

Hübenbecker, Ulf; Homölle, Susanne

Article

How Thinking about Markets and Institutions Influences Thinking about the Future of Banks

Credit and Capital Markets – Kredit und Kapital

Provided in Cooperation with:

Duncker & Humblot, Berlin

Suggested Citation: Hübenbecker, Ulf; Homölle, Susanne (2024) : How Thinking about Markets and Institutions Influences Thinking about the Future of Banks, Credit and Capital Markets – Kredit und Kapital, ISSN 2199-1235, Duncker & Humblot, Berlin, Vol. 57, Iss. 1/4, pp. 49-80, <https://doi.org/10.3790/ccm.2024.1454201>

This Version is available at:

<https://hdl.handle.net/10419/324955>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



<https://creativecommons.org/licenses/by/4.0/>

How Thinking about Markets and Institutions Influences Thinking about the Future of Banks

Ulf Hübener* and Susanne Homöle**

Abstract

As the narratives about the future of banks seem to lack of theoretical rigour, the paper undertakes a very fundamental analysis of what economic theories can tell us about the future of banks. The New Institutional Economics portrays new challengers as perfecting the market and thereby sidelining the more passive banks, which could lead to their demise. This gloomy narrative is critically discussed and contrasted. By re-evaluating concepts such as uncertainty, trust, and power, a more nuanced perspective emerges. Banks may have a greater agency and potential for success than previously thought, challenging the pessimism about their future.

Keywords: future of banks, market, institution, institutional economics

JEL Classification: G21, G23, B52

I. Introduction

In the social sciences, statements about the future are often viewed critically. This reflects the problem of overdetermination, but also the fear of many social scientists of being labeled as charlatans, or, even worse, of finding out in the near future that their predictions were wrong. Nevertheless, it is hard to look away when people talk about the future, as the narratives that emerge in this way can develop immense power and may even guide the future in a certain direction. This phenomenon, which is known as performativity, has been described in the context of economics by, for example, *Callon* (1998) and *MacKenzie* (2006).

* Ulf Hübener, FHöVPR M-V, Lecturer in Economics, Goldberger Straße 12–13, Building 1, Room 218a, 18273 Güstrow, E-Mail: u.huebenbecker@fh-guestrow.de.

** Prof. Dr. Susanne Homöle, University of Rostock, Chair of Banking and Finance, Ulmenstr. 69, Thünen-Haus, Raum 207, 18057 Rostock, E-Mail: susanne.homoelle@uni-rostock.de.

We gratefully acknowledge the helpful comments of the anonymous referee, the participants of the 8th Rostock Conference on Service Research and the HVB PhD Seminar 2022 in Waren. We also thank Philipp Winskowski, Julian Berens and Eric Heyden for reading earlier versions of the paper.

One topic that is regularly followed with excitement and attention concerns the future of banks, as they are central to our economic system. Publications such as “Bank 4.0: Banking Everywhere, Never at a Bank” (King 2019) and “Banking 5.0: How Fintech Will Change Traditional Banks in the ‘New Normal’ Post Pandemic” (Nicoletti 2021) try to satisfy this interest, whereby the most popular narrative still comes from Bill Gates: “Banking is essential, banks are not.”¹ This narrative hangs over the banks like a sword of Damocles, and its followers seem to be waiting for the moment when they can finally say, “That’s how it is, I always knew it.”

Astonishingly, such narratives have rarely been scientifically investigated. Hübener (2024) has conducted a literature review of the narratives, inter alia, to identify their underlying assumptions. His results reveal a range of different narratives about the future of banks, but hardly any scientific debate between the authors. Moreover, there seems to be a lack of theoretical stringency, as the assumptions behind the predictions are often not (clearly) worked out. These results are rather disappointing as “narratives are not facts without theory. The suggestion that narratives are inherently less scientific than mathematical models is nonsense. After all, theories begin and end with words” (Whalen 2021, p. 261). For this reason, we take the opposite approach in this paper. We start with theoretical considerations to derive a narrative about the future of banks, which is then critically discussed and adapted using other economic theories.

There are a number of perspectives from which the existence and future of banks can be approached theoretically, e.g., a regulatory perspective. In this paper, we focus on the very abstract categories of market and institution, because they characterize all economic thinking from the very beginning (see, for example, Williamson 1975).

The aim of this paper is to find out how thinking about markets and institutions according to economic theory can influence thinking about the future of banks. This paper thus considers banks “only” as institutions at a high level of abstraction, looking at the institutional challenges they face, rather than at specific business models and products of banks or the regulation they face.² In this context, few people would deny that banks are facing a whole range of new competitors, especially Fintechs and BigTechs, that are attacking the banks’ value chain. This phenomenon is widely referred to as disintermediation (Beck 2001; Omarini 2018).

¹ In some variants, “Banking is necessary, banks are not.”

² On this point, see the informative papers by Dow (2012), Chick/Dow (2013) or Nersisyan/Wray (2010).

Narratives have a theoretical background that influences the thinking and actions of people and institutions. In a recent article, *Heilmann et al. (2024)* ask “what kind of science is financial economics?” and their answer is “its focus on the use of models and by its performative nature” (*Heilmann et al. 2024*, p. 112). Which narratives, which need neither be correct nor reasonable in order to be valid in the world, circulate and have a performative effect, but also which narratives are given credibility, is a profoundly scientific task given the uncertain future of the banks.

Obviously, narratives are complex constructs. So the focus can only ever be on individual aspects. This does not preclude a holistic view, but it does require more preparatory work, such as this paper, to be able to see the whole picture. This involves a balancing act between considerations on the factual level and scientific-theoretical considerations. Ultimately, an ontological theme is the necessary basis for epistemological insights, especially in order to avoid the ‘epistemic fallacy’, i.e. the “reduction of reality to our knowledge about reality” (*Farasoo 2024*, p. 122).

The theoretical starting point of our analysis will be the new institutional economics (NIE). As the name suggests, the NIE is primarily concerned with institutions. From a sociological point of view, it represents the mainstream when it comes to an economic view of institutions. This can be seen not only in research but also in teaching, through its representation in many textbooks (see, for example, *Furubotn/Richter 2009*).

In a second step, the narrative that the NIE offers us about the future of banks will be scrutinized. On the one hand, the NIE will be examined critically; on the other hand, the narrative itself will be brought into focus and blind spots will be pointed out. Consideration will be given to (post-)Keynesianism and Marxism as well as to the old institutional economics (OIE) to identify blind spots and inconsistencies in the narrative derived from neo-institutional thinking. Finally, we get a fuller picture of the future of banks.

This paper contributes to the literature in four main ways. First, we contribute to the ongoing debate about the future of banks, less in the sense of a forecast than in the sense of how economic theory can guide our thinking and enable us to think about the subject. Second, the consideration of narratives in general has an enormous and not yet fully understood importance for economics. By examining the case of the future of banks, we show how strongly, and sometimes even subliminally, abstract categories such as the market and institutions can shape narratives. Third, by addressing the role of banks in our current economic system, we clarify how the economy works, which, against the backdrop of a rapidly changing business world, is relevant not only for banks. Fourth, we bring different schools of thought into the discussion. As explicit reference is made to more than one economic theory, the narrative becomes transparent and com-

prehensible through critical observation. Moreover, we follow a principle which has not only legal but also scientific application: *audiatur et altera pars* (let the other side be heard as well).

The paper is structured as follows. In Section II, the methodology is explained in detail. This is followed in Section III by a description of the transition from neoclassical economics to the NIE, namely transaction cost theory and agency theory. The rather lengthy description of this theoretical underpinning is necessary in order to clearly work out the relevance of the market and institutions. The implications for thinking about the future of banks are derived in Section IV. In Section V, this narrative is evaluated critically and examined comprehensively for inconsistencies as well as blind spots, namely the aspects of uncertainty, trust, and power. The paper ends with a summary and conclusion.

II. Methodology

Against the background of thinking about market and institutions, we look at the future of banks from different angles. A rather obvious approach would be simply to find out what has happened in “reality” in the recent past and then try to extrapolate this development using data and “facts.” This approach would produce content of thought about the object of investigation that stands in a (purely) historical/empirical context. It could be supplemented by logical/theoretical considerations that draw on an “appropriate” theory in order to formulate further content of thought about the object of investigation. However, what remains unconsidered is what we call the form of thought: what logic underlies the appropriate theory and, in a broader context, which theorizing dynamics have historically taken place and how any explanations of the object of investigation have come about. This addresses the point made by *Somers* (1998, p. 731) that “all of our knowledge, our logics, our presuppositions, indeed our very reasoning practices, are indelibly (even if obscurely) marked with the signature of time”; in other words, they are history-laden.

Not only can it be shown that, because of the problem of theoretical terms, empirical explanations always rely on theories (*Zoglauer* 1993), it can just as easily be shown that the form and the content of thought are closely interwoven. This becomes evident in quite simple explanatory schemes like the deductive-nomological one, but also when the logic of a theory itself is taken into account. To give an extreme example here, the Nazi race theory follows a racist logic. The logic of the theory is, so to speak, the engine that generates thoughts about the object of investigation in the first place.

Table 1
Scheme of thought

	Historical/empirical	Logical/theoretical
Content of thought	(a) Historical development of banks	(b) Thinking about (the future of) banks with theory
Form of thought	(d) Historical development of theories (theory dynamics)	(c) Inner logic of the theory

Table 1 serves as an illustration of which aspects should be considered in order to examine a phenomenon comprehensively. For the object of investigation, the future of banks (which in this paper will be considered only in terms of thinking about market and institutions), this means not only (a) looking at what has happened historically/empirically with banks as institutions in recent years, and not only (b) referring to the supposedly appropriate economic theories that try to explain that development logically. Instead, we will also (c) make the inner logic of these theories clear to (d) understand these theories with all its potential statements about the object of investigation historically from the dynamics of the theory. The focus of this paper is on points (b) and (c). The results are then applied to Coleman's bathtub model. By specifically formulating immanent critiques of the theory (that is, critiques that do not use an external standard as a benchmark; *Wrenn* 2016, p. 453), and by initiating a discourse with other theories and pointing out blind spots, the future of banks can be considered more comprehensively, elevating the debate to a new level.

III. Thinking about markets and institutions

1. Neoclassical Economics

The market is the starting point of neoclassical thinking. This is also evident in neoclassical finance, which focuses on the purity of the market. For example, models of portfolio selection, asset pricing, capital structure, and option pricing are all based on a frictionless market. This view culminates in the efficient market hypothesis, which rejects any influence on the market for reasons of efficiency (*Haugen* 2002; *Bernstein* 2007).

The market is rarely defined or questioned in depth about its nature; rather, it is "taken for granted" (*Hodgson* 1988, pp. 172–173). In the German-language literature, *Ötsch* (1991) points out the use of metaphors in neoclassical economics and elaborates on 50 fundamental principles of the market in his critique of neoclassical economics (see also *Ötsch* 2019, chapter 1). The market is seen,

among other things, as a process of price formation that has inherent forces, as a social order, as a principle of freedom, as a mechanistic metaphor or machine, as a person acting, as a state of nature, or even as a utopia. In the English-speaking literature, *Mirowski* (1984, 1989) can be singled out for his analysis of the neoclassical worldview. He demonstrates that early neoclassicism is the replication of Newtonian mechanics and that the market in this respect resembles a mechanistic principle. For postwar neoclassicism, *Mirowski* (2007, p. 222) recognizes the metaphor of an information-processing computer.

It is typical that institutions (in the narrower sense), which are usually called firms, and especially financial firms, which include banks, do not exist in this model world. After all, the existence of such institutions questions the perfection of the market. However, one institution (in a broad sense) does exist, namely the market itself. In this respect, the tension between the terminology of market and institutions becomes apparent: institutions (in the broad sense) are a super-category under which the market also falls. *Coase* (1937) has already engaged with the fact that there are no institutions in the narrow sense in the neoclassical model. In his landmark paper, he asked the question “Why do firms exist?” and thus laid the foundation for the NIE.

2. *New Institutional Economics*

In asking why firms (as institutions in the narrow sense) exist, the NIE lies squarely in the tradition of neoclassical economics, even if its assumptions can be assessed as more realistic (*Dugger* 1983, p. 96; 1990, p. 429). Far from being a unified stream of thought (*Rutherford* 1989, p. 300), the NIE subsumes many different approaches. In their classification of theories, *Erlei et al.* (2016) distinguish between institutions in the market and institutions in the political sector. For institutions in the market, they refer to agency theory and transaction cost theory (*Erlei et al.* 2016, p. 59). In the following, these two strands of the NIE will be considered in more detail.

a) Transaction Cost Theory

A variant of the NIE is the transaction cost approach, which goes back to a large extent to the work of *Williamson* (1975, 1985). The initiators of this approach acknowledge that markets are rarely efficient in reality (*Dugger* 1983, p. 96), as there is a cost of using the price mechanism (of a market), which is the so-called transaction cost. Firms can deal with transaction costs more efficiently and thus gain their right to exist (*Coase* 1937, pp. 388–390). *Williamson* (1975) points out explicitly that firms and markets are to be regarded as alternative instruments, both with the same goal “for completing a related set of trans-

actions” (Williamson 1975, p. 8). The hierarchy of internal organization thus has advantages over the market (Williamson 1975, pp. 39–40).

This approach also addresses the phenomenon of market failure and makes some relevant assumptions that allow a more realistic picture of the economy to be drawn, e.g. bounded rationality and opportunism (Williamson 1975, pp. 21, 26). Another far-reaching assumption is the almost Faustian statement that “in the beginning there were markets” (Williamson 1975, p. 20, 1985, p. 87). This means in effect that the market becomes a universal category that has always existed (Ankarloo/Palermo 2004, p. 417). Only institutions in the narrower sense (i.e., firms) can be justified by market failures or transaction costs. Compared to markets, firms can carry out exchanges in ways that are less transaction cost intensive (Dugger 1990, pp. 425–428). All this happens in the absence of coercion or power. Instead, Coase and Williamson prefer to speak of “authority” in the sense of acting “voluntarily” (Pitelis 1998, p. 1002). On this view, institutions serve as an extended arm of the market, or rather, they serve the market and restore its harmony.

The harmony of the market is also reflected in equilibrium thinking, which is based on methodological individualism, a focus on atomistic individuals with rigid preferences who are socially disembedded.³ In this respect, Williamson’s approach to transaction costs is comparative-static: “Typically, the incidence of transaction costs in equilibrium is compared in two or more governance structures, and the structure with the lowest costs is deemed to be more efficient” (Hodgson 1996, p. 252). The comparative-static approach is also recognized by Dow (1987, p. 34), who draws parallels with neoclassical microeconomics.

The fact that these equilibrium models have a normative character, emphasizing the “self-regulating tendency of the market” (Valentinov 2012, p. 256), is often underestimated or not recognized by economists. Equilibrium models demonstrate the ability of the market to coordinate at the aggregate level, evoking an ideally functioning system (Boldyrev/Ushakov 2016, p. 42; Boldyrev 2019, p. 4).⁴ Williamson (1996) himself later tried to make his view less attackable.

³ The charge that methodological individualism is preferable to other economic strands is rejected by Dorman (1991). He argues for a heterodox approach to institutional analysis in general and defends a Marxian account in particular.

⁴ To what extent this comparative-static approach is about Pareto-optimal states is debatable, as is the question of whether it is a general Walrasian equilibrium or a partial Marshallian equilibrium. In fact, a Walrasian (general) equilibrium cannot be assumed, since the assumptions of complete information and honesty are not fulfilled (De Vroey 1998, pp. 207–209). However, even a Marshallian (partial) equilibrium entails further conditions that are not (cannot) be fulfilled here. For example, by assumption, production must exist at first; but then we cannot start with the market. Moreover, households need income to be able to afford the products (De Vroey 1999, p. 322). Last but not least, a perfect information context is of crucial importance (De Vroey 1999, p. 323). Because

In any case, it is clear that microanalysis is an important component of the transaction cost approach, as even *Williamson* (1991, p. 91) confirms: “Transaction cost economics adopts a comparative contractual approach.” Winter, likewise, comes to the conclusion that “few if any advocates of transaction cost or evolutionary economics have sworn to abstain entirely from optimization calculus” (*Winter* 1991, p. 189).

To sum up, methodological individualism and equilibrium thinking are ontological basic principles, which are implicit assumptions supporting market thinking or efficiency thinking.

Market thinking also affects firms themselves. This becomes clear when we refrain from assuming a static state, looking instead at the dynamics in which firms find themselves. Williamson’s book is called “The Economic Institutions of Capitalism”. He thus explicitly targets a period in history and aims to explain the institutions of capitalism in evolutionary terms (similarly *Palermo* 2000, p. 580; *Meramveliotakis/Milonakis* 2010, p. 1057). Since firms exist as institutions in the narrower sense for reasons of efficiency, this approach goes so far as to suggest that the institutions that exist at the moment must be considered efficient; after all, they would not be able to exist otherwise.⁵

In this context, Williamson’s assumption that “in the beginning there were markets” must be addressed again. It is impossible to consider it as a historical-empirical assumption. On the one hand, we cannot interpret it as a primordial beginning, not only because doing so would clearly contradict Williamson’s intention in his book, but also because the development of mankind presupposes many other institutions, such as families and tribes (*Hodgson* 1988, pp. 206–207; *Pitelis* 1998, pp. 1000–1001; *Meramveliotakis/Milonakis* 2010, p. 1061). On the other hand, the assumption is untenable in terms of a capitalist beginning because, even if Williamson wanted to get at the important characteristic of markets as a place of exchange, he would miss the point that the commodity form of assets in capitalism is a result of production. Williamson would thus be presupposing something that he wants to explain (*Ankarloo/Palermo* 2004, pp. 423–426).⁶ Thus, Williamson is not concerned with real markets as

of complexity and bounded rationality, however, this perfect information context cannot be assumed without further effort (*Williamson* 1975, p. 31). A partial equilibrium can most likely be justified on the grounds that no global statements of efficiency except local ones can be assumed (*Nutzinger* 1982, pp. 180–181). Following *Nutzinger*, (1982), *Hodgson* (1999a) arrives at a similar view, although he draws more attention to the contradiction that the transaction cost-minimizing rational agents of Williamson’s comparative static approach are difficult to fit with his assumption of bounded rationality (*Hodgson* 1999a, pp. 208–209).

⁵ A similar view can be found in *Ankarloo/Palermo* (2004, p. 418).

⁶ This is also true for one-person companies, as *Fourie* (1993, pp. 43–44) shows.

they really exist or came into being, but in a logical sense with “neoclassical markets as those of the GE [general equilibrium] world” (*Ankarloo/Palermo* 2004, p. 423).

This analysis reveals the epistemological character of the assumption and thus of the transaction cost theory as a whole. Relying on idealizing assumptions is completely in the tradition of neoclassical economics and in this sense characteristic of market thinking.⁷ If markets were assumed from the very beginning, they would not be the result of conscious human selection, which is compatible with the assumption of bounded rationality. If it was further presupposed that markets had transaction costs and that firms were more efficient than the market because of hierarchies, the evolutionary efficiency assumption would also be fulfilled. Thus, efficiency is made the engine of the market, with the result that the idealized world develops evolutionarily toward the best (in this case, efficient) condition. So, even here the market is present in the form of an invisible (evolutionary) hand. In the literature, Williamson has thus been blamed for succumbing to Panglossianism (*Granovetter* 1985, p. 503; *Hodgson* 1991, 1993, p. 94), an allusion to the character Dr. Pangloss in Voltaire’s *Candide* who tries to portray every bad event in the world in a positive light and as pointing to a path toward a better world. Accordingly, it is an extremely deterministic worldview that subordinates everything to functionalism. In this connection, *Hodgson* (1991) draws a parallel between the NIE personified by Williamson and the neoclassical economics personified by Friedman: “Panglossian writers like Friedman and Williamson take for granted that survival means efficiency” (*Hodgson* 1991, p. 522).

b) Agency Theory

To justify the existence of firms, opportunistic behavior (which is also a focus of the transaction cost approach) and information asymmetries (which are mainly addressed within the firm) are among the central assumptions of agency theory. Both assumptions provide a more realistic picture of the economy than neoclassical economics. *Jensen/Meckling* (1976) accuse the supporters of the transaction cost theory of continuing to treat the firm as a black box. They emphasize the crucial importance of contractual relations within firms and beyond: “Contractual relations are the essence of the firm, not only with employees but with suppliers, customers, creditors, etc.” (*Jensen/Meckling* 1976).

⁷ In particular, the important essay by *Friedman* (1953), who is known for his ultra-liberal stance on markets, can be mentioned here. See also *Ankarloo* (2002, pp. 26–28).

One aspect of opportunistic behavior that appears in the seminal work of *Jensen/Meckling* (1976) and *Alchian/Demsetz* (1972) is shirking, which is what makes monitoring within the firm important in the first place. *Jensen/Meckling* (1976) pointed out that “the term monitoring includes more than just measuring or observing the behavior of the agent. It includes efforts on the part of the principal to ‘control’ the behavior of the agent through budget restrictions, compensation policies, operating rules, etc.” (*Jensen/Meckling* 1976, p. 308).⁸

In this context, it is important to note that everything takes place without coercion and that power plays no role. “The firm [...] has no power of fiat, no authority, no disciplinary action any different in the slightest degree from ordinary market contracting between any two people” (*Alchian/Demsetz* 1972, p. 777). This statement is clarified by the example of a grocery store. Customers can damage their grocer only by not buying his products again. This is also the case within the firm. All an employer can do is terminate the employment relationship. According to *Alchian/Demsetz* (1972), there is no difference between the two relationships. The market relationship between firm and customer thus has a mirror-image effect in the firm between employer and employee. The firm is no longer an alternative to the market, as in the transaction cost approach, but itself functions in principle like a market, or, as *Alchian/Demsetz* (1972) put it, “The firm serves as a highly specialized surrogate market” (*Alchian/Demsetz* 1972, p. 793). *Jensen/Meckling* (1976) express themselves even more precisely, using the vocabulary of the neoclassical model world to describe the balance between principal and agent: “In this sense the ‘behavior’ of the firm is like the behavior of a market; i.e., the outcome of a complex equilibrium process” (*Jensen/Meckling* 1976, p. 311; similarly *Palermo* 2000, p. 575).

The passage from *Alchian/Demsetz* (1972) also contains the metaphor of the market as an optimal information processor, which *Mirowski* (2007) has already identified with the information-processing computer for neoclassicism after the Second World War. Although it is (superficially) about the better (“more efficient”) processing of input information by the firm’s manager-employer, the firm is ultimately explicitly characterised as a (“highly specialised surrogate”) market. The aforementioned Panglossianism is particularly evident in the section “Socialist firms” by *Alchian/Demsetz* (1972). Here the authors attempt to compare Yugoslav, i.e. socialist, firms with firms from Western societies and argue that the form of worker participation in surpluses would be much more

⁸ A considerable part of the literature on banks in the context of intermediation is based on (delegated) monitoring (e.g., *Diamond* 1984). This stream of banking literature will not be treated in more detail here. The monitoring function already concerns, in the broadest sense, a service offered by banks. Although what the banks do is of enormous importance, this paper aims at an understanding of the institutions themselves at a higher level of abstraction.

common in Western societies if this form were more profitable (*Alchian/Demsetz* 1972, p. 787).

From these quotations, it is clear that the market is omnipresent or represents a universal category in agency theory. A similar conclusion is reached by *Palermo* (2000), who calls the opposition between firm and market “illusory”. When the price mechanism is made ubiquitous, the market becomes a universal principle, even within the firm itself (*Palermo* 2000, p. 575; 2007a, p. 152). A consequence of this social disembedding and of these methodological principles can be summarized as follows: “by severing the market from its structural-institutional context, it is reduced to nothing but inter-individual relations [...] the market is seen as a super societal organizer capable of regulating almost any societal activity or sphere” (*Fourie* 1991, p. 54).

In summary, the NIE is subject to market thinking both in transaction cost theory and in agency theory, and in this respect it is clearly in the tradition of neoclassical economics.

IV. Implications for narratives about the future of banks

Content of thought of a historical nature that relates to the future of banks from an institutional perspective is still missing from our schema of thought (see Section II). Candidates for this content are the current challenges facing banks, although it cannot be concealed that the identification of such challenges naturally takes place through theory and is also captured in theoretical terms (*Zoglauer* 1993). Nevertheless, one commonly recognized challenge stands out: new competitors, namely Fintechs and BigTechs, are attacking the value chain of banks and thus may cause disintermediation (see point (1) in Table 2).⁹ The question here is how the NIE can deal with this historical-empirical issue of new competitors for banks, that is, what narrative about the future of banks this theory can offer us.

The existence of firms, and especially banks, can be justified by the existence of transaction costs or agency problems due to informational asymmetries (see point (2) in Table 2). Moreover, we showed in Section III that the NIE stands in the tradition of neoclassical thinking and is subject to strong market thinking in its inner logic (see points (3) and (4) in Table 2). Because firms themselves are also subject to this market thinking, one implication is that they are to be regarded as “passive players” (see *Meramveliotakis/Milonakis* 2010, p. 1058). In

⁹ The concept of intermediation presupposes intermediation theory, which can be derived from the NIE literature. However, it is still unclear how the new competitors can be classified in the existing theory: “So far, the literature on fintech has simply bootstrapped fintech platforms to models of financial intermediary existence” (*Thakor* 2020, p. 6).

terms of thinking about the future of banks, this means that, in the broadest sense, banks are passive players that have to subordinate themselves to the market (activities). Following the Panglossian story, the new competitors can be seen as perfecting the market (see point (5) in Table 2).¹⁰

Table 2
Scheme of thinking about banks

	Historical/empirical	Logical/theoretical
Content of thought	Historical development of banks (1) <i>New competitors attack the value chain of banks</i>	Thinking about banks with theory (2) <i>NIE explains institutions (banks) via TCT and AT</i> (5) <i>New competitors serve to perfect the market</i>
Form of thought	Historical development of theories (4) <i>NIE stands in the tradition of neoclassical economics</i>	Inner logic of the theory (3) <i>NIE is dominated by market thinking and Panglossianism</i>

Note: NIE = new institutional economics; TCT = transaction cost theory; AT = agency theory.

In order to complete the narrative about the future of banks, we have to think about reasonable reactions by the banks. For this purpose, the so-called bathtub model of Coleman (1990), which was further developed by Hedström/Swedberg (1998), will be applied. The model makes it possible to explain social mechanisms via a macro-micro-macro transformation, which would otherwise be observable by the researcher only at the macro level (Hedström/Swedberg 1998, p. 22). Coleman can be seen as a follower of a rational choice sociology (Swedberg 2003, p. 38). His model accommodates the NIE approach chosen here, applying and evaluating the NIE according to standards that correspond to its intention.

The starting point for the bathtub model is the market environment at the macro level (see Figure 1). From there emanates the situational mechanism that sees individuals exposed to a particular situation (Hedström/Swedberg 1998, p. 23). Opportunistic customers who want to take advantage of services that are favorable for transaction costs, as well as transaction cost minimizing banks who are competing with new competitors, are located at the micro level.¹¹

¹⁰ For a similar argument, but with a much stronger reference to the Arrow and Debreu model world and disintermediation, see Scholtens/van Wensveen (2003, p. 9).

¹¹ The banks stand above the customers here, since they are, in the broadest sense, institutions that come close to what is called a “meso unit,” located between the micro and macro levels (Dopfer et al. 2004, pp. 267–270).

The second mechanism that comes into play is the action-formation mechanism, which shows how a particular combination of desires, beliefs, and action options produces a particular action (*Hedström/Swedberg* 1998, p. 23). Customers at the micro level switch to the most favorable provider, which means that the new competitors can count on an influx of customers. As a result of this mechanism, the banks enter a transaction cost downward spiral. However, there is the possibility of mergers among banks, allowing them to reduce transaction costs. “The search for efficiency [...] drives merger movements.” (*Dugger* 1990, p. 425).¹²

The same applies to information asymmetries. They are overcome by the firm, but it does not have to be a particular firm (here, for example, a bank) that processes the information better. In principle, new firms contribute to the elimination of information asymmetries, because the image of the market as an optimal information processor (which was revealed by *Alchian/Demsetz* (1972) precisely in this context) resonates in the background.

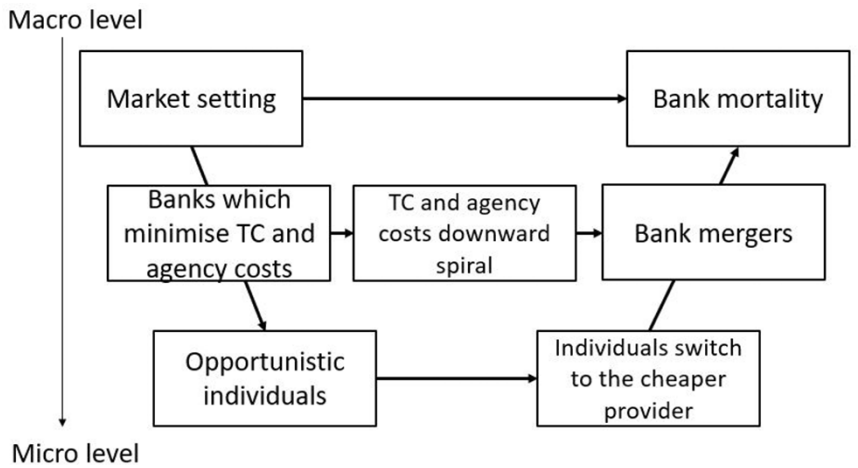
Information asymmetries also affect relationship banking, which is characterised by banks investing in building long-term relationships with their borrowers (*Boot/Thakor* 2000, p. 679) and by the exchange of private information between the bank and its customers (*Freixas* 2005, p. 3). Irrespective of whether, as in *Freixas* (2005), relationship lending increases with increasing competitive pressure from other firms in order to protect themselves from competition, or whether, as in *Boot/Thakor* (2000), relationship lending only increases with increasing competition in the banking sector, while banks invest less in relationship lending when competition in the financial markets increases, it can be argued that non-bank financial investors can also establish a type of relationship lending. *Andreani/Neuberger* (2004, p. 2) mention in particular pension funds, mutual funds, and life insurance companies. This means that the reduction of information asymmetries can no longer be limited to banks.¹³

In a final step, the transformational mechanism is considered. Individuals interact with each other, and their social actions are cumulated, so to speak, leading to a collective outcome (*Hedström/Swedberg* 1998, p. 23). Through bank mergers and customers switching to the most favorable provider or to the new competitors, a loss of importance of single banks and a not insignificant dying of banks is likely. Not all banks will disappear, but the market will tend to perfect itself through the new competitors. Moreover, banks might have difficulties retaining their customers in the long run.

¹² *Hamada* (2012) shows that horizontal mergers generate larger profits when uncertainty increases, even if there are no efficiency gains that point in the same direction.

¹³ With regard to Fintechs, *Kaja et al.* (2021) argue that they do not provide core banking functions such as relationship lending, and therefore in this respect do not increase competitive pressure on banks (*Kaja et al.* 2021, p. 79, 90).

The passivity of banks, due to the strong market thinking within the NIE, prevents them from opposing these mechanisms in a hopeful way. According to agency theory, management might come somewhat more into play, but since there is no power for the firm vis-à-vis the customers (and no market power), the banks’ options for action are still limited.



Note: TC = transaction costs.

Figure 1: Bathtub model

V. Discussion

In this section, the rather pessimistic narrative about the future of banks developed above will be evaluated critically. The evaluation is carried out, on the one hand, via criticism of the NIE; if the weak points of the theory are exposed, then the substantive aspects of the narrative can also be seen as at least questionable. This is a kind of meta-critique. If the schematization of thinking (see Table 2) is used, then the form of thinking of the NIE will be questioned in its inner logic and, in addition, the theory will be historically classified. On the other hand, the narrative itself will be brought into focus and blind spots will be pointed out. This critique concerns the content of thought, is more pragmatic in nature, and indirectly enables an alternative narrative on the future of banks. More specifically, the meaning of uncertainty, trust, and power for the narrative is discussed. Consideration is given to (post-)Keynesianism and Marxism as well as to the OIE.¹⁴

¹⁴ The OIE is not simply a historical predecessor of the NIE. The term “old” is misleading in this respect, because there are still economists who work in this paradigm. Ad-

1. *Uncertainty*

A fundamental assumption of transaction cost theory is bounded rationality, which is linked to uncertainty and complexity (Williamson 1975, pp. 21–23). In complex (even deterministic) situations, “computational inability” (Simon 1972, p. 170; Williamson 1975, p. 23) leads to decision-making under uncertainty.¹⁵ Williamson’s concept of uncertainty is thus rather restrictive and driven mainly by the decision-makers’ rational limitations.

This insight becomes even more significant when other distinctions between different kinds of uncertainty, by authors who are primarily associated with post-Keynesianism, are consulted. For example, Langlois (1984) distinguishes between “parametric uncertainty” and “structural uncertainty,” the former referring to the lack of certain parametric values or parametric information and the latter to a fundamental uncertainty or lack of knowledge (Langlois 1984, pp. 29–31; see also Hodgson 1988, pp. 203–204). A further division into “substantive uncertainty” and “procedural uncertainty” can be made (Dosi/Egidi 1991). The former, as the name suggests, refers to the lack of the information needed to make decisions, and the latter includes limitations of the cognitive possibilities. This distinction is also explicitly based on Herbert Simon’s differentiation between substantive and procedural rationality (Dequech 2006, p. 112). Other classifications include “weak uncertainty” and “strong uncertainty” (Dequech 1997), or uncertainty (1) and uncertainty (2) or “pure uncertainty” (Fontana 2009), or, as Hodgson (1988) calls his concept in contrast to the NIE, “radical uncertainty” or “real uncertainty” (Hodgson 1988, p. 205).

What all these distinctions have in common is that uncertainty is not simply uncertainty, as trivial as this may sound. Bounded rationality leads to “behavioral uncertainty” but neglects “fundamental uncertainty” (Dunn 2001). All the authors mentioned above emphasize that there is an uncertainty that exists independently of human and computational possibilities. That uncertainty makes future predictions or forecasts difficult or even impossible.¹⁶

herents of this school of thought today prefer to call themselves “radical” or “original” institutionalists in distinction to proponents of NIE (Dugger 1989, p. vii). Nevertheless, especially in comparisons of the two schools of theory, the terms “new” and “old” have more or less prevailed (see also Rutherford 1994).

¹⁵ Williamson and Coase make little effort to provide really solid definitions of uncertainty (Dunn 2000, p. 420). For a more detailed interpretation of Williamson’s understanding of uncertainty, see Dequech (2006, p. 113).

¹⁶ In a broad sense, the call for an awareness of uncertainty is also made by Hutchison (1984) when he looks for similarities between old and new institutional economics. He also draws here heavily on Simon (1976).

For *Fontana* (2009), uncertainty is a “first principle” that runs counter to the “invisible hand theorem” and thus opposes harmonic equilibrium views that assume market adjustment or self-correction (*Fontana* 2009, p. 7). In this context, the OIE school of thought considers predictions to be uninteresting. If prediction is used at all, it is a matter of making general qualitative predictions and not specific quantitative ones (*Dugger* 1979, p. 905). This view is justified by the fact that the economy should be regarded as a process: “All institutionalists, including those who do not stress its radical nature, argue that the economy is a process, not an equilibrium” (*Dugger* 1988c, p. 4). In a nutshell, central to the OIE is the “concept of process,” whereas the NIE focuses on the “concept of optimum” (*Dugger* 1990, p. 424).

This argumentation rejects the starting point and the entire market understanding of the NIE: “Specifically, in a world of flux of the institutional economist that the economic system is not controlled by the price mechanism or the market mechanism, and that it is not to be understood by starting from that premise. [...] The economic system is, rather, to be understood as a congeries of a multitude of forces – institutional and technological, social and historical” (*Cochran* 1955, pp. 248–249; see also *Reuter* 1996, p. 139).

This has a direct logical impact on model thinking in economics. It can no longer be assumed that the economy tends toward a state of equilibrium. The market is not a harmony-producing construct, an automatic mechanism, or even an invisible hand¹⁷ that provides balance.¹⁸ Dunn has argued that the bounded rationality argument for transaction costs is in any case only a “short-run imperfectionist argument” and that transaction cost theory cannot explain firms adequately in the long run (*Dunn* 2000, p. 425).

On this line of argumentation, Panglossianism cannot be applied, and economic events cannot be viewed deterministically. For the narrative about the future of banks it follows that the new competitors can no longer be understood as a perfection of the market, displacing the banks and creating a new equilibri-

¹⁷ *Hahnel* (2007), who is influenced by Marxism, argues that markets are inefficient because disequilibrating forces that are not weak, non-competitive market structures are common, and externalities are the rule rather than an exception, which is why he uses the term “invisible foot” for all bad tendencies of the market (*Hahnel* 2007, pp. 1141–1142). *Perelman* (1999), also a Marxist, portrays the influence of markets in this respect even more starkly: “Pure market forces have the tendency to run amok” (*Perelman* 1999, p. 150).

¹⁸ A distinction can be made here between post-Keynesians and New Keynesians. In the tradition of Keynes, New Keynesians assume that in the short run there are no automatic adjustment processes in the market. For the long run, however, they join the neo-classicals in believing in self-adjustment of the market. Post-Keynesians assume that neither in the short run nor in the long run are processes at work that cause an automatic adjustment toward equilibrium (*Fontana* 2009, pp. 2–3).

um. However, when equilibrium is not achieved in the long run and the harmony of the market cannot be preserved (or must be preserved because the uncertainty is so great), then institutions in general and banks in particular can be accorded a much more prominent role than that of mere preservers of continuity.

Underlying this argumentation is a psychological explanatory approach that sees institutions as a stronghold of continuity. The more uncertain the future appears, the more important the role of institutions:

“Specifically, in a world of flux and uncertainty the institution has been regularly identified as a relied-upon source of endurability, of continuity and stability, and indeed as the most significant such source. And this fits with the conception of institutions [...] as particular social phenomena, mostly social systems, or structured processes of interaction, that are relatively enduring and recognized as such” (Lawson 2005, p. 14).

Hodgson (2000) also emphasizes this view: “Through this circle of mutual engagement, institutions are endowed with a stable and inert quality, and tend to sustain and thus ‘pass on’ their important characteristics through time” (Hodgson 2000, p. 117). In this respect, the emphasis on uncertainty provides a basis for the existence of firms, which can also apply to the relatively old institution of banking. Therefore, the pessimistic view on the future of banks discussed in Section IV must be put into perspective by expanding the notion of uncertainty.

2. Trust

In the NIE, opportunism plays an important role in explaining institutions in a narrower sense (i.e., firms). For the transaction cost theory, Moschandreas even speaks of opportunism as the “sine qua non” (Moschandreas 1997, p. 41). Opportunism in the form of shirking is also given a prominent position in agency theory (see Section III.2.b).

Williamson’s argument that hierarchy (through authority in firms) mitigates opportunism leads, first, to trust playing no role either inside or outside the firm, and, second, to the opportunism of authority being neglected (as pointed out especially by Dow 1987; see also Moschandreas 1997, p. 49). More precisely, transaction cost theory assumes that authority in the firm is responsible for transaction costs being allocatively efficient (Dow 1987, p. 33). However, it is not clear why the assumption of opportunism is not taken to its logical conclusion. Who monitors the authority or who monitors the monitors (Dow 1987, pp. 20, 24)? This question is addressed by Alchian/Demsetz (1972) and by Jensen/Meckling (1976), but they do not explicitly consider authority.

As shown in Section III.2.a), the NIE is a further development of neoclassical economics (and the concept of homo oeconomicus). Humans are still rational agents (albeit in transaction cost theory their rationality is limited). Homo oeco-

nomicus cannot be left behind, because the NIE is based on the calculation of costs, whereas norms and conventions are not included (Hodgson 1988, p. 206). The epistemological parallel to neoclassical economics can again be drawn here, since the NIE considers opportunism “as if [it] were the invariant core of human nature and trustworthiness no more than a supplement that varies from country to country, depending on culture and institutions” (Noorderhaven 1996, p. 106).

The OIE can be distinguished from the NIE in its emphasis on the importance of habits (Hodgson 2000, p. 117). This also includes cultural conditions, in which the distance from the NIE is again very clear: “The mind of Williamson’s individual is bounded; the mind of institutionalism’s individual is culturally conditioned” (Dugger 1990, p. 427). In relation to Williamson, it can be stated that the NIE adopts an individual choice approach, instead of the collective action approach advocated by Commons (Dugger 1994, p. 378). As a result, the supporters of the OIE also have a different image of human agents. For example, Veblen’s (1898) “instinct of workmanship” in some respects represents a counter-design to shirking. It is worth quoting at length to demonstrate the difference:

“By selective necessity he [the human being] is endowed with a proclivity for purposeful action. He is possessed of a discriminating sense of purpose, by force of which all futility of life or of action is distasteful to him. There may be a wide divergence between individuals as regards the form and the direction in which this impulse expresses itself, but the impulse itself is not a matter of idiosyncrasy, it is a generic feature of human nature. [...] Cases occur in which this proclivity for purposeful action is wanting or is present in obviously scant measure, but persons endowed in this stepmotherly fashion are classed as ‘defective subjects’. [...] Within the purview of economic theory, the last analysis of any given phenomenon must run back to this ubiquitous human impulse to do the next thing. [...] In the intervals of sober reflection when not harassed with the strain of overwork, men’s common sense speaks unequivocally under the guidance of the instinct of workmanship. [...] They like to see others spend their life to some purpose, and they like to reflect that their own life is of some use” (Veblen 1898, pp. 188–189, cited in 2011, pp. 159–160).

While Veblen’s concept of instincts is controversial, it should be noted that, unlike in the case of *homo economicus*, instincts are subject to social influences (Reuter 1996, pp. 212–216; Jennings 1999, pp. 519–520). In this respect, the OIE also distinguishes itself from the NIE in its definition of institutions. According to North, institutions are “humanly devised constraints” (North 1990, p. 3). However, a conception of institutions as mere constraints could lead to the assumption that unbridled free markets are, so to speak, the state of nature against which those constraints are then directed (Bromley 2006, p. 32). Indeed, passages can be found in North’s work in which the market logic is to be discovered: “The profitable opportunities in trade and commerce seemed everywhere

circumscribed by privileges, barriers to entry and mobility, which had only to be removed to increase the scope and profitability of enterprise and consequently to promote economic growth” (*North/Thomas* 1973, p. 148; cited in: *Mirowski* 1981, p. 575). *Hodgson* (1999b) points out that, in North’s definition, the “absence of the word ‘habit’ [...] is not accidental” (*Hodgson* 1999b, p. 535). In *Veblen* (1909), however, habits are explicitly addressed in the definition of institutions¹⁹ as “settled habits of thought common to the generality of men” (*Veblen* 1909, p. 626 cited in 2011, p. 518).

This is important, because “habits both reinforce and are reinforced by institutions” (*Hodgson* 2000, p. 117). This interaction is particularly interesting in the aspect of trust toward institutions. It creates a circle according to which trust creates habits, and habits in turn create trust. In this context, *Moschandreas* points out that “Trust reduces costs in long-term relationships” (*Moschandreas* 1997, p. 45). For this reason, aspects which cannot be explained via transaction costs, such as trade partnerships, must be taken into account; therefore, it can be argued that the NIE approach is not sufficient to fully explain institutions or the existence of firms (*Moschandreas* 1997, p. 45). Trust is thus a blind spot in the narrative about the future of banks considered in Section IV.

Trust and habits are essential for firms to exist at all. Williamson’s assumption of opportunistic behavior, which he applies to the market as well as to firms, is contrary to this assumption (*Hodgson* 1988, pp. 209–211). For the future of banks, this is interesting, in that banks have a trust advantage due to usually long relationships with their customers, which translates into the habit of staying with the bank.²⁰ New competitors have to build up this trust over a long period of time. Therefore, the narrative developed in Section IV might overestimate the speed with which the competitors establish themselves and the banks are displaced.

3. Power

In principle, power plays hardly any role in the NIE. Within agency theory, power structures are completely absent, both inside and outside the firm. According to transaction cost theory, the existence of the firm is explained via the advantages of a hierarchy, but externally the firm does not possess any power either.

¹⁹ In general, the definitions of institutions are broad and include not only organizations (as well as banks) but also social entities such as money, language, and law (*Hodgson* 1999b, p. 535).

²⁰ For the phenomenon of relationship lending see, for example, *Boot/Thakor* (2000) and *Kysucky/Norden* (2016).

This approach becomes more understandable when the ontology behind it is considered. For the NIE, as for neoclassical economics, power and a perfectly functioning market are antipodes. Two systems are conceived in theory: one without imperfections, in which perfect competition governs all individual relations (a perfect decision-making context), and one with imperfections, in which individual relations are also characterized by power (an imperfect decision-making context) (Palermo 2007b, p. 545; 2007a, p. 164; 2019, p. 1359). Accordingly, in the NIE, imperfections are “the true cause of power” (Palermo 2019, p. 1359). If imperfections are abolished, then power relations will automatically disappear (Palermo 2007a, p. 164).

However, it is doubtful that power has no meaning at all in the justification of the existence of firms (and especially banks).²¹ For example, it is not explained why two individuals would agree that one is the employer and the other is the employee. In particular, the amount of compensation would matter to the employee, not the transaction costs. The power to employ is at least implicitly assumed; after all, not everyone can hire workers at will. In this respect, employer and employee are already in a power relationship that is socio-economic in origin (Meramveliotakis/Milonakis 2010, p. 1061).

Similarly, Pitelis (1998) considers the argumentation of the NIE in the context of capitalism:

“Within the capitalist logic of profit generation for the principals, the employment relation is transactionally superior to the price mechanism and is thus a more efficient means of the organization and division of labor. In this sense, the transactional properties of firms are not per se the reason for market failure; the reason is the transactional properties needed for capitalist control to be established. Such control is easier under the employment relation, which renders the latter transactionally superior from the capitalist point of view. Given this, (transactional) efficiency cannot in itself explain the existence of firms; the principals’ objectives (thus power and distribution) also need to be considered” (Pitelis 1998, p. 1010).

Besides the logical inconsistencies, the NIE’s argument that hierarchies emerged without coercion cannot be sustained historically (Palermo 2007b, p. 544; for a more comprehensive look at the matter, see Gerstenberger 2017).

Power plays a role not only within a firm but also outside it, that is, between the firm and other firms, and between the firm and individuals. In this regard,

²¹ It is not the task here to refute the NIE. Rather, the criticism serves a meta-argument: if the representation of the firm in this theory is wrong (logically as well as historically), or if false assumptions form the basis of the NIE, then the derivations of the theory will be at least questionable and the corresponding narrative about the future of the banks subject to doubt.

different dimensions of power are addressed. Following *Lukes* (1974), *Young* (2002, p. 51) proposes four categories of power:

- (1) A has the ability to win in overt conflict with B;
- (2) A is able to divert B's wants;
- (3) A is able to reconstitute B's wants;
- (4) A is able to reconstitute B's wants against B's interests.

Levels 2 to 4 address the possibility of changing preferences. However, since the NIE excludes exactly that (*Hodgson* 1994, p. 399), a significant form of power is not recognized. In the OIE, in contrast, preferences are not taken for granted: "Wants are not just givens" (*Dugger* 1988c, p. 5). Power is a more important factor than efficiency, which means that this tradition of thought is directed against the concept of the survival of the fittest; that is, efficiency is not mixed with existence (*Hodgson* 1988, p. 214). Power does not always have to be based on brutal coercion and force: "power is difficult to see and to analyze because it is secure and based on voluntary compliance" (*Dugger* 1980, p. 905).

These considerations lead us to the conclusion that, in a certain sense, there is a contradiction in the NIE regarding power. On the one hand, power relations are almost completely disregarded, such that individuals have sovereignty, and they possess and exercise power over themselves. On the other hand, individuals are slaves to their own preferences, which are merely given, and which they cannot question or change. This is also reflected in institutions. They are free of constraints, but at the same time they have no power to act,²² except to reduce (transaction and agency) costs. In this sense, the banks are subject to a superior structural coercion that is exercised by the market or at the level of the market.

A structural form of power is also found in the Marxist view. This is mainly because class struggle is assumed within society. Thus, there is not only a relational notion of power (power over somebody) and a dispositional notion (power to act), but also a kind of invisible coercion (*Palermo* 2019, p. 1357). At a model-theoretical level, this view is directed against a methodological individualism that does not allow for social classes (*Palermo* 2019, p. 1360). Without going too deeply into the aspects of money, credit, and capital, in order not to lose sight of the institutional perspective, it can be stated that capitalism itself is in essence a system of power (*Palermo* 2007b, p. 556) and that "to have authority in production or market power in circulation, one must first have purchasing power" (*Palermo* 2007b, p. 551). This point is essential here because it rejects the opposition of power and efficiency and considers both aspects together. In the OIE, a circle results: power leads to growth in size, and at the same time growth in size leads to a drive for even more power to keep the company coherent and capable of action (*Dugger* 1988b, p. 80).

²² This concept is also discussed by *Lukes* (1974) and *Palermo* (2019).

Because of the emphasis on social structures and the primary emphasis on power issues, followers of the OIE, such as *Dugger* (1988c), arrive at a completely different assessment in their thinking about the market: “The market does not just happen. It is not a natural phenomenon. The market is a set of instituted social relations [...] the market is not a result of Adam Smith’s natural system of liberty. It is a result of the exercise of power [...] the market is not a cause, but an effect” (*Dugger* 1988c, p. 8).

In contrast to the NIE, where the market appears as an active agent, in the OIE the market is an explicitly “passive institution” and the modern economy is a “corporate economy” (*Dugger* 1988a, p. 984).

This assessment has several implications for thinking about the future of banks. First, banks are no longer merely passive actors that can at best lower transaction and agency costs. By incorporating several dimensions of power, banks have the possibility to change preferences (i.e., the possibility of power over somebody) and to (pro)actively shape their situation to their advantage. Banks can thus actively manage their customer relationships.

Second, assuming that endowments are distributed asymmetrically, banks also have power to act. In relation to the banks’ rather small new competitors, Fintechs, this seems to be without a doubt the case. In relation to their larger BigTech challengers, things look different. However, banks are not necessarily powerless here, either.

Third, and more fundamentally, the abolition of the separation of efficiency and power casts the bank as an actor in a different light. The model world of the perfect market is fading and with it the idea of perfecting the market by means of new competitors. Power is no longer a defect that arises from imperfection, but an original category that exists between the actors and determines the framework for action.

VI. Summary and Conclusion

In this paper, we have outlined a narrative of the future of banks against the background of neo-institutional thinking about markets and institutions. As a starting point, we referred to Fintechs and BigTechs as new challengers that are attacking the value chain of banks. Strong market thinking and a tendency toward Panglossianism were identified as characteristics of the NIE, which leads to the new challengers being interpreted as a perfection of the market. In this context, the banks are regarded as playing a rather passive role and as having to subordinate themselves to the market.

In line with Coleman’s bathtub model, this path was further developed. Banks might be displaced by the new competitors. A consolidation process could take

place in which banks merge in order to reduce transaction and agency costs and to become more competitive. Some of the banks could therefore disappear from the scene, leading to a new market equilibrium with fewer banks and more new competitors. Overall, following the ideas of the NIE leads to a rather gloomy narrative concerning the future of banks.

In a second step, we evaluated this narrative critically by examining the (assumptions of the) NIE and by pointing out blind spots. Specifically, the meaning of uncertainty, trust, and power for the narrative was discussed in detail with reference to the OIE, (post-)Keynesianism, and Marxism. In the NIE, uncertainty is closely linked to individuals' bounded rationality and can thus be understood as behavioral uncertainty. Such an understanding, however, cannot express itself in an appreciation of institutions that may have a legitimizing effect via a more fundamental form of uncertainty. In terms of trust, the immanent critique shows, first, that the assumption of opportunistic behavior can be mitigated by authority, although in that case it is not clear who is supervising the authorities. Second, and even more importantly, the assumption of opportunism leaves no room for trust, which may be a significant factor in explaining the existence of institutions. In the case of power, the immanent critique is evident from the ontology according to which efficiency and power form antipodes and institutions are justified only on efficiency grounds. On this reading, power cannot play any role. However, even in logical terms, it is not evident that power is not being used as an explanatory factor for institutions.

Overall, the immanent critique and the characterization of alternative traditions of thought result in a more comprehensive narrative about the future of banks. If uncertainty, trust, and power are taken into account, a strongly altered picture of the future will appear. Uncertainty (in a wider sense) can lead individuals to rely on old, familiar, trusted institutions for the stability they offer. Banks could be seen as institutions that provide security, making many of their customers unwilling to change. This goes hand in hand with trust. With the recognition of strong uncertainty, it becomes important to have trustworthy partners that accompany individuals through the uncertain future. Here again, banks can build on a trust advantage over their new competitors, as bank customers already know what they are getting. In addition, cooperation based on trust can form habits that further strengthen the circle of trust and habits, which is beneficial for the relationship between bank and customer. New challengers must first, at great effort, create trust and try to convince customers. They can also use one of the forms of power described above to change the preferences of bank customers. However, banks, too, are in a position to change customers' preferences in such a way that customers do not choose the cheapest provider, but instead focus on other aspects. Banks are no longer passive players that can only reduce transaction and agency costs and have to subordinate themselves to the market. Banks can take action themselves and use their power against the

new competitors or to shape customer preferences, be it in the form of capital or in the form of trust. In this way, banks are seen as having the ability to remain successful in the market for a longer period of time.

By working out the assumptions of thinking about the future of banks, the paper lays the foundation for a better understanding of narratives on this topic. It may show the limits of such gloomy narratives like Bill Gates' famous one. At the same time, it highlights the importance of plural economic thinking, once again underlining that the content and the form of thought are inextricably linked. It provides a tangible example to illustrate that, for economic science, there is not and cannot be only one theory; a broad knowledge of theories is necessary, also in teaching, in order to explain social phenomena comprehensively.

This conclusion primarily has implications for academic practice. Shedding more light on the assumptions of the theories used when discussing the future of banks would be very helpful. This is all the more important because economic theories can have a performative effect and thereby change the direction of their object of study. Therefore, it is incumbent on scientists to recognize and seek to fulfill their social responsibility.

In terms of practical implications, our findings are also relevant for banks. By examining how markets and institutions are perceived through the lens of economic theory, we provide insights into the credibility and impact of certain narratives. In doing so, we help banks to identify narratives about their future at an early stage, especially the origins of certain narratives. By knowing the hidden ideas behind these narratives, banks can more easily find arguments that counter the narratives. For both academics and practitioners, it is important to note that banks, as important institutions in our economic system, deserve special attention and also special rigour. In particular, premature narratives such as that of Bill Gates need to be viewed critically. Such narratives, consciously or unconsciously linked to economic theories, operate in a performative channel, creating fictional expectations, establishing causal relationships or merely suggesting deductions that provide orientation and form the basis for strategies of action to deal with the uncertain future. When these narratives are then shared by thought collectives, they can undermine confidence and change reality without there being any equivalent in the real economy. Just think of the power of Mario Draghi's 'whatever it takes' speech in 2012 to calm the financial markets in the wake of the sovereign debt crisis with two sentences²³, without the fundamentals of the affected countries having changed in the slightest (see also *Beckert* 2016, pp. 82, 89, 256–257).

²³ "Within our mandate, the ECB is ready to do whatever it takes to preserve the euro. And believe me, it will be enough." (*Draghi* 2012, <https://www.ecb.europa.eu/press/key/date/2012/html/sp120726.en.html>).

Of course, this work is not free of limitations. First, when criticizing schools of thought, there is always the risk of attacking a straw man, and it must be questioned whether economists really do think about the future of banks in the ways represented here. However, doubt as to whether economists think in these ways consciously does not make the analysis in this paper less relevant; because of their tacit knowledge of the NIE, economists might still think in these ways unconsciously. Second, the account given in this paper has been presented in terms of the economic categories of market and institutions. However, a narrative may change its orientation by adding or omitting categories, and by weighting categories differently. Therefore, further research is needed to examine the influence of other economic categories, such as regulation and technology, on thinking about the future of banks. Finally, we view banks as institutions at a high level of abstraction. Special bank services and products, such as loans and deposits, are not taken into account. This more functionalist view of banks will not be considered here, but in another paper. In particular, by comparing the theory of intermediation and the theory of 'money creation out of thin air', the role of banks in the monetary system is analysed in more detail. In doing so, an internal perspective will take into account both banks as specific institutions in their own right and their special function in dealing with money.

References

- Alchian, A. A./Demsetz, H. (1972): Production, Information Costs, and Economic Organization, in: The American Economic Review, Vol. 62(5), pp. 777 – 795.*
- Andreani, E./Neuberger, D. (2004): Relationship Finance by Banks and Non-bank Institutional Investors: A Review Within the Theory of the Firm, Thünen-Series of Applied Economic Theory, Working Paper, No. 46.*
- Ankarloo, D. (2002): New Institutional Economics and Economic History, in: Capital & Class, Vol. 26(3), pp. 9 – 36.*
- Ankarloo, D./Palermo, G. (2004): Anti-Williamson: A Marxian Critique of New Institutional Economics, in: Cambridge Journal of Economics, Vol. 28(3), pp. 413 – 429.*
- Beck, H. (2001): Banking Is Essential, Banks Are Not: The Future of Financial Intermediation in the Age of the Internet, in: Netnomics, Vol. 3(1), pp. 7 – 22.*
- Beckert, J. (2016): Imagined Futures: Fictional Expectations and Capitalist Dynamics, Cambridge, MA: Harvard University Press.*
- Bernstein, P. L. (2007): Capital Ideas Evolving, Hoboken, New Jersey: John Wiley & Sons.*
- Biebricher, T. (2018): The Political Theory of Neoliberalism, Stanford, California: Stanford University Press.*
- Boldyrev, I. (2019): The Ontology of Uncertainty in Finance: The Normative Legacy of General Equilibrium, in: Topoi, Vol. 40(4), pp. 725 – 731.*

- Boldyrev, I./Ushakov, A.* (2016): Adjusting the Model to Adjust the World: Constructive Mechanisms in Postwar General Equilibrium Theory, in: *Journal of Economic Methodology*, Vol. 23(1), pp. 38 – 56.
- Boot, A. W. A./Thakor, A. V.* (2000): Can Relationship Banking Survive Competition?, in: *The Journal of Finance*, Vol. 55(2), pp. 679 – 713.
- Bromley, D. W.* (2006): *Sufficient Reason: Volitional Pragmatism and the Meaning of Economic Institutions*, Princeton, NJ: Princeton University Press.
- Callon, M.* (1998): Introduction: The Embeddedness of Economic Markets in Economics, in: *The Sociological Review*, Vol. 46(1_suppl), pp. 1 – 57.
- Chick, V./Dow, S. C.* (2013): Financial Institutions and the State: A Re-Examination, in: *Rochon, L.-P./Seccareccia, M. (Eds.), Monetary Economies of Production*, Cheltenham, UK ; Northampton, MA, USA: Edward Elgar Publishing, pp. 99 – 111.
- Coase, R.* (1937): The Nature of the Firm, in: *Economica*, Vol. 4(16), pp. 386 – 405.
- Cochran, K. P.* (1955): *The Concept of Economic Planning in Institutional Economics*, Ohio State University.
- Coleman, J. S.* (1990): *Foundations of Social Theory*, Cambridge, Mass: Belknap Press of Harvard University Press.
- De Vroey, M.* (1998): Is the Tâtonnement Hypothesis a Good Caricature of Market Forces?, in: *Journal of Economic Methodology*, Vol. 5(2), pp. 201 – 221.
- De Vroey, M.* (1999): The Marshallian Market and the Walrasian Economy: Two Incompatible Bedfellows, in: *Scottish Journal of Political Economy*, Vol. 46(3), pp. 319 – 338.
- Dequech, D.* (1997): A Brief Note on Keynes, Unknown Probabilities and Uncertainty in a Strong Sense, in: *History of Economic Ideas*, Vol. 5(2), pp. 101 – 110.
- Dequech, D.* (2006): The New Institutional Economics and the Theory of Behaviour Under Uncertainty, in: *Journal of Economic Behavior & Organization*, Vol. 59(1), pp. 109 – 131.
- Diamond, D. W.* (1984): Financial Intermediation and Delegated Monitoring, in: *The Review of Economic Studies*, Vol. 51(3), pp. 393 – 414.
- Dopfer, K./Foster, J./Potts, J.* (2004): Micro-meso-macro, in: *Journal of Evolutionary Economics*, Vol. 14(3), pp. 263 – 279.
- Dorman, P.* (1991): Marxism, Methodological Individualism and the New Institutional Economics: Further Considerations, in: *Journal of Institutional and Theoretical Economics (JITE)/Zeitschrift für die gesamte Staatswissenschaft*, Vol. 147(2), pp. 364 – 374.
- Dosi, G./Egidi, M.* (1991): Substantive and Procedural Uncertainty: An Exploration of Economic Behaviours in Changing Environments, in: *Journal of Evolutionary Economics*, Vol. 1(2), pp. 145 – 168.
- Dow, G. K.* (1987): The Function of Authority in Transaction Cost Economics, in: *Journal of Economic Behavior & Organization*, Vol. 8(1), pp. 13 – 38.
- Dow, S. C.* (2012): What Are Banks and Bank Regulation For? A Consideration of the Foundations for Reform, in: *European Journal of Economics and Economic Policies: Intervention*, Vol. 9(1), pp. 39 – 56.

- Draghi, M. (2012): Speech by Mario Draghi, President of the European Central Bank at the Global Investment Conference in London 26 July 2012, accessed 20 May 2024, URL: <https://www.ecb.europa.eu/press/key/date/2012/html/sp120726.en.html>.
- Dugger, W. M. (1979): Methodological Differences between Institutional and Neoclassical Economics, in: *Journal of Economic Issues*, Vol. 13(4), pp. 899–909.
- Dugger, W. M. (1980): Power: An Institutional Framework of Analysis, in: *Journal of Economic Issues*, Vol. 14(4), pp. 897–907.
- Dugger, W. M. (1983): The Transaction Cost Analysis of Oliver E. Williamson: A New Synthesis?, in: *Journal of Economic Issues*, Vol. 17(1), pp. 95–114.
- Dugger, W. M. (1988a): A Research Agenda for Institutional Economics, in: *Journal of Economic Issues*, Vol. 22(4), pp. 983–1002.
- Dugger, W. M. (1988b): An Institutional Analysis of Corporate Power, in: *Journal of Economic Issues*, Vol. 22(1), pp. 79–111.
- Dugger, W. M. (1988c): Radical Institutionalism. Basic Concepts, in: *Review of Radical Political Economics*, Vol. 20(1), pp. 1–20.
- Dugger, W. M. (Ed.) (1989): *Radical Institutionalism: Contemporary Voices*, New York: Greenwood Press.
- Dugger, W. M. (1990): The New Institutionalism: New But Not Institutionalist, in: *Journal of Economic Issues*, Vol. 24(2), pp. 423–431.
- Dugger, W. M. (1994): Williamson, O. E., in: Hodgson, G. M./Samuels, W./Tool, M. (Eds.), *The Elgar Companion to Institutional and Evolutionary Economics*, Vol. 2, Aldershot, Hants, England ; Brookfield, Vt., USA: Edward Elgar Publishing, pp. 378–380.
- Dunn, S. P. (2000): Fundamental Uncertainty and the Firm in the Long Run, in: *Review of Political Economy*, Vol. 12(4), pp. 419–433.
- Dunn, S. P. (2001): Bounded Rationality Is Not Fundamental Uncertainty: A Post Keynesian Perspective, in: *Journal of Post Keynesian Economics*, Vol. 23(4), pp. 567–587.
- Erlei, M./Leschke, M./Sauerland, D. (2016): *Institutionenökonomik*, 3., überarbeitete Auflage. Stuttgart: Schäffer-Poeschel Verlag.
- Farasoo, A. (2024): The Question of Epistemic Fallacy in Practical Research: The Case of IR, in: *Journal of Critical Realism*, Vol. 23(2), pp. 121–143.
- Fontana, G. (2009): *Money, Uncertainty and Time*, London ; New York: Routledge.
- Fourie, F. C. v. N. (1991): The Nature of the Market. A Structural Analysis, in: Hodgson, G. M./Screpanti, E. (Eds.), *Rethinking Economics. Markets, Technology and Economic Evolution*, Aldershot, Hants, England ; Brookfield, Vermont, USA: Edward Elgar Publishing, pp. 40–57.
- Fourie, F. C. v. N. (1993): In the Beginning There Were Markets, in: Pitelis, C. (Ed.), *Transaction Costs, Markets and Hierarchies*, Oxford, UK ; Cambridge, Mass: Blackwell, pp. 41–65.
- Freixas, X. (2005): Deconstructing Relationship Banking, in: *Investigaciones económicas*, Vol. 29(1), pp. 3–31.

- Friedman, M.* (1953): *The Methodology of Positive Economics*, in: *Essays in Positive Economics*, Chicago ; London: The University of Chicago Press, pp. 3–43.
- Furubotn, E. G./Richter, R.* (2009): *Institutions and Economic Theory: The Contribution of the New Institutional Economics*, 2nd ed. Ann Arbor, Mich: The University of Michigan Press.
- Gerstenberger, H.* (2017): *Markt und Gewalt: die Funktionsweise des historischen Kapitalismus*, Münster: Westfälisches Dampfboot.
- Granovetter, M.* (1985): *Economic Action and Social Structure: The Problem of Embeddedness*, in: *American Journal of Sociology*, Vol. 91(3), pp. 481–510.
- Hahnel, R.* (2007): *The Case Against Markets*, in: *Journal of Economic Issues*, Vol. 41(4), pp. 1139–1159.
- Hamada, K.* (2012): *Uncertainty and Horizontal Mergers*, in: *Journal of Institutional and Theoretical Economics*, Vol. 168(2), pp. 252–265.
- Haugen, R. A.* (2002): *The Inefficient Stock Market: What Pays off and Why*, 2nd ed. Upper Saddle River, N.J: Prentice Hall.
- Hedström, P./Swedberg, Richard* (1998): *Social Mechanisms: An Introductory Essay*, in: Hedström, P./Swedberg, R. (Eds.), *Social Mechanisms. An Analytical Approach to Social Theory*, Cambridge: Cambridge University Press, pp. 1–31.
- Heilmann, C./Szymanowska, M./Fernández, M. V.* (2024): *Financial Economics: What Kind of Science Is It?*, in: Sandberg, J./Warenski, L. (Eds.): *The Philosophy of Money and Finance*, Oxford: Oxford University Press, pp. 111–128.
- Hodgson, G. M.* (1991): *Economic Evolution: Intervention Contra Pangloss*, in: *Journal of Economic Issues*, Vol. 25(2), pp. 519–533.
- Hodgson, G. M.* (1993): *Transaction Costs and the Evolution of the Firm*, in: Pitelis, C. (Ed.), *Transaction Costs, Markets and Hierarchies*, Oxford, UK ; Cambridge, Mass: Blackwell, pp. 77–100.
- Hodgson, G. M.* (1994): *Institutionalism, ‘Old’ and ‘New’*, in: Hodgson, G. M./Samuels, W./Tool, M. (Eds.), *The Elgar Companion to Institutional and Evolutionary Economics*, Vol. 1, Aldershot, Hants, England : Brookfield, Vt., USA: Edward Elgar Publishing, pp. 397–402.
- Hodgson, G. M.* (1996): *Corporate Culture and the Nature of the Firm*, in: Groenewegen, J- (Ed.), *Transaction cost economics and beyond*, Boston ; Dordrecht ; London: Kluwer Academic Publishers, pp. 249–270.
- Hodgson, G. M.* (1999a): *Evolution and Institutions: On Evolutionary Economics and the Evolution of Economics*, Cheltenham, UK ; Northampton, MA, USA: Edward Elgar Publishing.
- Hodgson, G. M.* (1999b): *Institutions and Habits*, in: O’Hara, P. A. (Ed.), *Encyclopedia of political economy*. Vol. 1: A–K, London ; New York: Routledge, pp. 535–538.
- Hodgson, G. M.* (2000): *From Micro to Macro: The Concept of Emergence and the Role of Institutions*, in: Burlamaqui, L./Castro, A. C./Chang, H.-J. (Eds.), *Institutions and the Role of the State*, Cheltenham, UK ; Northampton, MA, USA: Edward Elgar, pp. 103–126.

- Hodgson, G. M.* (1988): *Economics and Institutions: A Manifesto for a Modern Institutional Economics*, Cambridge, UK : Oxford, UK: Polity Press ; B. Blackwell.
- Hübenbecker, U.* (2024): Is Nobody Interested in the Future of Banks? A Scoping Literature Review on the State of the Debate, in: *Management Review Quarterly*, Vol. 74(3), pp. 1283 – 1326.
- Hutchison, T. W.* (1984): Institutional Economics Old and New, in: *Zeitschrift für die gesamte Staatswissenschaft/Journal of Institutional and Theoretical Economics*, Vol. 140(1), pp. 20 – 29.
- Jennings, A.* (1999): Instincts, in: O'Hara, P. A. (Ed.), *Encyclopedia of political economy*. Vol. 1: A – K, London ; New York: Routledge, pp. 518 – 520.
- Jensen, M. C./Meckling, W. H.* (1976): Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure, in: *Journal of Financial Economics*, Vol. 3, pp. 305 – 360.
- Kaja, F./Martino, E. D./Pacces, A. M.* (2021): Fintech and the Law and Economics of Disintermediation, in: Chiu, I./Deipenbrock, G. (Eds.): *Routledge Handbook of Financial Technology and Law*, London & New York: Routledge, pp. 78 – 95.
- King, B.* (2019): *Bank 4.0: Banking Everywhere, Never at a Bank*, Chichester, West Sussex, United Kingdom: Wiley.
- Kysucky, V./Norden, L.* (2016): The Benefits of Relationship Lending in a Cross-Country Context: A Meta-Analysis, in: *Management Science*, Vol. 62(1), pp. 90 – 110.
- Langlois, R. N.* (1984): Internal Organization in a Dynamic Context: Some Theoretical Considerations, in: Jussawalla, M./Ebenfield, H. (Eds.), *Communication and Information Economics: New Perspectives*, Amsterdam ; New York ; Oxford: North Holland, pp. 23 – 49.
- Lawson, T.* (2005): The Nature of Institutional Economics, in: *Evolutionary and Institutional Economics Review*, Vol. 2(1), pp. 7 – 20.
- Lukes, S.* (1974): *Power: A Radical View*, London: Macmillan Education UK.
- MacKenzie, D. A.* (2006): *An Engine, Not a Camera: How Financial Models Shape Markets*, Cambridge, Mass: MIT Press.
- Meramveliotakis, G./Milonakis, D.* (2010): Surveying the Transaction Cost Foundations of New Institutional Economics: A Critical Inquiry, in: *Journal of Economic Issues*, Vol. 44(4), pp. 1045 – 1072.
- Mirowski, P.* (1981): The Rise (and Retreat) of a Market: English Joint Stock Shares in the Eighteenth Century, in: *The Journal of Economic History*, Vol. 41(3), pp. 559 – 577.
- Mirowski, P.* (1984): Physics and the 'Marginalist Revolution', in: *Cambridge Journal of Economics*, Vol. 8(4), pp. 361 – 379.
- Mirowski, P.* (1989): *More Heat Than Light: Economics as Social Physics, Physics as Nature's Economics*, Cambridge: Cambridge University Press.
- Mirowski, P.* (2007): Markets Come to Bits: Evolution, Computation and Markomata in Economic Science, in: *Journal of Economic Behavior & Organization*, Vol. 63(2), pp. 209 – 242.

- Moschandreas, M.* (1997): The Role of Opportunism in Transaction Cost Economics, in: *Journal of Economic Issues*, Vol. 31(1), pp. 39 – 58.
- Nersisyan, Y./Wray, L. R.* (2010): The Global Financial Crisis and the Shift to Shadow Banking, in: *Intervention*, Vol. 7(2), pp. 377 – 400.
- Nicoletti, B.* (2021): *Banking 5.0: How Fintech Will Change Traditional Banks in the “New Normal” Post Pandemic*, Cham: Springer International Publishing.
- Noorderhaven, N. G.* (1996): Opportunism and Trust in Transaction Cost Economics, in: *Groenewegen, J. (Ed.), Transaction cost economics and beyond*, Boston; Dordrecht; London: Kluwer Academic Publishers, pp. 105 – 128.
- North, D. C.* (1990): *Institutions, Institutional Change and Economic Performance*, Cambridge: Cambridge University Press.
- North, D. C./Thomas, R. P.* (1973): *The Rise of the Western World: A New Economic History*, Cambridge: Cambridge University Press.
- Nutzinger, H. G.* (1982): The Economics of Property Rights – A New Paradigm in Social Science?, in: *Stegmüller, W./Balzer, W./Spohn, W. (Eds.), Philosophy of Economics*, Berlin ; Heidelberg ; New York: Springer-Verlag, pp. 169 – 190.
- Omarini, A. E.* (2018): Banks and Fintechs: How to Develop a Digital Open Banking Approach for the Bank’s Future, in: *International Business Research*, Vol. 11(9), pp. 23 – 36.
- Ötsch, W. O.* (1991): Gibt es eine Grundlagenkrise der neoklassischen Theorie?, in: *Jahrbücher für Nationalökonomie und Statistik*, Vol. 208(6), pp. 642 – 656.
- Ötsch, W. O.* (2019): *Mythos Markt. Mythos Neoklassik: das Elend des Marktfundamentalismus*, Marburg: Metropolis-Verlag.
- Palermo, G.* (2000): Economic Power and the Firm in New Institutional Economics: Two Conflicting Problems, in: *Journal of Economic Issues*, Vol. 34(3), pp. 573 – 601.
- Palermo, G.* (2007a): Misconceptions of Power: From Alchian and Demsetz to Bowles and Gintis, in: *Capital & Class*, Vol. 31(2), pp. 147 – 185.
- Palermo, G.* (2007b): The Ontology of Economic Power in Capitalism: Mainstream Economics and Marx, in: *Cambridge Journal of Economics*, Vol. 31(4), pp. 539 – 561.
- Palermo, G.* (2019): Power: A Marxist View, in: *Cambridge Journal of Economics*, Vol. 43(5), pp. 1353 – 1375.
- Perelman, M.* (1999): *The Natural Instability of Markets: Expectations, Increasing Returns, and the Collapse of Capitalism*, 1st ed. New York: St. Martin’s Press.
- Pitelis, C. N.* (1998): Transaction Costs and the Historical Evolution of the Capitalist Firm, in: *Journal of Economic Issues*, Vol. 32(4), pp. 999 – 1017.
- Reuter, N.* (1996): *Der Institutionalismus: Geschichte und Theorie der evolutionären Ökonomie*, 2. Aufl. Marburg: Metropolis-Verl.
- Rutherford, M.* (1989): What Is Wrong With the New Institutional Economics (And What Is Still Wrong With the Old)?, in: *Review of Political Economy*, Vol. 1(3), pp. 299 – 318.
- Rutherford, M.* (1994): *Institutions in Economics: The Old and the New Institutionalism*, Cambridge: Cambridge University Press.

- Scholtens, B./Wensveen, D. v. (2003): The Theory of Financial Intermediation: An Essay on What It Does (Not) Explain, in: SUERF Studies.
- Simon, H. A. (1972): Theories of Bounded Rationality, in: McGuire, C. B./Radner, R. (Eds.), *Decision and Organization: A Volume in Honor of Jacob Marschak*, Amsterdam: North-Holland, pp. 161 – 176.
- Simon, H. A. (1976): From Substantive to Procedural Rationality, in: Latsis, S. J. (Ed.), *Method and Appraisal in Economics*, Cambridge ; New York: Cambridge University Press, pp. 65 – 86.
- Somers, M. R. (1998): Symposium on Historical Sociology and Rational Choice Theory „We're No Angels“: Realism, Rational Choice, and Relationality in Social Science, in: *American Journal of Sociology*, Vol. 104(3), pp. 722 – 784.
- Swedberg, R. (2003): *Principles of Economic Sociology*, Princeton, N.J: Princeton University Press.
- Thakor, A. V. (2020): Fintech and Banking: What Do We Know?, in: *Journal of Financial Intermediation*, Vol. 41, pp. 100833.
- Valentinov, V. (2012): The Institutional Implications of the General Systems Theory: The Societal Role of the Market, in: *Systems Research and Behavioral Science*, Vol. 29(3), pp. 253 – 262.
- Veblen, T. (1898): The Instinct of Workmanship and the Irksomeness of Labor, in: *American Journal of Sociology*, Vol. 4, pp. 187 – 201.
- Veblen, T. (1909): The Limitations of Marginal Utility, in: *Journal of Political Economy*, Vol. 17, pp. 620 – 636.
- Veblen, T. (2011): *The Essential Writings of Thorstein Veblen*, Camic, C./Hodgson, G. M. (Eds.), London & New York: Routledge.
- Whalen, C. J. (2021): Storytelling and Institutional Change: The Power and Pitfalls of Economic Narratives, in: Whalen, C. J. (Ed.), *Institutional Economics: Perspectives and Methods in Pursuit of a Better World*, London & New York: Routledge, pp. 247 – 270.
- Williamson, O. E. (1975): *Markets and Hierarchies: Analysis and Antitrust Implications a Study in the Economics of Internal Organization*, New York; London: The Free Press.
- Williamson, O. E. (1985): *The Economic Institutions of Capitalism*, New York; London: The Free Press.
- Williamson, O. E. (1991): The Logic of Economic Organization, in: Williamson, O. E./Winter, S. G. (Eds.), *The Nature of the Firm: Origins, Evolution, and Development*, New York ; Oxford: Oxford University Press, pp. 90 – 116.
- Williamson, O. E. (1996): Efficiency, Power, Authority and Economic Organization, in: Groenewegen, J. (Ed.), *Transaction cost economics and beyond*, Boston ; Dodrecht ; London: Kluwer Academic Publishers, pp. 11 – 42.
- Winter, S. G. (1991): On Coase, Competence, and the Corporation, in: Williamson, O. E./Winter, S. G. (Eds.), *The Nature of the Firm: Origins, Evolution, and Development*, New York ; Oxford: Oxford University Press, pp. 179 – 195.

- Wrenn, M. V. (2016): Immanent Critique, Enabling Myths, and the Neoliberal Narrative, in: Review of Radical Political Economics, Vol. 48(3), pp. 452 – 466.*
- Young, D. (2002): The Meaning and Role of Power in Economic Theories, in: Hodgson, G. M. (Ed.), A Modern Reader in Institutional and Evolutionary Economics, Cheltenham, UK ; Northampton, MA, USA: Edward Elgar Publishing, pp. 48 – 61.*
- Zoglauer, T. (1993): Das Problem der theoretischen Terme: Eine Kritik an der strukturalistischen Wissenschaftstheorie, Wiesbaden: Vieweg.*