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Diversifying finance research: From financialization to sustainability☆

Thomas Lagoarde-Segot *

KEDGE Business School, France
Aix-Marseille School of Economics, Aix-Marseille Université, CNRS & EHESS, France

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ABSTRACT

This paper seeks to overcome the apparent contradictions between global demand for sustainability and the structure of conventional financial discourse by putting forth a strategy for *diversifying* academic finance. It comprises four sections. I first situate academic finance within the broader spectrum of social sciences and highlight its ontological, epistemological and methodological assumptions. Second, I show that these assumptions, taken for granted within the field of finance, are the object of much debate within other fields – as is demonstrated by controversy regarding logical positivism, social ontology and performativity – which brings out the limitations of paradigmatic unity in finance. Third, I characterize diversification in finance with reference to the nested epistemological structure of scientific discourse. I argue that diversification is a process by which (*i*) *finance research is extended to other existing paradigms in social sciences;* (*ii*) *new research metaphors are developed within the current paradigm; and* (*iii*) *puzzle-solving robustness is achieved*. Fourth, I develop a research agenda for the diversification of academic finance. This agenda is broken down into themes, paradigmatic hypotheses, and research questions.

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1. Introduction

The ongoing economic, social and ecological crisis calls for a reconsideration of management theory, and finance in particular (Bay & Schinkus, 2012; Epstein, 2005; Epstein & Habbard, 2011; Faugère, 2014; Giraud, 2012; Lagoarde-Segot, 2010, 2014; Lazonick, 2013). However, due to its paradigmatic unity, academic finance has always been,

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* KEDGE Business School, France.
E-mail address: thomas.lagoardesegot@kedgebs.com.

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to a very large extent, restricted to a single approach. Taking this paradox into account, this paper proposes a strategy for *diversifying* academic finance. It comprises four sections. I *first* situate academic finance within the broader spectrum of social sciences and highlight its ontological, epistemological and methodological assumptions. *Second*, I show that these assumptions, which are taken for granted by the finance community, are non-neutral, and often viewed as problematic outside of the finance field, as is shown by controversy regarding logical positivism, social ontology and performativity. This observation is at the basis of my criticism of the state of the finance field. *Third*, I characterize diversification in finance with reference to the nested epistemological structure of scientific discourse. I argue that diversification is a process by which (*i*) *finance research is extended to other existing paradigms in social sciences;* (*ii*) *new research metaphors are developed within the current paradigm; and* (*iii*) *puzzle-solving robustness is achieved*. *Fourth*, I identify a set of promising research themes for future diversification of academic finance. The overarching objective of this research is to contribute to a revitalization of financial research, taking into account potential areas of conflicts between financialization[1] and sustainability demands. By construction, this research will hence concern both the macronormative and micronormative aspects of finance research, and appeal to a wide range of researchers. For each of these themes, I finally describe the research context, research hypotheses, and outline a few pertinent research questions.

2. Situating finance within social sciences

2.1. Paradigms in social sciences

Burrel and Morgan (1979) heuristic paradigmatic matrix provides a useful interpretation grid for social sciences, which can be adapted to analyze the finance field (Adler, Forbes, & Willmott, 2007; Lagoarde-Segot, 2014). It categorizes research depending on the chosen assumptions regarding the *nature of science* and the *nature of society*. As shown in Fig. 1, assumptions regarding the *nature of science* can be ranked according to a subjective–objective dimension. These refer to assumptions regarding ontology, epistemology, human nature and methodology:

- Ontological assumptions are concerned with the essence of the studied phenomenon: is the phenomenon objective and external to the individual, or is it subjective and the product of the individual's mind?
- Epistemological assumptions are concerned with the nature of knowledge: is knowledge an external reality that has to be acquired, or is it a relative concept linked first and foremost to personal experience?
- Assumptions about human nature are concerned with the relationship between humans and their environments: are humans the product, or the creators of their environment?
- Assumptions about methodology are related to the procedures of scientific inquiry: should researchers seek to uncover universal mechanisms or understand the ways in which humans create, modify and interpret the social world in a given situation?

Assumptions regarding the nature of society can be represented according to two conflicting views on social processes:

- The regulation view assumes cohesiveness and unity of society, and seeks to explain why a given society tends to remain intact rather than fall apart;
- The radical change view analyzes society based on the assumption of structural conflicts and modes of domination, and seeks to develop alternatives rather than acceptance of the status quo.

As shown in Fig. 1, the interaction of these four assumptions gives rise to four paradigms in the social sciences: the *positivist functionalist* paradigm, the *interpretive* paradigm, the *radical humanist* paradigm and the *radical structuralist* paradigm.

Given that all four approaches rest in fine on philosophical choices, it is impossible to demonstrate the superiority of a given approach without relying on a particular ad-hoc worldview. Thus, this matrix demonstrates that the financial realm can be analyzed from very different angles: a given theory can be considered valid only if one is willing to accept its underlying paradigmatic hypothesis (Ardalan, 2008).

2.2. The paradigmatic cohesion of academic finance

In this section, I argue that academic finance research belongs almost exclusively to the *positivist functionalist* paradigm. Academic finance is indeed rooted in *objectivist ontology*: the financial world, just like the natural world, is assumed to be made of stable and tangible entities (e.g. financial markets, financial institutions, money…), which are external to the observer. Finance research considers that financial institutions (banks, money, markets…) and financial behavior (risk-return optimization) exist independently of individual or collective representations of the social world.

This objectivist ontology is associated with a *positivist* definition of knowledge. Academic finance research seeks to identify the regularities and causality mechanisms uniting the various entities of the financial realm, using methodologies and protocols derived from the natural sciences,[2] with a view to identifying universal laws. The object of study (e.g., the stock market) is hence conceived as an external reality characterized by a set of regularities, which can be uncovered through the analysis of statistical causality (e.g., the impact of macroeconomic news on expected shareholder returns).

Such hypotheses give rise to a *mechanistic* representation of human actions. They thus implicitly contain an additional assumption regarding *human nature*: financial interactions are indeed supposed to reflect the causality mechanisms uncovered by empirical research (e.g. through econometric analysis). The financial realm is therefore assumed to be reducible to a set of elements that cannot be broken down, and that could be reconstructed through reverse operations. For instance, the neoclassical view represents capital market as a stable aggregation of individual investors and rests on two key hypotheses: (i) individual investor rationality, and (ii) equilibrium, which assumes that combining the decision of economic agents produces a stable state. In this framework, an exogenous shock (e.g., a decrease in interest rates) modifies the behavior of individuals, and yields a new stable equilibrium (e.g., increased asset prices). This *methodological individualism* implies a tacit assumption concerning the *nature of society*. Given that interactions between individuals produce a stable system, the analysis is rooted in the *sociology of regulation* and notions of conflict, modes of domination, dispossession, or structural contradictions are, de facto, excluded.[3]

Financial research thus seeks to put forth an abstract, value-free, uniform and universal knowledge, with a view to explaining and predicting financial reality through a discovery of the universal relations uniting the supply and demand of capital. Academic finance probably

[1] Financialization is defined as "*the increasing dominance of financial actors, markets, practices, measurements and narratives at various scales, resulting in a structural transformation of economies, firms (including financial institutions), states and households*" (Aalbers et al., 2015).

[2] For instance, 'econophysics' specifically applies the methods of physics to the study of financial markets (Mantegna & Stanley, 2000).

[3] However, methodological individualism does not restrict the analysis to microeconomic problems. For instance, Stiglitz and Weiss (1981) show that macroeconomic credit rationing stems from the rational response of lenders to information asymmetries: lenders lower interest rates below the market equilibrium level so as to minimize default risk. This in turn increases the demand for credit and generates macroeconomic credit rationing.