Accounting Historians Journal

Volume 28	
Issue 2 December 2001	

Article 8

2001

Were Islamic records precursors to accounting books based on the Italian method? A comment

Christopher Nobes

Follow this and additional works at: https://egrove.olemiss.edu/aah_journal Part of the <u>Accounting Commons</u>, and the <u>Taxation Commons</u>

Recommended Citation

Nobes, Christopher (2001) "Were Islamic records precursors to accounting books based on the Italian method? A comment," *Accounting Historians Journal*: Vol. 28 : Iss. 2, Article 8. Available at: https://egrove.olemiss.edu/aah_journal/vol28/iss2/8

This Article is brought to you for free and open access by the Archival Digital Accounting Collection at eGrove. It has been accepted for inclusion in Accounting Historians Journal by an authorized editor of eGrove. For more information, please contact egrove@olemiss.edu.

Accounting Historians Journal Vol. 28, No. 2 December 2001

COMMENT

Christopher W. Nobes UNIVERSITY OF READING

WERE ISLAMIC RECORDS PRECURSORS TO ACCOUNTING BOOKS BASED ON THE ITALIAN METHOD? A COMMENT

Abstract: Some readers might have interpreted Zaid [2000] as claiming that the accounting practices of the Islamic State already used or directly led to double entry. This comment puts Zaid's paper into the context of prior literature and points out that no evidence is offered in that literature or by Zaid to dispute an Italian origin for double entry. Nevertheless, there are clear influences from the Muslim world on some antecedents to Western accounting developments and on some features of pre-double-entry accounting in the West.

INTRODUCTION: ZAID'S HYPOTHESIS

Zaid [2000, p. 89] argues that "the development of accounting records and reports in the Islamic State have most likely contributed to the development and practice of accounting in the Italian Republics as documented by Pacioli in 1494". Zaid would seem to be seeking to identify the influence of the practices of the Islamic State on one or other of the following Italian developments:

- 1. various pre-double-entry accounting records and reports, or
- 2. the accounting records and reports specifically related to the practice of double entry.

Readers might well infer from the reference to "as documented by Pacioli" that Zaid is suggesting Interpretation 2. Such an

Acknowledgments: The author is grateful for help from Brian Rutherford and for comments on an earlier draft from Richard Macve, R.H. Parker, Alan Roberts, Michael Scorgie, Basil Yamey, Omar Zaid and the editor of this journal.

inference might be confirmed when Zaid [p.74] states, without questioning it, that (according to ten Have) it is "received wisdom" that Italians borrowed the concept of double entry from the Arabs. Zaid also refers to "the Italian Method" [title]. The main feature that distinguishes "the Italian Method" of recording described by Pacioli [1494] from that of previous Western systems is double entry.

Zaid has confirmed¹ that he has no evidence that Islamic records were kept in double entry in the period examined in his paper and that, despite the above references, he did not intend to claim Islamic influence over the development of the system. It is vital to establish this because a mass of literature would be overturned if Zaid had proposed and provided support for Interpretation 2. Not only do standard texts [e.g. Edwards, 1989, p.48; Chatfield and Vangermeersch, 1996, p.218] now assume an Italian origin for double entry, but scholars have expended great effort on explaining why it developed there when it did and how it spread from these origins [e.g. Bryer, 1993;² Mills, 1994].

The purposes of this comment are to try to summarise the literature relating to the Islamic influence on accounting in order to put Zaid's paper into that context and to correct any misinterpretation of the paper that some readers may have reasonably made.

PRIOR LITERATURE

Double-entry bookkeeping (or, at least, substantial elements of it) can be found in use by Italian merchants in Provence in 1299-1300 [Lee, 1977] and in London in 1305-8 [Nobes, 1982] and in the records of the commune of Genoa in 1340 [de Roover, 1956]. It can be seen evolving in Italy in records earlier than this [Yamey, 1947; de Roover, 1956; Lee, 1973]. It is the later Venetian version of the system that Pacioli describes in a small section of his *Summa*.

There is widespread acceptance that many of the necessary conditions for the development of double entry (as suggested by Littleton, 1966) were established in the Muslim world earlier than in Italy and that they probably moved from the former to the latter. Parker [1989] examines this in detail. Incidentally, the suggestion that Hindu/Arabic numbers are important for

208

¹Correspondence between O.A. Zaid and the author of 14 March 2001.

²As Macve (1996, footnote 14) notes, Bryer argues that double-entry reflects things about Northern Italy other than the needs of capitalism.

Comment: Nobes: Islamic Records . . . The Italian Method?

double entry (as in many references noted by Parker, 1989, p.110) can be countered by referring to the use of Roman numerals in the Farolfi and Gallerani records [Lee, 1977; Nobes, 1982].

Parker [1989] identifies medieval Jewish traders as the major intermediaries for taking Muslim ideas to Italy. He leaves open the question [p.112] of whether there was direct influence on accounting practices rather than on the antecedents of those practices (such as paper, arithmetic and money). Commenting on this, Scorgie [1994, p.141] refers to evidence that Jewish bankers in Cairo used a bilateral form of accounts in the eleventh and twelfth centuries, thus predating Italian use.

Albraiki [1990] provides some evidence that certain bookkeeping features needed for the development of double entry were invented in the Islamic world, but no evidence of direct transfer to suggest that they were not also separately invented in Italy. Albraiki examines sources relating particularly to tax records in the Islamic world from the ninth to twelfth centuries. They show the development of bilateral accounts and of dual entries for certain transactions. There is also balancing of accounts. However, there seem to be no trial balances of the whole system, nor balance sheets.

Hamid *et al.* [1995] also describe in detail the registers of a tax department of a 10th-century Muslim administrative office. They conclude that the environment was suitable for the development of double entry but that "[i]t cannot be concluded from this tentative enquiry that double-entry was practised" [p.331].

ZAID'S EVIDENCE

Like Hamid *et al.* [1995], Zaid [2000] describes (from secondary sources) some of the accounting records of the Islamic state. He identifies four types of journal, three types of other accounting book and two types of report. Some of these can be identified in Hamid *et al.*'s list [p.325] of nine "registers". Zaid's categorisation of the records adds some clarity, but it would have been useful to readers if Zaid had acknowledged and commented on the similarities and differences between the two outlines.

As noted above, Zaid does not suggest that he is offering evidence that any of the Islamic records were kept in double entry. The fact that certain accounts had two columns (e.g. for tax liabilities and tax payments) [p.82], classified expenses according to type [p.84] or totalled revenues and expenses by month [p.85] would neither confirm nor deny the existence of double entry.

Zaid notes [p.86] that "the concept of the balance sheet as a separate statement . . . was not common". There seems to be no evidence of the balance sheet in the sense of a periodic balancing list of debit balances and credit balances from a recording system (including some form of owner's equity). By contrast, Zaid reports [p.86] that for particular purposes "some balance sheet items were included".

The most specific of Zaid's suggestions [p.81] of borrowing by Italian merchants from Islamic merchants concern Pacioli's admonition to start accounts with "In the Name of God" and his use of the term "journal". However, pious inscriptions can be found in Italy throughout the centuries leading up to the appearance of double entry [Lopez and Raymond, 1955, pp. 146, 170-178, 188, etc; Yamey, 1974, pp. 143-144]; they were applied to other documents, not just to accounting.

As for the word "journal" (or Venetian "zornal"), Zaid suggests [p.81] that this "may be based on the translation of the Arabic word Jaridah", although later [p.89] the suggestion becomes a statement that the word "is the literal translation of the Arabic word "Jaridah"". However, the English word "journal" has, as one of its meanings, the same meaning as the English word "diurnal"; and a large dictionary of English [e.g. OED, 1970, p.1069] will show that the English word "journal" derives from the French "journal", related to the Italian "giornale", and that it goes back (like the English word "diurnal") to the late Latin adjective "diurnalis" and the ancient Latin adjective "diurnus" (both meaning diurnal or daily). In ancient Rome, a diary or day-book was a "diurnum". This pre-dates Islam by many centuries.

ZAID'S USE OF OTHER AUTHORS

Zaid's introductory reference to ten Have (see above) might mislead readers into thinking that it is now generally accepted by scholars that double entry was borrowed by the Italians. However, ten Have himself [1976, p.11] rejects the idea of any proof:

It cannot be demonstrated that the Arabs in this period had already developed the double-entry system; thus there is no proof the Italians borrowed from the Arabs. Nevertheless, the possibility cannot be ruled out completely.

Comment: Nobes: Islamic Records . . . The Italian Method?

Zaid [p.74] cites Woolf [1912, p.54] as a further reference for the unlikelihood of accounting progress in Italy "at the time". Since this reference comes in the same paragraph as Zaid's quotation from ten Have, readers might infer that Woolf was referring to the period leading up to the appearance of double-entry in Italy. However, Woolf is referring to the period from 500 AD to 1000 AD. Woolf himself [pp.105-106] ascribes developments in accounting (up to the appearance of double entry) to the Italians.

Zaid [p.81] also tries to support the idea of Islamic influence by suggesting that Ball [1960, p.209] saw Pacioli's *Summa* as based on the work of Leonardo of Pisa who had translated Arabic writings, and that Chatfield [1968, p.45] saw Pacioli as "a translator of what existed in other cultures". Of course, these references by Zaid to Pacioli are not really relevant to his thesis. Examination of the content of a book of 1494 cannot help us much in determining the foreign influences on the development in Italy of accounting records and reports which occurred 200 or more years earlier.

Anyway, Zaid's references are likely to mislead readers again. Ball referred to Pacioli relying particularly on Leonardo of Pisa for other arithmetic matters, not for accounting. When it comes to accounting (both before and after the appearance of double entry), Ball [1960, p.187] is quite clear:

The history of modern mercantile arithmetic in Europe begins then with its use by Italian merchants, and it is especially to the Florentine traders and writers that we owe its early development and improvement. It was they who invented the system of book-keeping by double entry.

There is nothing in the Chatfield [1968, p.45] reference which corresponds to Zaid's description. However, on p.45 of another Chatfield [1974] book, there is a reference to Pacioli drawing on the work of other Italian writers, but no reference to other cultures. Elsewhere, Chatfield [1974, pp. 32 and 34] specifically refutes the idea of non-Italian invention of various accounting practices (again both before and after double entry):

Bilateral accounts developed in northern Italy between 1250 and 1440 ... They were not the product of any earlier civilization ... [p.32]. Though claims are made for an earlier invention of double entry in other places ... in fact the Italian system was from the beginning essentially different from any which preceded it [p.34].

Perhaps the more recent scholarship cited earlier in this comment casts some doubt on the certainties of Ball and Chatfield, but this merely reinforces the point that Zaid should not have used them in support of his thesis.

CONCLUSION

Zaid's paper could be interpreted as suggesting Islamic influence on pre-double-entry Italian accounting records and reports (Interpretation 1) or directly on double-entry itself (Interpretation 2). Elsewhere Zaid refutes the latter.

Assuming Interpretation 1, Zaid offers no new evidence about the state of Islamic accounting in the period before Italian double entry, and does not link his description to prior descriptions. He offers no evidence of actual transfer of accounting technology to Italy. The most precise suggestions of borrowings (notably the word "journal") seem to be clearly unfounded.

Three authors (ten Have, Ball and Chatfield) called in aid by Zaid make it clear that they would either have been opposed to or could not have offered any evidence to support either Interpretation.

In sum, influences from Arabia on mathematics and on some other antecedents of accounting developments in the West are undoubted. It has also been clear for many years that several features of pre-double-entry accounting were used in the Muslim world before they were used in the West. Further, direct influences on some elements of Western accounting are plausible, although no evidence is offered by Zaid or others on this. Finally, there is still no evidence that double entry was first developed outside Italy. At present, it still seems that it was Italians who were the authors of the earliest surviving records kept as full double-entry systems; Italians who wrote the earliest surviving descriptions of double entry; and, above all, it is in sets of Italian records that the gradual evolution of the elements of double entry, towards a full system, can be seen in the 13th and 14th centuries.

REFERENCES

- Albraiki, S.S. (1990), *The Muslim Contribution to the Development of Accounting* (University of Kent, unpublished PhD thesis).
- Ball, W.W.R. (1960), A Short Account of the History of Mathematics (New York: Dover Publications), as reprinted from earlier editions, e.g. that by Macmillan, London, 1908.

212

Comment: Nobes: Islamic Records . . . The Italian Method?

- Bryer, R.A. (1993), "Double-entry bookkeeping and the birth of capitalism: accounting for the commercial revolution in medieval Northern Italy," *Critical Perspectives on Accounting*, Vol. 4: 113-140.
- Chatfield, M. (1968), Contemporary Studies in the Evolution of Accounting Thought (Belmont, CA: Dickenson Publishing Company).
- Chatfield, M. (1974), A History of Accounting Thought (Hinsdale, Illinois: Dryden Press) reprinted in 1977 by Robert E. Krieger, New York.
- Chatfield, M. and Vangermeersch, R. (1996), *The History of Accounting: An International Encyclopedia* (New York: Garland).
- de Roover, R. (1956), "The Development of Accounting prior to Luca Pacioli according to the Account-Books of Medieval Merchants," in A.C. Littleton and B.S. Yamey (eds), *Studies in the History of Accounting* (London: Sweet & Maxwell).
- de Ste Croix, G.E.M. (1956), "Greek and Roman Accounting," in A.C. Littleton and B.S. Yamey (eds), *Studies in the History of Accounting* (London: Sweet & Maxwell).

Edwards, J.R. (1989), A History of Financial Accounting (London: Routledge).

- Hamid, S., Craig, R. and Clarke, F. (1995), "Bookkeeping and accounting control systems in a tenth-century Muslim administrative office," *Accounting*, *Business and Financial History*, Vol.5, No.3: 321-333.
- Have, O. ten (1976), The History of Accounting (Palo Alto, CA: Bay Books).
- Lee, G.A. (1973), "The Development of Italian Bookkeeping, 1211-1300," *Abacus*, December : 137-155.
- Lee, G.A. (1977), "The Coming of Age of Double Entry: The Giovanni Farolfi Ledger of 1299-1300," *The Accounting Historians Journal*, Fall: 79-95.
- Lopez, R.S. and Raymond, I.W. (1955) *Medieval Trade in the Mediterranean: Illustrative Documents* (New York: Columbia University Press).
- Macve, R.H. (1985), "Some Glosses on "Greek and Roman Accounting"", History of Political Thought, Spring [reprinted in Edwards, J.R. (ed.) (2000) The History of Accounting: Critical Perspectives on Business and Management, London & New York: Routledge, Vol.II: 66-97].
- Macve, R.H. (1996), "Pacioli's Legacy," in Lee, T.A., Bishop, A.C. and Parker, R.H. (eds.) Accounting History from the Renaissance to the Present: A Remembrance of Luca Pacioli (New York: Garland): 3-30.
- Mills, G.T. (1994), "Early accounting in Northern Italy: the role of commercial development and the printing press in the expansion of double-entry from Genoa, Florence and Venice," *The Accounting Historians Journal*, Vol.21, No.1: 81-96.
- Nobes, C.W. (1982), "The Gallerani Account Book of 1305-1308," *The Accounting Review*, Vol. 57, No. 2: 303-310.
- OED (1970), *The Shorter Oxford English Dictionary* (London: Oxford University Press).
- Pacioli, L. (1494), Summa de Arithmetica, Geometria, Proportioni e Proportionalita (Venice: Paganinus de Paganinis).
- Parker, L.M. (1989), "Medieval traders as international change agents: a comparison with twentieth century international accounting firms," *The Accounting Historians Journal*, Vol.16, No.2: 107-118.
- Scorgie, M. (1994), "Medieval traders as international change agents: a comment," *The Accounting Historians Journal*, Vol.21, No.1: 137-143.
- Woolf, A.H. (1912), A Short History of Accountants and Accounting (London: Gee).
- Yamey, B.S. (1947), "Notes on the Origin of Double-entry Bookkeeping," *The Accounting Review*, Vol. 22: 263-272.

214

- Yamey, B.S. (1974), "Pious inscriptions; confused accounts; classification of accounts: three historical notes," in H. Edey and B.S. Yamey, *Debits, Credits, Finance and Profits* (London: Sweet & Maxwell).
- Zaid, O.A. (2000), "Were Islamic Records Precursors to the Accounting Books Based on the Italian Method?," *The Accounting Historians Journal*, Vol. 27, No.1: 73-90.