only discipline – states the scholar – which can take charge of measuring balance-sheet values and that particularly deals with it is accounting” (Zappa, 1910: 24). It can be argued that he firmly claims the privilege of accounting over such subject, taking it away, once and for all, from real estate appraisal discipline and economics. This is a greatly interesting moment, since the doctrine sanctions the independence – at least in programmatic terms – of the theory of financial accounting measurements from the principles of other social sciences close to accounting. And one should not think that back then such interpretation was calmly received. The idea that only

³⁶ “To conclude, it seems to me that, for profits to be real, they must be legally acquired by the firm,... so that an enforceable legal action may be filed to collect them ...” (Zappa, 1910: 39). A few years later, he added: “A sale gives... profits or losses that so-called real character that makes them comparatively certain, not just in their extent, but also in their very existence” (Zappa, 1920-29: 283).

accounting should deal with financial accounting measurements was not shared by many scholars, including some accounting authors³⁷. “This was not understood – Zappa points out – by all those who understand the word valuation as a determination of value, the latter in... the sense of exchange value” (Zappa, 1910: 24-5). The independence of accounting was in fact disregarded by those who thought it expedient to draw principles and criteria of valuation from other spheres of knowledge, placing accounting in a position of scientific subservience to them. Zappa, however, does more than that. He also lingers on discussing the scientific location of the theory of value, in a special section in the first part of his “Reddito” (Zappa, 1920-29: 80-6). In Zappa’s view of such problem, accounting is also in charge of dealing with the theory of accounting values. It is precisely this sphere of knowledge that, with accounting values and balance-sheet values, given the specific requirements of the discipline, must solely take care of the theorisation of such values. Zappa, in other words, claims scientific independence even in such area. As to this, he seems to firmly believe that, “in studies that reflect accounting and balance-sheet values, the accounting disciplines are as independent as the economic sciences are unqualified” (Zappa, 1920-29: 80)³⁸. With this, the scholar traces a route that would deeply affect the future of accounting, pushing it towards an independent development of principles and rules on accounting and balance-sheet values, the beneficial effects of which can still be felt today.

The basic lines of the *third moment* that can be found in the development so far investigated could then be summarised as follows:

- The existence of a “true value” or “actual value” is finally rejected;
- The economic concept of value built around the exchange value gives way to the accounting concept of historical cost, in the area of financial statement measurements;
- The finalistic principle of value is insisted upon;
- The real estate appraisal assumptions which accounting took inspiration from for financial accounting measurements become little less than a memory;
- The theory of valuations is fully brought back into the scope of accounting;
- The *dependent* position from economics, insofar as concerning the theory of value, is expressly disavowed, in the awareness that an accounting theory of value, consistent with the peculiar requirements of such doctrine, could be developed.

³⁷ “Of these many people, I will mention an accountant, Mr Rossi” (Zappa, 1910: 25, no. 1).

³⁸ Then, the scholar explained: “Let our words not be misunderstood, let them not think that in our thinking any use of the concepts or methods of economic science is unacceptable... Only, we believe that the precious help, that the powerful aid which can be found in the proactive acceptance of economic concepts should not hide our special intentions and the special direction that must be followed in our research” (Zappa, 1920-29: 80, no. 2). This was then followed by a strong call to the study of factual reality: “Only practice has for us the controlling power, and only compliance with the effected reality gives our theories their *raison d’être* and bounds their domain. The fertility of our concepts is only proven by facts: «*a fructibus eorum cognoscetis eos*»” (Zappa, 1920-29: 80, no. 2). Likewise: Ceccherelli, 1922: 79.

5. Concluding remarks

The evolution of accounting measurements in the period at hand was no doubt quite complex and intricate, and above all full of innovative concepts, which concurred, one after the other, to raising the scientific threshold of the time. In particular, Italian accounting managed to get rid of the principles that had been initially drawn from other areas of knowledge.

While it is true that, in the second half of the nineteenth century, some of the best accounting experts, faced with the need to properly develop the problem of accounting measurement, thought it appropriate to rely on concepts that belonged to similar sciences, such as economics and real estate appraisal discipline, by blindly borrowing the theory of value from the former and the theory of valuation from the latter. During such age, everything hinged around the concept of “exchange value”.

In accounting, the “exchange value” was taken to mean a universal value, that is, a value that could fulfil any informative requirement a balance-sheet was based on. Therefore, back then the doctrine relied on a concept which had already been largely theorised in economics but without questioning the actual possibilities of applying such concept to accounting. This may be accounted for, at least partly, by the scholars’ attempt to support the scientific nature of accounting with the principles that had been theorised in similar areas of research, mainly in economics. At that time, accounting, as a science, was quite young, so it was at an early stage of its life in which it was acceptable if not appropriate to rely, for its interpretative needs, on theoretical principles developed by other, more advanced and scientifically-supported branches of knowledge. This phenomenon is well known to the philosophers of science. Indeed, at that time, the acknowledgement of accounting as a scientific subject, mainly on the part of scholars of similar scientific areas, became a true priority (Gonnella, 2001: 4). That’s how, then, the aspiration to fully recognise it as a scientific branch of knowledge was at first fulfilled not so much by the observation of factual reality but rather by accepting the principles that had been developed by already-substantiated sciences, such as, in particular, economics, a science which, in addition, real estate appraisal discipline was also very interested in. So accounting came to be temporarily in a position, as it were, of “scientific subservience” to such disciplines.

At the dawn of the last century, the scholars’ attitude tended to become more critical. Doctrine in particular began to wonder about a subject that was crucial to the theory of accounting measurement, notably the informative purposes from which such theory takes inspiration. A crucial time actually occurred when they became aware that one measured object can be looked at from different perspectives, all of them relevant, each one based on a different value- and capital-based approach. As the accounting scholars discarded, although by degrees, the idea of the existence of a “true” or “actual value”, the “exchange value”, sensing the possibility that could there be multiple “correct” values, depending on the purposes set forth for any such measurement. In other words, there are no accounting measure-

ments that can provide every kind of required knowledge at the same time: different informative requirements may only be adequately fulfilled by different kinds of accounting measurements and statements. It was then that the paradigm of the “exchange value”, as a universal value, disappeared³⁹. At the same time, a first principle took shape, which is still the basis of the theory of accounting measurement, which might be called the *finalistic principle of value*, which lays down that different measurement criteria must be applied to different informative purposes. In other words, it is the informative purpose that must inform the choice of a measurement method. Perhaps it would be not wrong at all to identify the enunciation of such principle with the birth of the theory of financial accounting measurement in Italy. An alternative criterion to that of the “exchange value” thus makes its appearance on the scene of the accounting measurement, notably, the historical cost principle. With its introduction and above all with the relinquishment of the combination of economic cost that had been initially accepted by the doctrine and the later transition to the combination of manufacturing cost, the accounting world managed to get rid, once and for all, of economic and valuative assumptions, thus becoming independent in its accounting measurements. This is mainly due to the scholars’ ability to learn precious lessons from the observation of the accounting practices of the time.

The aforesaid phase was then followed – from the 1910s to the 1960s – by a period of great cultural flurry, with the Italian accounting scholars increasingly exploring the accounting measurement principles, which sometimes relied on the careful observation of the measurement practice, some other times on the uncommon intuitions of some brilliant authors⁴⁰.

³⁹ “A paradigm is what the members of a community of scientists share, *and*, conversely, a scientific community consists of men who share a paradigm” (Kuhn, 1970: 177).

⁴⁰ See Gonnella (2008: 28-54).

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