Entrepreneurship & Organization Management

Modern Research: Accounting and Econometrics

Ayman Gruszczyński*

Department of Econometrics, SGH Warsaw School of Economics, 02-554 Warszawa, Poland

Introduction

The relationship between econometrics and accounting is the main topic of this essay. The term "econometrics" was first used in writing by Polish economist Pawe Ciompa, who was also a banker, educator, and researcher in bookkeeping. Outline of Econometrics and Bookkeeping Theory was the English title of publications released by Ciompa in Polish and German in 1910. The German book was titled Grundrisse einer Oeconometrie and the on Nationalökonomie constructed natural Theorie der Buchhaltung, and the Polish work was titled Zarys ekonometryi I teorya buchalteryi (Ciompa 1910a) (1910b). The term "econometrics" as employed by Ciompa in 1910 has no connection to the term as used in contemporary economics. It is used in Ciompa publications to present bookkeeping rules quantitatively. But he is identified by Many academics credit him with coining the phrase in economics. Details of Ciompa's accounting-related econometric theories are included in Section 2 below, along with a list of academics who have praised him. These days, an essential component of accounting study is the econometric methodology. To illustrate this, Section 3 lists the approaches that were used in papers published in five influential accounting journals between 2017 and 2021. A conclusion is offered in Section 4. This paper adds to the accounting literature by highlighting the relationship between accounting and econometrics in current research and by tracing the origins of this relationship back to the writings of Polish academic Ciompa, who published his ideas more than 110 years ago [1].

Description

Polish banker, educator, social worker, and author of a new vocabulary of bookkeeping principles, Pawe Ciompa (1867–1913), is still well-known for this work. Sojak (2022) provides a thorough explanation of Ciompa's theory, but this article focuses on its initial usage of the word "econometrics." Israel demonstrated Ciompa's concept of tying together accounting and econometrics (2016). The author quotes Ciompa (1910b) as saying, "Just as mechanical, acoustical, dynamic, and other similar phenomena in physics, and mass phenomena in geometry, so also economic phenomena should be depicted and portrayed following a philosophy, which I envision as a sort of economographics. This economographics would be a descriptive economics, requiring the use of economics, mathematics, and statistics. geometry. The geometric representation of value would be the main objective of such a doctrine. I refer to this section of economographics as econometrics. Accounting would be a practical example of how econometrics is applied to the mathematical description of values and their changes. Or, to put it another way, econometrics would simply be the theory of accounting [2].

*Address for correspondence: Ayman Gruszczyński, Department of Econometrics, SGH Warsaw School of Economics, 02-554 Warszawa, Poland; E-mail: Aymangruszczyński13@gmail.com

"In principle, economics strives to explain all phenomena of value, while in fact, mathematics and bookkeeping account for the values of things," reads a further translation of Ciompa (1910a) by Sojak (2022). Thus, bookkeeping and economics have a close relationship. Economics must be the foundation of bookkeeping theory and provide justification for bookkeeping regulations. Economic phenomena should be represented in the same way that mechanical, acoustic, dynamic, etc. phenomena are in physics. by the field of study known as econometrics. Similar to how trigonometry is a part of geometry, econometrics is based on economics, mathematics, and geometry. Then, bookkeeping is really an application of econometrics, much as how algebraic laws are applied in mathematics. As a result, according to Ciompa, geometry is the root of econometrics. Accounting is built on econometrics thanks to mathematics. In a broader sense, Ciompa is still correct today: econometrics is created by adding economics to measurement [3].

At the time, the word for geometry in Polish was geometrya, while the word for econometrics was ekonometrya (now: ekonometria) (now: geometria). Despite there being no equivalent in English, Ciompa gives the new word the Polish geometry ending trya. As seen in the graph, assets are real, or positive [+], whereas capital is only their driving force (or, "econometric activity of assets"), or, "something negative. (Sojak 2022). It should be noted that liabilities are part of Ciompa's current "capital". Rectangles are graphically represented in "econometric equations and econometric ratios" by Ciompa. In Polish, he calls such a rectangle a "kwadrant," or quadrigon. According to economic theory, a good's value is calculated by multiplying its quantity by its unit price. According to geometry, this product is the surface area of a rectangle with one side's length equal to the amount of the good and the other's to the good's unit price (Ciompa 1910b, p. 10). This rectangle is referred to as the field (plane) of what the commodity is worth (after Sojak 2022). The Sojak paper gives more information (2022) [4].

Ciompa's proposal's revised language and geometrical structure did not amount to a novel theory. According to Israel (2016), Ciompa was condemned by Lulek (1922), who claimed that he "does not establish new economic conceptions and does not seek solutions to solve economic problems" (after Sojak 2022). Israel (2016) writes in a study he conducted on Ciompa's work that "his notions of econometrics and economographics are essentially descriptive. They represent efforts to advance economic theory without changing it. Therefore, it is in stark contrast to how econometrics is now understood. Ragnar Frisch, the first economics Nobel laureate, defined the field's current knowledge 16 years after Ciompa. Frisch (1926) gave the following definition of the new field of econometrie in a Norwegian journal: "We find a new subject, which, for want of a better name, may be named econometrics, intermediate between mathematics, statistics, and political economy [5].

Conclusion

Between the release of Pawe Ciompa's book more than a century ago and the accounting articles published today in prestigious journals, accounting study has advanced significantly. In this essay, the relationship between modern econometrics employed in accounting research today and the econometrics Ciompa initially described in the context of accounting in 1910 was studied. The term "econometrics," first coined by Ragnar Frisch in 1926 to characterise the statistical and mathematical methods used in economics, bears no relation to Ciompa's econometrics. As a result, the earliest application of econometrics is now only valuable historically and, to some, sentimentally. On the other hand, modern econometrics is still very much in use and present in accounting

study today. This study offers research that represents the current mainstream of contemporary accounting research and has been published in a number of prestigious international publications. Other journals might not focus on the practical side of accounting, such as from a legal or managerial standpoint, with the same intensity and depth of econometric technique as shown in the journals included here.

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Conflict of Interest

None.

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