

Dr. Vladimir Stipetić - Dr. Mladen Habek:
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**BENO KOTRULJEVIĆ IN THE HISTORY OF ACCOUNTING THOUGHT
(BENO KOTRULJEVIĆ U SVJETSKOJ RAČUNOVODSTVENOJ MISLI)**

In their work the authors analyse the meaning, for history of the accounting, of a newly discovered manuscript by B. Kotruljević.

Beno Kotruljević¹ was born in Dubrovnik (Ragusa) around the year 1415 and died in Aquila (Italy) about the year 1469. He was an established trader in Dubrovnik, who operated in the entire region. Having acquired a solid education, partly in schools and partly working with his father-trader, he succeeded in making a large fortune. B. Kotruljević belonged through his life to that restricted circle of Ragusian traders, who, residing in their independent city-state, took part in the Mediterranean trade, expanded it, and greatly contributed to the wealth of their city. His family was active primarily in the business of linen (woollen fabrics), while possessing its own stores not only in Dubrovnik, but also in a number of Italian

cities. His father expanded the basic commercial activity to buying and selling of salt: Beno Kotruljević engaged in buying Spanish wool and founded handicraft workshops in Dubrovnik to process that wool into fabrics; the family under his direction also traded with the Balkans, exporting there numerous goods (from salt to luxurious articles) and importing to Dubrovnik (among other items) silver and gold from that region's mines. These metals were turned into coins (in Dubrovnik, and also in Naples), which increased the value of materials brought by caravans. The accumulated wealth aroused envy of his less successful friends, in particular after he successfully starts off buying accounts receivable from his fellow-citizens.² They blamed him for a number of abuses based on an unwritten codex of those times. Considering the circumstances he moves in 1453 with his family to Naples. There he continued his business activity, but

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- 1 This is the real name of the personality in Croatian language. Following the custom of that time and of that region, the complete name (name and surname) were translated into Italian. Hence, Benedetto Cotrugli Raguseo (the last word meaning resident of Ragusa i.e. Dubrovnik).
 - 2 In the Archives of the city of Dubrovnik an actual case of business factorage of those times was found. It reveals that in 1445 the Aragonian king Alfons was sued by four Ragusian traders. The Royal treasury was obliged to compensate them for the pillage of their ships perpetrated by pirates (the dispute lasted ten years!). The traders demanded 17.976 ducats (gold coins) which, for those times, were an enormous quantity of money. The terms of payment were 12 yearly instalments (1.500 ducats each year). Actually, collections proved slow so that in the course of six years only 1.976 ducats were paid, after many costly intercessions. For this reason, the traders decided to sell their uncollected receivables. These were bought by B. Kotruljević (and partners) who requested a commission to be recognised in advance on all the accounts to be collected. He also requested money for "pains and efforts", and means as for "gifts and bribes". Given his connections and trade relations with Spain, Kotruljević indeed collects the accounts rather quickly. But then, the Ragusian traders feel unhappy, claiming to have been cheated. They bring a legal action against him before the Court of the Republic of Dubrovnik. However, the case is never legally settled (by then Kotruljević lives abroad and dies there).

soon became a respected consultant at the court of king Ferdinand. Also he was administrator of Naples mint works. He died in 1469.

Kotruljević represents in 15th century Mediterranean merchant class, which was creating its specific "global" economy. All over the region existed an almost identical customary business law. Notaries were registering transactions almost in the same language and their documents were being recognised everywhere. Transaction were made in national currencies. Exchange rates existed for every currency that was being exchanged. Goods were bartered or purchased in cash, but not a small part of those was sold on credit, against draft, pledge or other guarantee. All markets were known and goods were bought and sold where they were the best offer. Transportation was made by ships of all flags; freight charges were stable; insurers covered transportation risks including the piracy as well. A new world market emerges and strengthens, slowly but constantly, including Far East (the "silken way" over the entire Asia) and Africa. The witness of this invigorating Mediterranean trade was the Ragusian citizen Beno Kotruljević.

He is the writer of several books, among others of a disappeared manuscript *Della natura dei fiori* (About the nature of flowers) and *De xore ducenda* (About the role of wife in Family life). The manuscript of his book *De navigazione* (About the navigation) is preserved in Yale library. In the science of economics he is remembered for the book he wrote in 1458, but which was printed in Venice after 115 years (in 1573) under the title *Della Mercatura et del Mercante Perfetto*. The book appeared in several prints during the XVI century, and was translated into French too. Because of it, Kotruljević was highly regarded in the history of economics thought. J. Schumpeter wrote about him in his *History of Economic Analysis* (Oxford University Press, 1954) Peter Kheil considers him to be the first to elaborate the principles of double-entry bookkeeping in the world literature (Ein

Beitrag zur Geschichte der Buchhaltung, Wien 1906), although his book was not the first to be published. The epoch-making significance of the double-entry bookkeeping (and of Kotruljević's credit for its development) is further by W. Sombart (*Das Moderne Kapitalismus*, 1916-17) and O. Spengler (*The Decline of the West, Prospectives of World History*, Knopf, New York 1950). Most attention was granted him by F. Braudel (in his monumental three-volume *Civilisation Matérielle Economie de Capitalisme*, A. Colin, Paris 1979).

However, these high grades for the role of Kotruljević in development of the economic thought, particularly in the field of accounting, now needs further explanation since U. Tucci found in Florence two transcripts of Kotruljević's book. One transcript is dated probably in 1484 and another (undated) dates back to the end of the XV century (around the year 1500). Based on these transcripts Tucci publishes in Venice in 1990 (bookprinter Arsenale) a new, critical edition, of the work of Kotruljević. This edition contains the oldest transcript with footnotes about differences and additions in relation to a later manuscript and to its printed edition. A careful analysis demonstrates that both manuscripts differ from the book printed in 1573. Therefore, these authors accept the opinion of Prof. Tucci, that the text printed in 1573 was "hasty and destructive". More than an editorial refining, it was an actual revision of the true manuscript. This remarking nobody nowadays can accept. The authors consider that the editor of the same F. Petrić (Francesco Patritio) with his interventions had converted the book of trader Kotruljević into a humanistic treatise, removing what in it was the most valuable for economists - an analysis of how the business world functioned at the midst of the 15th century in that region.

The authors consider that the book of Ragusian B.Kotruljević was, precisely for those (removed) pages, exceptionally important, since therein were analysed the economic conditions surrounding the Me-

diterranean trade in that - from many points of view - significant period of European history. In their analysis they stand for a new thorough reading of Kotruljević's writings. In this respect they find a need to appraise the real scope of his economic thought, once more, and particularly as to the meaning of his concepts in the evolution of double-entry bookkeeping system.

The authors emphasise that, in future, the history will have to change its judgement on B. Kotruljević. They are pointing out that:

(1) The true title of his book is "The Book About the Trading Skills" (Il libro delle'Arte di mercatura), and not "About the Trade and the Perfect Trader" (Della Mercatura et del Mercante Perfetto), as it was titled on basis of the edition of 1573.

(2) The book, whose manuscript was finished in 1458 represents a significant contribution to the empirical and pragmatic contemplation of the Mediterranean trade of that time, which is progress in relation to the then dominating scholastic economics (J. Buridan N. Oresme, A. Pierozzi-Forciglioni and others). To be true, in the book there were also some elements of the old economics, but their meaning was sensibly reduced by pragmatic examples of a new capitalistic and profit oriented economy, that was emerging and evolving in those times.

(3) The authors of this paper found examples of a pragmatic Kotruljević's approach in those chapters where he writes about characteristics of trades (trader as entrepreneur) an appropriate business location (inception of the location theory!), how to sell (barter, cash sale or deferred payment i.e. crediting the customer!), how collection of receivables are enforced and how a trader must pay back his debts. Then, at full length, Kotruljević expressed his thoughts about exchange bill, collateral and mortgage, insurance and insurers; about traders of textile and trivial commodities, and also about those who negotiated wool and jewels.

(4) In the Kotruljević's book particularly important is the chapter in which he writes about "an orderly keeping of trade books", which is the first written statement ever made on how to practice the double-entry bookkeeping.

Until the beginning of the 20th century the world believed that the first written work about the system of double-entry bookkeeping was written by Luca Paccioli published in 1494. Such assertion was challenged, or at least put in doubt by numerous authors. The scientific proof to defeat that proposition was offered by Prof. Karl Kheil in his work published in Vienna in 1906. Kheil proved that Kotruljević is the first writer in the world who presented a complete system of double bookkeeping, emphasising he did it way back in the distant 1458. Since it appeared before the advent of the technique of printing, his work could circulate (through Mediterranean) only in transcripts. In effect, it was printed in Venice only in 1573. Unfortunately, when printed it was precisely the chapter of accounting that was shortened (in relation to the manuscript). This threw into shadow Kotruljević's contribution to the scientific treatment of double-entry bookkeeping. The authors emphasise particularly this chapter as it appears now in the newly printed Kotruljević's book "The Book About the Trading Skills".

In this now published critical edition, there is - in the book I - a separate chapter 13 titled "De'l'ordine di tenere le scritture" (About an Orderly Keeping of Business Books). It demonstrates a whole system of double-entry bookkeeping as it was applied in the middle of the XV century. There is a detailed demonstration of how to use business books (initiation, description of assets and capitals, settlement of accounts, determination of business results and so on). On top of that there are accounting and operating set-up procedures and also their connections with the enterprise as a whole. An analysis of this chapter is made and it was established that Kotruljević actually pioneered in the accounting thought.

The significance of Kotruljević's contribution is further viewed through his basic principles which are applied even in today's business activities:

- **NEED FOR BOOKKEEPING** is the basic Kotruljević's idea. Without any hesitation he affirmed that there is no successful business without a "good and orderly bookkeeping". Such are the features of double-entry bookkeeping that are preferred in his manuscript.

- **BOOKKEEPING TASKS**, as described in Kotruljević's work continue to be valid today. Of course, extending them to cover the activities of today's economy. So for example says Kotruljević: "An orderly bookkeeping is to a businessman a source of memory about everything he is doing, from whom he claims and to whom he owes, about the price of goods, about gains or losses and about any deal that is important to the trader".³

- **BUSINESS ACTIVITIES AND BOOKKEEPING EVENTS** were discerned by Kotruljević far back in the XV century. If this were not the case, neither true proprietary position nor the results of a business activity could be seen from the book. In this connection Kotruljević asserts: " Yet it still happens that many things are negotiated and that such events are not recorded in the journal".

- **VERIFICATION OF DATA ENTRIES IN BUSINESS BOOKS** is also Kotruljević's concern. Indeed, he dedicates to this subject a good part of the text. In his time there were no accounting records, rather there was a separate book called "MEMO PAD". How much importance Kotruljević attached to "MEMO PAD" can best be seen from his following thoughts: "In memo pad you will enter at once all contracts, obligations drafts. Everything you do you must immediately

register therein before these items appear recorded in journal".⁴

It is known that in the XV century books were posted in such a way that first the events were taken from the "Memo Pad" into the Journal and then to the Ledger. This practically means that "Memo Pad" is a true forerunner of today's notion of "accounting record".

- **BOOKKEEPING ACCOUNTS AND ENTRIES** in the Kotruljević's work are undoubtedly disclosed in a spirit of double-entry bookkeeping. It describes a bookkeeping account as a "foil" (two pages), then it depicts a booked item saying: "For every item it should be stated when, how much, to whom and why; when - means day, how much is quantity of money, to whom - enables to indicate who is claiming a debt; why denotes reason"⁵

Furthermore, Kotruljević clearly looks at the turnover and balance of an account, which is exceptionally important for reading accounting reports.

- **ORGANISATION OF BUSINESS BOOKS** is presented by Kotruljević in such a way that there is no doubt he is writing about a double entry bookkeeping system. He mentions the books a trader (entrepreneur) must keep: memo pad, journal and ledger. In addition he also points at a need of keeping auxiliary books.

Kotruljević describes the ledger in more details than other books. His design is based on a bounded form of business books, in accordance with the technique of those times. He explains that first volume of the ledger is to be marked "A", the second "B" and so on as needed. Thereafter, he goes on into more details about the opening of ledger accounts, initial data entry, determination of debit and credit items, and then recommends to keep entries up-to-date. Interesting are his

3 Ugo Tucci: Benedetto Contrugli Raguseo: Il Libro dell'arte di mercatura, Ed. Arsenale, Venezia,

4 Ibid, page 174.

5 Ibid, page 173.

explanations on postings. One of them runs like this: "If you have one thousand ducats as a starting figure of the ledger, you must designate treasury as debtor and capital as creditor. Debtors and goods are interrelated as debit and credit".

He also pointed at the interdependence of journal and ledger, and their significance as to the control of data processing in the business books.

• **REPORTING THE VALUE OF PROPERTY** is still today a topic number one in the disclosure of accounting position in financial reports. Kotruljević observed that problem and suggested solutions similar to those that are found today in the international accounting standards. For instance, to settle the exchange rate differences in foreign currency operations, Kotruljević advised they should be reported as profit or loss. The same solution is found in the international accounting standard number 21.

Interesting is Kotruljević's opinion on how to determine the value of merchandise. He asserts that a real acknowledgement of purchase outlays takes place only if the value of merchandise can be verified by a new sale on the market.

• **DETERMINATION AND DISCLOSURE OF FINANCIAL RESULTS** is based, according to Kotruljević, on the earned revenues which he considers credit items, and on the remaining inventories

which are items of a debit nature. As to the calculation of profit, he obviously parts from a mixed account in which merchandise transactions were recorded. Final profit is determined through a yearly settlement of business accounts.

Kotruljević sustains, same as the modern accounting experts do, that with a yearly settlement of accounts, profit should be added to the capital and that eventual loss should be deducted from the capital.

From all that was stated, it can be concluded that B. Kotruljević had fully worked out a system of double-entry bookkeeping in its early stage as applied in the XV century. His theoretical and practical proposition are useful even today in the contemporary accounting system. This is precisely a proof of his scientific contribution to the development of accounting in the world. In effect, without a double-entry bookkeeping system, the accounting could not have provided its exceptionally important support to the economic achievements of developed countries.

The authors are convinced that a newly discovered manuscript of B. Kotruljević, which U. Tucci had expertly analysed and published, will lead to a reevaluation of his significance for history of the accounting, and to a better understanding of the Mediterranean trade of that time, as well.

Dr. Ante Cicvarić