This is an Accepted Manuscript of an article published by Taylor & Francis in the *Journal of Economic Issues*

The published article will be available soon at https://www.tandfonline.com/loi/mjei20

On the constitutive role of law for economics – An elaboration on the contribution by the German socio-legal school

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This paper draws attention to the forgotten German socio-legal school of economics. According to this school, the actual starting point of economic theory is not the individual as such, but the social environment with its legal stipulations that the individual is necessarily a part of. Based on a corresponding retrospect, the paper makes visible the tacit legal preconditions of economic theory. Some of the fundamental concepts of economic models – exchange, value, and equilibrium – require the existence of a legal system that defines legal persons and their rights and duties towards each other.

Keywords: neoclassical economics; assumptions; law and economics; socio-legal school

JEL Classification: A12; B15; K00

1. Introduction

The institutions that are necessary for the competitive economy and the price system to exist in the first place, but also to function smoothly, are largely ignored by economists (Geoffrey Hodgson 2015). These institutions include, among others, money, capital, financial accounting, the firm, and the market. Yet the most fundamental institution for the price system, and therefore for economics as a science, is probably law, defined broadly to include its enforcement mechanisms. It is the purpose of this paper to indicate how this institution could be conceived of by economists so that they are able to understand and model its importance for and its influence on the working of the price system.

The approach of this paper complements the discipline known as "Law and Economics" which tackles the problem the other way around by imposing economic standards on the evaluation of legal regulations (Samuels and Mercuro 1984) and, more generally, applying economic theories to analyze law (Hovenkamp 1995). I build from the German socio-legal school (sozialrechtliche Schule) of economics which developed at the turn of the 20th century and was part of the broader historical school of economics. Working along similar lines as John R. Commons, several scholars writing in the socio-legal tradition tried to establish economics as a social science that does not command any universal scientific laws, as do the natural sciences, but only relative ones that depend on the underlying, historically specific legal system. Similar to Heinsohn and Steiger (2009, 30), the socio-legal economists tried to find a compromise between the classical British and the Austrian schools on the one hand, and the historical school on the other. They argued that there actually are economic laws, but that economics has to start not from the analysis of the actions and choices of a single person, like those of Robinson Crusoe, but from social rules, whether codified explicitly or not, that define the relationship between several human beings (Hesse 1950, 656). Diehl (1941) provides a good survey of the socio-legal school, although he is not very generous in acknowledging his predecessors, barely mentioning Rudolf Kaulla and Hermann Roesler. Short introductions are contained in Hesse (1956) and Suranyi-Unger (1932, 29 f., 79 ff.).

What I do in this paper is to screen this literature for elements that can be employed in an updated analysis of how the institution of law can and must be seen as a necessary precondition of economic theory. The legal system will be shown to be

constitutive for economic theory. The paper links to the newly developing literature on legal institutionalism as understood by Deakin et al. (2017). Pistor (2013) discusses the constitutive role of law for financial markets, Deakin et al. (2017) analyze the role of law for the constitution of property rights and the firm, and Atkinson et al. (2019) cover, with a similar purpose in mind, the legal nature of the corporation. I will delve into the legal preconditions of three crucial economic concepts: exchange, exchange value, and equilibrium.

Commons (1924) discussed especially the first two of these concepts from a closely related perspective, and I will highlight throughout the paper the areas in which the socio-legal school and Commons were thinking and arguing along similar lines. However, Commons and the German socio-legal scholars differed from each other on certain issues. Commons made his arguments against the background of the common law tradition, which is why he dedicated a large part of his writings to a discussion of judicial decisions and their relevance for economic theories and concepts. The socio-legal school, writing against the background of the civil law tradition, argued in a more abstract way. It was not of major importance for them to delve into legal history. As my paper starts from the socio-legal tradition, it can be read as a development of the more abstract aspects of Commons's approach. That makes the paper a complement to the recent book by Atkinson and Paschall (2016), which builds instead on Commons's discussion of judicial decisions.

On a certain level, there is of course also the reverse relationship of economic phenomena influencing legal relationships, and I do not in any way intend to deny or downplay its importance. The contributions by Samuels (1989), Hodgson (2003), and Atkinson and Paschall (2016) on the interdependency of law and economics when it comes to explaining their parallel evolution are central to an understanding of the mutual relatedness of law and economics. What I do is take the current state of economics as given and carve out its legal preconditions.

As I start from the current state of economics, I do not go into the question, examined by Hodgson (2003, 382), of whether in the beginning there were markets or bureaucracies. That is why the approach in this paper differs from constitutional economics, despite some considerable overlap in certain details. It is not important for my question whether the legal system is created in an ultimate and voluntary constitutional contract (Buchanan 1987, 246) or in how far it can be sustained by mere conventions and without a state. I consider a legal system to be a system of social rules

that is enforced, be it by the state or by something different, and analyze its constitutive role in and its influence on economics.

Section 2 builds on the critique that was and is maintained by adherents of historical and institutional schools of economics against the practice of neoclassical economists to base their theories on the observation of actually or theoretically isolated individuals and to disregard the social aspects that unite them. Special attention is given to Stammler ([1896] 1924), which can be seen as the founding treatise of the German socio-legal school. Stammler's insight was anticipated by Roesler (1868a, 1868b, 1878) and was further elaborated by Berolzheimer (1907) and Kaulla (1916, 1919, 1919/20, 1951). Diehl (1922) and Amonn (1927) tried to develop the framework of an economic theory that is not based on individual choices, but on social relations. Section 3 traces the fate of the socio-legal school after the Second World War and argues that the spirit of the school lived on to some extent in the intellectual fathers of the German social market economy, the Ordoliberals of the Freiburg School. In the sections four to six I elaborate on the contributions of several socio-legal economists in order to show where present-day economics would profit from their insights. In this discussion, I also highlight the high degree of affinity between the socio-legal approach and the approach of John Commons. Section 4 demonstrates the point of the socio-legal school by explaining the difference between exchange considered as an ahistorical action, as it is common in economic theory since Schumpeter (1908) and Mises (1949), and exchange considered as a social event presupposing social rules. Section 5 extends this argument to the phenomenon of exchange value. I show that this term does not relate to tangible or intangible goods, but only to rights in these goods that must be constituted and granted by the legal system. Section 6 finally illustrates the legal preconditions of the concept of equilibrium. Hayek's (1945) seminal contribution to the logic of the price system becomes institutionally underpinned by demonstrating that the coordinating market processes, distinctive of capitalism, are based on the existence of capital-based enterprises maximizing their monetary profit. Only if the term capital is understood as a legal concept, as Geoffrey Hodgson (2014) and Braun (2017) demand, can these market processes be motivated. Following Braun (2019b), I further demonstrate the dangers that society faces if economists continue, on one hand, to ignore the legal preconditions of their theories and, on the other, to use these theories nonetheless to endorse legal reforms. In recent years, neoclassical theory has been applied to the reform of financial

accounting regulation. The consequences have been a severely misguided market process and highly aggravated effects from the financial crisis.

2. The importance of the legal system for economic theory

Rothbard (2009) is the rare case of a treatise on economics that makes an explicit choice among several socio-legal systems that may serve as a starting point for economic theories. He (2009, 84) declares that the first part of his book – the one on economics proper – will only deal with a society "based purely on voluntary action, entirely unhampered by violence or threads of violence." By assuming away violence, however, and focusing on mere voluntary actions, he also gets rid of the necessity to define any underlying legal system. If everything happens voluntary by definition, rules of social conduct are superfluous.

Most economists in the neoclassical tradition are less explicit than Rothbard. Like him, however, they assume and deal only with a society where no violence exists – at least not by private parties – and all actions and exchanges are voluntary. Yet, the apparent lack of a legal system and an enforcing police and judiciary apparatus in economic theory does not imply that these institutions are not present or unnecessary. Arrow (1994, 1), who can hardly be accused of being biased against neoclassical economics, argued that economists propose to explain in terms of individuals alone but actually use social categories in economic analysis all the time. The "rules of the game" are especially important for the applicability of certain models but are rarely made an explicit issue (Arrow 1994, 5). This means that "the governmental and institutional framework" is at best mere "data" for the economist (Samuelson 1947, 8). To deal with the working of a legal system and other social categories seems unnecessary. These institutions are assumed to work perfectly and it is taken for granted that the economy under consideration is in orderly conditions.

According to Hodgson (2000), it is the defining feature of institutional economics that it does not take the individual as given. Instead, institutions affect individuals in fundamental ways. Commons (1924, 4, 137) is well known for criticizing the neoclassical economists of his day for taking the notions that underlie their "individualistic standpoint" for granted, namely ethics, law, private property, liberty, society, and government. The socio-legal school took the same line, and Kaulla (1916, 300f.) hits the nail on the head:

> The logical precondition of [economists'] reasoning, abstracting as it does from the state, is in reality not a stateless, anarchic state of affairs; on the contrary, their reasoning presupposes the existence of a state whose entire institutions and functions are perfectly stable, so that it is possible to stipulate the latter's influence on the economy as a permanently constant factor and therefore eliminate it from the discussions.

In the German-speaking world, it was most notably the historical school of economics that stressed the historical relativity of the object of economics. Economics, this school argued, must not ignore the underlying institutional and historical prerequisites of their theories because these prerequisites are not cast in stone but change constantly. Yet, the historical school economists were led by their rather non-theoretical approach to interpret the economic states of society as stages of a loosely defined evolution. When new developments occurred, they would describe the new facts in extenso, but they were not able to systematize them.

It is at this point, Hesse (1956, 576) explains, that the German socio-legal school came into play. Rodbertus (1884) and Wagner (1894) had made some first but inconsequential steps in this direction (see Diehl 1941, 99), and Stolzmann (1896), with his eclectic "socio-organic" approach, might serve as a link between the neoclassical and the socio-legal schools (Diehl 1941, 82 ff.). But it was Stammler ([1896] 1924) who tried to work out systematically one institutional feature that is of fundamental importance in constituting the shape of the respecting economies. Stammler found that this "fundamental feature of all social life are rules that normalize outward behavior" (Hesse 1956, 576).

Similar to Commons (Gonce 1971: 87), Stammler ([1896] 1924) tried to find and define the relationship between the legal system and economics. According to him, the choices and actions of isolated individuals cannot serve as the starting point for a social science like economics. Stammler ([1896] 1924, 10) argued rather that the preconditions of the social existence of human beings must stand at the beginning of the analysis.

What he himself aimed at was a fundamental critique of historical materialism which claimed that the design of the legal system is determined fully by the economic conditions of production. Historical materialists considered law an outcome of economic struggles throughout history, not an active determinant of this development. Although Stammler dealt only cursorily with what today is called neoclassical economics, his arguments are worth considering. That is because in downgrading law

conceptually, modern economics resembles historical materialism closely. In both historical materialism and neoclassical economics, law is not considered as a necessary precondition of economic science, but as a kind of epiphenomenon (Deakin et al. 2017, 192). Even the socialist calculation debate between socialist and free-market economists has been shown to suffer from a lack of clarification when it comes to developing the legal details of a system of private property (Geoffrey Hodgson 2016).

According to Roesler (1868b, 311ff.), the tendency of historical materialism to downplay the role of law must itself be traced back all the way to the classical school, especially to Adam Smith, who "ignored the legal element as far as possible and concentrated on the technical element." Indeed most classical economists simply assumed that a system of property rights existed but did not go so far as even to make this assumption explicit (Pearson 1997, 7). It seems that the gap identified by Stammler has existed in economic theory for centuries without being filled, and it cannot be denied that his rendition of the core of historical materialism is still relevant and fits neoclassical economics accurately:

> According to this doctrine, economic phenomena stem from nature; – legal regulation is only a human tool that has been added next to them. The natural power and the necessary scientific lawfulness of the former exist independently. (Stammler [1896] 1924, 43, emphasis added)

Berolzheimer (1910, 151) made the same argument explicitly against classical and neoclassical economics. He criticized economists for following the logic of natural law philosophy and attempting to "find eternal, inviolable economic laws" without considering "the respective legal system of a community." It is a mistake to transfer the results that are found by thought experiments about isolated individuals to actual, historically specific societies (Berolzheimer 1910, 157). Dobretsberger (1927, 579) added that economists thus make the conventional institutions that they unconsciously presuppose appear as inevitable laws of nature.

Stammler ([1896] 1924, 82f.) opposed the point of view that (scientific) laws of economics could be formulated independently of legal relations. He argued vehemently that social life is necessarily an externally regulated life. Wherever there are human beings connected to each other, there must be external regulations, be they laws or

customs, which must be thought of as existing beyond the connected persons. Without starting from and including the social rules that define the relationship between people in society, a social science would be impossible. For social science, social rules are logically prior (Stammler [1896] 1924, 97f.). He elaborates on this point at some length for economics in particular:

> All economic investigations, i.e., all examinations of the economy from a social point of view, are necessarily based on a certain legal (or conventional) regulation in the sense that this concrete legal normalization is the logical precondition of the respective economic concept and theorem. […] Each discussion of rent, wages, interest, or profit depends on the existence of a concrete legal system as do all theories of money, credit, prices, or any other chapter of economic research. (Stammler [1896] 1924, 177f.)

Stammler's point is that law is a constitutive and logical precondition of economics (Hesse 1926, 152). Kaulla (1919/20, 137f.) summarizes this viewpoint, adopted by the socio-legal school from Stammler, concisely:

> There is no economic activity that does not imply a legal activity, and no economic institution that is not a legal institution at the same time. The production of goods, the turnover of goods, the consumption of goods – all proceed as legal acts and on the basis of legal institutions that allow somebody to use land; to use tools and machines; to put oneself or others to work with these; to use the products for oneself or to cede them to others etc. It is impossible to think of a procedure of economic life which does not proceed the way it does because of the existence of legal regulations and which would not proceed differently if the legal system were designed differently.

To eliminate the legal system from economics is but a fiction (Kaulla 1951, 68). Among the socio-legal economists, it was most notably Amonn (1927) who tried to build economics on the basis not of isolated individual actions, but of social rules that regulate the interactions of individuals. He (1927, 185) agreed with Stammler in that "all economic problems only arise under the precondition of [a] certain social organization of association and are unthinkable without it." This might be a system of rules that make exchange and the formation of prices possible or, in a communist system, the centralistic allocation of goods. The members of the socio-legal school agreed in that the object of economics is the concrete, historically given economy which is organized by a certain legal system.

A large part of Amonn (1927) is dedicated to demonstrate the implications of the socio-legal foundation of economic theory. Particularly he redefined the basic concepts

of economics so that they fit his vision. Also other economists, most notably Diehl (1922) and Stolzmann (1909), were working on a reconstruction of economic theory on the basis of given social rules. However, none of them managed to raise a new generation of economists interested in the theoretical aspects of this approach. Winkel (1977) concludes that the socio-legal school vanished before it had made any significant impact on economic theory.

3. Further development of the socio-legal school

In the rare cases that the socio-legal school is discussed today, it is usually because its intellectual father, Rudolf Stammler, was attacked several times by Max Weber (Swedberg 1998; Coutu and Kirat 2012). In 1907, Weber wrote a very negative, but unfinished review of the second edition of Stammler ([1896] 1924) (see Weber and Albrow 1975), and also later on he returned to the topic several times (Swedberg 1998, 248). Whereas his review is more an epistemological critique of Stammler ([1896] 1924) and does not touch upon the relationship between law and economics (Diehl 1941, 130), in Weber (1911) he attacks the core argument of the socio-legal school. Weber argues that there is no direct link between the legal framework and the working of the economy. There is only a "probability" that a certain paragraph of the Civil Law Code affects the behavior of economic subjects, but this does not necessarily have to be the case (Weber 1911, 269). Weber (1911, 269) adds that

> a socialist order could develop while the Civil Law Code remains fully in force. […] [T]he Civil Law Code does not in any way prevent the state or any other community from creating a fait accompli by […] acquiring the means of production via purchases that are regulated under private law.

Law cannot be regarded as a factor that constitutes economics because there is "no unambiguous, 'functional' relationship" between law and the economy (Weber 1911, 270).

In his response to this attack, Diehl (1941, 133) argued that in Weber's example the legal order does not stay the same at all. Instead, "the meaning of all our legal codes would be obsolete" if the state actually abolished private property in the means of production by purchasing all of them. According to Diehl, the legal order changes in Weber's example even though the Codes remain the same.

More important is Hesse's (1956) answer to Weber's challenge. Hesse (1956, 576) says that the socio-legal school does not ignore the numerous factors that influence social life and the legal system. Yet, this does not invalidate the central idea that "the economy must always be an organized economy." This is also the view of current legal institutionalists for whom markets are constructed in law and do not exist outside it (Pistor 2013, 317).

Independent of the quality of this counter-argument, the social-legal school vanished from the scene after its main proponents died. Yet, its spirit managed to live on in the Freiburg School around Walter Eucken, Wilhelm Röpke, and Franz Böhm, probably best known for their endorsement of Ordoliberalism (Hesse 1955, 98).

For Ordoliberals it is the purpose of the state to create a legal order that guarantees the price mechanism of full competition (Hagemann 2017, 60). Like the adherents of the socio-legal school, Ordoliberals were convinced that the working of the economic system depends on the underlying, historically specific institutions, especially the legal framework. "Our economic world," Röpke (1950, 117 f.) wrote, "has in the main assumed its present shape because certain legal forms and institutions have been created." Röpke (1950, 118) regarded it as a "catastrophic mistake" that classical liberalism considered the market system

> as something autonomous, something based on itself, as a natural condition outside the political sphere requiring no defense or support and to overlook the importance of an ethical, legal and institutional framework corresponding to the principles of the market system.

Due to this mistake, Röpke argued, classical and neoclassical economists were not able to see the inherent flaws of the contemporary version of capitalism and to react to them in an appropriate manner. They did not consider the possibility that the market and competitive system they knew was organized in a "historically conditioned manner" and "could just as well have been arranged in a different way" (Röpke 1950, 113). He himself claimed that, among others, patent law, bankruptcy law, the laws relating to trusts, and the institution of limited liability for corporations had paved the way to "mammoth industries," to "corporate capitalism," to "giant enterprises" and "monopolism" (Röpke 1950, 116) and were therefore responsible for the degeneration of capitalism and the totalitarian response in the first half of the 20th century.

As against the socio-legal school, however, Ordoliberals were less concerned with theory and more with the urgent social and economic problems that Germany and Europe faced after the Second World War. One of their main goals was to provide a list of legal principles that constitute a stable competitive market order. Eucken's (1952) treatise on economic policy is the best known and most elaborate example.

The Ordoliberals were quite successful politically. In the 1940s and 1950s they influenced the economic policy of Germany. However, due to their relative abstinence when it came to theory, they could not serve as a link between the theoretical contributions by the socio-legal school and the newly developing fields of New Institutional Economics and the Property Rights Approach. Therefore, and given the historical amnesia of many economists, the opportunity to revive the school was missed (Müller 1994, 123 f.).

Of current authors, Kingston (2017) comes very close to what the socio-legal and ordoliberal schools had in mind. He does not seem to be aware of his German predecessors though when he argues that capitalism destroys itself because interest groups have captured law-making. Like the socio-legal school, he is well aware that economists must not take a working system of private property rights as a naturally given prerequisite of their analysis. Otherwise they lack the tools to comment on certain degenerations of capitalism. By making the legal preconditions of the capitalistic system visible, he shows how private property rights have been perverted such that they ceased to harmonize private interests and the common weal. Strikingly, he discusses almost the same developments as Röpke and Eucken, namely those of patent law, corporation law, and trademark protection. In reaction to the financial crisis of 2007/08, however, Kingston adds another field where interest groups have perverted law: the area of financial reporting. We will return to this issue in section 6.

4. The legal preconditions of exchange

In the following three sections, I will elaborate on some themes that were stressed by Stammler and his followers in their attempts to demonstrate the meaning and importance of the constitutive role of law for economic theory. The prototypical economic model that I have in mind throughout the following discussion is general competitive equilibrium – a term that I use synonymously with neoclassical economics.

While Hodgson (1992) argued, with good reasons, that a theoretical revolution is required at the core of economics itself and that it will not suffice to add further

dimensions to neoclassical economics, it is essential to understand the institutions that underlie neoclassical economics. We live in a time in which neoclassical theories are being applied to the reform of institutions despite the fact that neoclassical economists are usually unaware of the institutional preconditions of their own models. These reforms have shaken the very foundations of our existence, causing or aggravating irrational exuberance, financial crashes, and deep depressions. The implementation of fair-value measurement throughout the Western world via the reform of international accounting standards is a recent example of a change in the institutional framework of our society, which has been aimed at better according with neoclassical models – with the attendant unpleasant consequences during the financial crisis of 2007/08 (Braun 2019b). It is, therefore, an important task for institutional economists to draw attention to these institutional preconditions and comment on reforms that pervert the foundations of society out of sheer ignorance.

The socio-legal approach is able to contribute to the newly developing literature on legal institutionalism. So far, the constitutive role of law has been discussed notably for the financial market (Pistor 2013), for property rights and the firm (Deakin et al. 2017), and for the corporation (Atkinson et al. 2019). I will demonstrate that a similar point can be made for three concepts that are fundamental for economic theory: exchange, exchange value, and equilibrium. Throughout the discussion, I will highlight the high degree of affinity on these issues between the socio-legal school and Commons (1924).

In his opus magnum Human Action, Ludwig von Mises introduced the term "autistic exchange" in order to show that exchange does not necessarily involve two persons, but may already exist in Robinson Crusoe's isolated world (Geoffrey Hodgson 2016, 42). According to Mises (1949, 195), all action is essentially "the exchange of one state of affairs for another state of affairs," and if "the action is performed by an individual without any reference to cooperation with other individuals, we may call it autistic exchange." From Mises's methodological point of view, this way of defining "exchange" makes perfect sense. He tried to start all analysis of economic problems from acts of choice, and he argued that the given and unchanging characteristics of human action can principally be grasped by all acting humans. As "to exchange" is a human action, it must be explainable by means of the understanding of human action that we have a priori and outside of any specific context – hence his introduction of the term "autistic exchange."

To define "exchange" in an individualistic way without reference to other people or to society, however, is neither an invention nor a unique feature of the Austrian School. Already Schumpeter (1908, 80), in his attempt to outline the methodological foundations of Walrasian general equilibrium theory, anticipated Mises's definition by saying that "all human actions can be interpreted […] as an exchange of one state of affairs for another state of affairs." Schumpeter, however, defined "exchange" in this broad way not mainly in order to be able to make it fit the actions of an isolated individual, but to demonstrate that an exchange between two persons actually consists of two exchanges – each person exchanges one state of affair for a different one. The exchange among individuals is not seen as a phenomenon that somehow transcends those who perform it, but one that can fully and without presuppositions be explained by the motives of these individuals. Schumpeter's methodologically individualistic foundation of the standard neoclassical equilibrium model holds to the present day. Individuals are considered as isolated beings which is manifest, among other things, in the fact that their utility functions are modelled as being unrelated to each other (Urquhart 2013, 822).

In the opinion of the socio-legal school, on the other hand, there is a fundamental difference between exchange as it occurs between several persons and mere autistic exchange. Authors in this tradition are not interested in individual agents and their actions as such, but only in the social aspects of their coexistence and collaboration (Diehl 1922, 4f.; Marbach 1935, 569). They argue that exchange between persons, as opposed to the simple action of an isolated individual, always presupposes a legal regulation (Marbach 1935, 575).

If two persons meet each other on an isolated island, like Robinson Crusoe and Friday, and if the marginal rates of substitution of the goods they possess are such that an exchange would make both of them better off, it does not follow that they therefore actually embark on a mutual exchange of goods. In addition to these individualistic requirements, we must further assume that there exists on this island a certain system of rules allowing for exchange and that alternative rules leading to a different way of social behavior – like the submission of Friday under Robinson's rule – are rejected. As Stammler ([1896] 1924, 99) noted, "at the moment of the exchange they implement a rule concerning their future conduct after the deal," meaning that both agree to the rule that they must give up all claims on the goods they have respectively given away. On this point, Stammler argued very similarly to Commons (1924, 22), who stated that

what is traded in an exchange is not a physical thing, but a “promise of future behavior” on the part of the trade partners. The fact that both Robinson and Friday respect each other’s claim on the goods that have been exchanged implies in itself that there must be a certain legal order, however primitive, before we can even start with our economic analysis of exchange (Kaulla 1951, 61). Commons (1924, 86) meant the same thing when he claimed that a third person is required who plays the role of a judge, chief, or king, whom the two parties consent to obey in the case of conflict. There is no natural state of human society where the economy is not in some way legally regulated (Diehl 1922, 40).

This, however, seems to be the assumption behind the Ricardian theory of comparative advantage which is the established explanation for why persons or nations tend to trade. This theory does not consider the legal requirements of exchange and trade, but rather assumes that exchange is simply the natural way for humans to go. In the words of Mises (1949, 160), “[i]f and as far as labor under the division of labor is more productive than isolated labor, and if and as far as man is able to realize this fact, human action itself tends toward cooperation and association.” In other words, the individuals’ capacity to choose rationally is sufficient to explain the origin of the exchange economy. That the division of labor can also be accomplished in a system where labor is enslaved is not addressed. Rather the existence and the perfect functioning of a legal system that only allows for voluntary exchange and that outlaws any involuntary relationships among citizens is tacitly assumed from the beginning. That people cooperate peacefully, as the theory of comparative advantage maintains, presupposes that other forms of social interaction have been made unavailable by the legal system in the first place. The totally isolated individual that decides independently whether to cooperate or not is nothing but a fictional character and has no counterpart in real life (Hesse 1950, 647). Amonn (1927, 190f.) concludes that a legal system must be positively defined by the theorist before the economic problem of price can even come into existence.

5. The legal preconditions of exchange value

The phenomenon of exchange is important because it is the exchange economy that neoclassical economics is supposed to model. Of course, the models themselves are purely formal statements of logical relationships; they completely abstract from any

empirical content they might possibly have in the real world (Wilber and Harrison 1978, 62). However, utility functions are usually interpreted as relating to goods that can be bought from or sold to other members of society, i.e., that are traded on the market. The utility functions are used in combination with the cost functions to create functional relationships between these goods that are interpreted as exchange relationships or exchange values. By demonstrating that the notion of exchange value is based on rights granted to legal persons by the legal system, the present section spells out the most important but tacit legal preconditions of neoclassical models.

The main purpose of utility functions in the framework of neoclassical economics is to determine the decisions of individuals depending on their preferences. As neoclassical models only consist of individuals who actually make decisions and are not directly subject to decisions made by others, these models assume that all persons are legal persons. They have the right to their own body and their property (however defined), and the legal system protects their right to make the deals that these models focus on. The assumption that individuals are able and allowed to implement their preferences is taken as a matter of course by standard theory (Buchanan 1987, 247), yet it is anything but trivial. In the U.S., slavery was abolished only in 1865, and it took another one hundred years until black Americans were granted equal rights. To a society where most work is done by slaves, as it seems to have been the case in some ancient Greek city states, the standard neoclassical model could not be applied without fundamental reinterpretations and adaptations. For example, the supply of labor would no longer be determined by the decisions of the laborers. Although slaves could be said to have utility functions that contain consumer goods and leisure time, they are not allowed to make decisions on the basis of these functions. Rather slaves would have to be considered as being part of the capital of their owners and would therefore be a component of the latter's cost functions. Bonar (1927, 46) came to a similar conclusion in his discussion of ancient Greek economics:

> As long as we have this notion that men as well as things can be mere instruments, we cannot have the notion of economics as now understood, in which the world of men stands over against the world of things as a world of ends to a world of means.

As long as the households of workers are legally dependent, as it has also been the case throughout most of the Middle Ages, their compensation does not result from a free wage contract, but mostly from what their owners or the lords of the manor

consider necessary for their subsistence (Roesler 1878, 161f.). If in an extreme case all labor were accomplished by slaves, the whole category of "wages" would not exist anymore. Only to the extent that individuals are clothed with the "sovereign power of the state," as Commons (1924, 121) formulated it, do they rise "from the nakedness of slave, child, woman, alien, into the armament of a citizen."

The standard models of economic theory tacitly take for granted that the legal system awards equal legal rights to all market participants. The value of the traded goods is determined by the utility functions of all people, and no distinction is made between legal and non-legal persons. If this assumption were made explicit, it would be possible to discuss the potential influence of changes in the definition of legal persons and their rights both on the models proper and on the social outcome they predict. A related issue is the question of what happens to the models if certain non-human entities, like firms or other associations, are granted legal personhood. Corporations based on capital represent the abstract power of ownership granted by a legal system where property is no longer inseparably connected to political rights and duties as it has been the case in the constitutions of the ancient empires and throughout the Middle Ages (Roesler 1878, 125ff.). It does not seem improbable that the inclusion or exclusion of capital-based decision makers with their more or less unrestricted access to finance has some influence on the dynamics and the outcome of the market process, but it is difficult to allow for these and similar effects within neoclassical economics where the producers are modelled as cost functions with undefined legal status.

In the same way as persons can only be modelled as active decision-makers if they are accepted as legal persons by the underlying legal system, also goods and services can only enter utility functions if the legal system protects their owners' or possessors' rights to use them. The subjection of goods under the will of a person is regulated by law. All goods are enclosed by a circle of rights and entitlements which are held by one or several legal persons. These rights are not directed at the goods themselves, but at other legal persons; the rights define how others have to behave towards the goods and those who have rights in them, and be it only that they have to respect passively the status quo. What is traded on the market are "not the goods themselves […], but the existing or newly to be created rights to these goods" (Kaulla 1916, 298). True, to acquire the ownership of a good might imply its physical transfer; but it does not have to imply it. Like modern property economics (Steiger 2006), Kaulla (1916, 299) distinguishes property rights and possession. The physical transfer of goods

is conceptually different from the transfer of rights to these goods. Whereas the transfer of rights is possible without the transfer of possession, the transfer of possession from one legal person to another is only possible as a transfer of the right to possession. In this regard, it is important to note that even a thief, that is, someone who violates the right of possession of somebody else, does actually have a certain temporary right to possess a stolen good. In other words, even violations of the law are regulated by the legal system and do not stand outside of it.

But if it is the rights to goods that are traded on the market, not primarily the goods themselves, it is also them that are the object of exchange value. The exchange value of things can therefore also be said to be constituted by law. As is well known from institutional economics (Erlei, Leschke, and Sauerland 2016, 283f.), the right to property can be divided into several components. A person might have the right to use a thing (usus), to profit from it (fructus), to alter or move it (abusus), and to alienate it; but it is also possible that someone has only one or two of these rights. Furthermore, each of these rights can be fleshed out in a number of different ways; it is possible that the legal system constrains some of these rights or even denies one or several of them to certain groups or even to all members of society. For this reason, a certain object does not have an exchange value – a price – merely because it is scarce and because people would like to use it. As Roesler (1868a, 297) remarks,

> [a] thing can only have value if it belongs to the dominion [Vermögensherrschaft] of someone, whereby the thing is […] put into the order of life as corresponding to the individual owning it as opposed to all other individuals. If there were no property in diamonds, diamonds would be valueless despite their brightness and scarcity.

To give another example, if private fructus and alienation of land were to be abolished, as it has been demanded many times by certain philosophers, land would cease to have a purchase price in the same way as humans ceased to have a purchase price when slavery was abolished. This holds for all other goods and services as well. Without the legal system granting and guaranteeing the rights in them, they do not have an exchange value.

It is not necessary to confine ourselves to the binary question of whether certain property rights are granted and protected or not. Like most things in life, the protection of property rights is a matter of degree. Legal protection does not only depend on the intentions of the legislator and the executive authority, but also on the level and the

quality of enforcement. If a state should not be able to protect its citizens sufficiently from internal or external forces that infringe their property rights, or if the state itself should be corrupted so that its citizens could not count on it, the exchange value of goods, especially of immovable and durable property, would hardly remain unaffected (Kaulla 1916, 299f.). If the present value of assets depends on the hope of expected transactions, as Commons (1924, 25) commented, the stability of the legal system that enforces the legal rights exchanged in these transactions is a fundamental factor in the valuation of assets. These examples clearly show that there is something beyond scarcity and utility of goods that influences or even constitutes exchange value.

Note that it is no counter-argument to the argument presented in this section to refer to the black market where objects have exchange value although they are traded illegally. After all, the existence of a black market itself requires the acceptance of certain rules that must be obeyed by its participants. These might run contrary to those implemented by the state, but they are nonetheless a system of rules and conventions that regulate or try to regulate the behavior of the market participants towards each other and towards outsiders. Also in the case of the black market it is the rules which constitute the possibility of exchange value of the goods traded.

6. The legal preconditions of equilibrium

It could be argued that it is not necessary to delve into the legal preconditions of the neoclassical concept of equilibrium, as it is unrealistic beyond repair. Still, Hodgson (1992, 755) has reminded us that there are indeed "coordinating actions of the market," it is only that the Walrasian equilibrium model does not give an adequate representation of real-world market systems. Hodgson (1992, 755), therefore, endorses Friedrich von Hayek's market process approach on the grounds that Hayek does not ignore important features of reality such as decentralized knowledge, true uncertainty, and change in real time.

According to Hayek (1945, 519f.), the knowledge which is necessary to secure the best use of resources in society is not given to anyone in totality. It only exists as "dispersed bits of incomplete and frequently contradictory knowledge which all the separate individuals possess." Through the price system, however, all market participants are connected directly or indirectly and the prices pass on the information concerning the scarcity of the individual goods. By means of buying and selling, each

market participant influences market prices and in this way contributes his “knowledge of the particular circumstances of time and place” (Hayek 1945, 521) so that prices tend to reflect the knowledge otherwise dispersed in society. The process of buying and selling is hereby incentivized by profit opportunities, most prominently indicated by price spreads which entrepreneurs are eager to exploit (Kirzner 1997, 68).

Hayek’s general message is recognized by most economists (Arrow et al. 2011, 4). He explains how decentralized market processes coordinate human actions in a disequilibrium environment. This coordinating tendency of markets is the kernel of truth in the equilibrium concept of neoclassical economics. Although we reject this equilibrium concept as such, the preconditions of coordinating market processes remain an important issue.

These market processes however, depend on the stipulations of the legal system. One area where the institutions of law are especially important in this regard is the area of business enterprise. The standard treatment of capital does not leave room for the discussion of how capital-based enterprises organize the economy under capitalism (Geoffrey Hodgson 2014; Braun 2017). In the Cambridge capital controversy (Harcourt 1972), for example, both sides defined capital as a factor of production, as a conglomeration of material goods that play a technical role in the production process. This definition of capital is independent of the prevailing legal system (Braun 2017). Capital in this sense – produced means of production – is employed in the market economy as well as in socialist systems or on Crusoe’s island. If capital is defined in this way, the whole legal foundations of the way coordination is brought about in capitalism go by the board. The point is that in business and legal practice, capital is not a technical factor of production, but a certain manifestation of ownership that is specific to modern capitalism (Roesler 1878, 127). Capital in this sense is ownership in assets that is expressed in money terms and that is considered from the perspective of making monetary profit. The famous Marxian formula shows the logic of capital in a nutshell:

Money – Commodity – Money’

Only in so far as the legal system allows for actors to follow this kind of logic in their actions can it be said that there is a strong tendency towards the formation of consistent prices that is presupposed in equilibrium models. Actors who act according to this formula are interested to find areas in the economy where the spread between the

price of the input they have to buy (money) and the price of the output they sell (money') is as large as possible. Competition among several of these actors however tends to increase input prices and to decrease output prices so that large price spreads disappear (Braun 2017).

It is well known that ancient philosophy despised the art of moneymaking for its own sake and that the Middle Ages were characterized by the partial or total prohibition of usury, at least for Christians. Only with the later scholastics and mercantilism did profiteering become a morally neutral kind of behavior (Pribram 1951, 3f.). And only then did legal forms develop that allowed for activity that was solely oriented towards the maximization of monetary profit. That enterprises can assume legal personality simply means that legal forms have evolved that allow for capital to be separated from the non-economic interests of its owners and to fully develop its own logic. Without canonistic, feudal, and guild requirements that used to restrict the employment of property for centuries, property in the form of capital is equivalent to the power to direct labor and the natural resources exclusively according to the principle of profit maximization (Roesler 1878, 131).

Capital, in other words, is a central legal term. By ignoring the implications of capital in this legal sense and focusing on capital in the sense of technical means of production, economists run in danger of forming unfounded opinions on important political issues that involve capital-based business enterprises.

One important issue that falls inside this area is the discussion about the information content concerning the profitability of capital that enterprises are allowed to send to the market. In recent years, legislation concerning this content has changed dramatically. Auditors and practitioners have been allowed to gain control of legislation on auditing and financial reporting (Kingston 2017, 110). Whereas the profit figures disclosed in financial statements used to relate to concrete actions made by the reporting enterprise, recent regulation has brought a tendency towards the reporting of profit figures on the basis of fair values (Dichev 2017; Hodgson and Russell 2014). It has been noted by many observers that the concept of fair value draws heavily on neoclassical economics (Hitz 2007; Barker and Schulte 2017; Braun 2019a, b). Fair values do not inform the market, however, but are themselves basically market prices (Braun 2019b). They therefore cannot serve as information inputs of the market process à la Hayek (1945), but are rather its output. Yet, to use the information output of the market process as its information input involves a circularity. There is no external

source of information left that could serve as an input of the formation of prices. The market is cut off from reality and passes off in what can be called a hyperreality. It is well known that the adoption of fair value accounting has been said to destabilize the economy and to be responsible for the severity of the recent financial crisis (references in Braun 2019a, 17f.). A further expansion of the fair value program to all kinds of firms and all kinds of goods might destabilize the economy even more due to the inherent contradiction mentioned above.

We see that even a minor change in the legal regulation of business transactions could change the market process, such that it ceases to coordinate actions in the manner explained by Hayek and accepted by Hodgson. By applying the institution-free neoclassical equilibrium approach to institutional reform, accounting standard setters have severely misguided the market process and, in turn, destroyed what I have called the kernel of truth in Walrasian equilibrium models. As this example shows, there is the risk that neoclassical economists who ignore the institutional preconditions of their equilibrium models provide support for institutional reforms that engulf our world in severe economic crises.

In short, it cannot be ruled out that a certain design of the principles of financial accounting has a constitutive role for coordinating market processes. But also the design of the monetary system, including the rights and duties of those institutions producing money, seem to play a major role on the course and the direction of market processes. The very existence and endurance of monetary explanations of the business cycle hints in this direction. The Austrian theory of the business cycle, for example, blames a certain legal configuration of bank deposit contracts for inducing and reinforcing deviations from the long-term equilibrium that are not portrayed by means of neoclassical models (Bagus and Howden 2016). A closer inspection of the way the legal system as a whole, but also its particular rules, influence the market process seems indispensable if it comes to comment on the applicability of neoclassical models to concrete problems.

7. Conclusion

This paper has drawn attention to the legal preconditions of economic theorizing. To interpret utility functions and cost functions as representing the determinants of human actions requires the existence of a legal system that grants all market participants the

status of legal persons and defines the rights and duties of these persons towards each other. These models would not lose their inherent logic and coherence without such and similar legal institutions, but they would not have an object any longer. This object – an economic system of market exchange – is only brought about by certain institutions, and among them the legal system is the most basic one. It has further been shown that the application of institution-free neoclassical economics to the reform of legal institutions such as accounting standards could destroy the very market processes that underlie neoclassical equilibrium models.

This paper has also made a contribution to the history of economic thought by digging out the neglected works by the socio-legal school of economics, thus complementing Samuels's (1993) overview of early English contributions to the field of law and economics. Further research will show whether it is possible to achieve a systematic description of the institutions that tacitly underlie economic theory. It appears to be certain, however, that these institutions are all closely linked to the legal system. The existence of money as a general debt-solving instrument and of capital as the abstract power of businesses to purchase goods seems to be unthinkable without legal rules that define and determine the rights of the persons or entities involved in all transactions featuring these institutions.

References

Amonn, Alfred. 1927. *Objekt und Grundbegriffe der Theoretischen Nationalökonomie*, 2nd edition. Leipzig: Deuticke.

Arrow, Kenneth J. 1994. "Methodological Individualism and Social Knowledge." *American Economic Review* 84 (2): 1-9.

Arrow, Kenneth J., B. Douglas Bernheim, Martin S. Feldstein, Daniel L. McFadden, James M. Poterba, and Robert M. Solow. 2011. "100 Years of the "American Economic Review": The Top 20 Articles." *American Economic Review* 101 (1): 1-8.

Atkinson, Glen, and Stephen P. Paschall 2016. *Law and Economics from an Evolutionary Perspective*. Cheltenham (UK) and Northampton (MA): Edward Elgar.

Atkinson, Glen, Eric. R. Hake, and Stephen P. Paschall 2019. "Evolution of the Corporation in the United States: Stabilized Scarcity and Vested Interests." *Journal of Economic Issues* 53 (1): 1-25.

Bagus, Philipp and David Howden. 2016. "The Economic and Legal Significance of 'Full' Deposit Availability." *European Journal of Law and Economics* 41 (1): 243-54.

Barker, Richard and Sebastian Schulte. 2017. "Representing the market perspective: Fair value measurement for non-financial assets. *Accounting, Organizations and Society* 56: 55–67.

Berolzheimer, Fritz. 1907. *System der Rechts- und Wirtschaftsphilosophie IV: Philosophie des Vermögens einschließlich des Handelsverkehrs*. München: Beck.

Berolzheimer, Fritz. 1910. *Deutschland von heute. Kulturgemälde der deutschen Gegenwart*. 2nd ed. Berlin: Rothschild.

Bonar, James. 1927. *Philosophy and Political Economy in Some of Their Historical Relations*. 3rd ed. London: Allen & Unwin.

Braun, Eduard. 2017. "The Theory of Capital as a Theory of Capitalism." *Journal of Institutional Economics* 13 (2): 305-25.

Braun, Eduard. 2019a. "The ecological rationality of historical costs and conservatism." *Accounting, Economics and Law – A Convivium* 9 (1), article 1.

Braun, Eduard. 2019b. "Accounting for Market Equilibrium – Comparing the Revenue-Expense to the Balance-Sheet Approach." *Accounting, Economics and Law – A Convivium*, ahead of print. DOI: https://doi.org/10.1515/ael-2018-0024

Buchanan, James M. 1987. "The Constitution of Economic Policy." *American Economic Review* 77 (3): 243-50.

Commons, John R. 1924. *Legal Foundations of Capitalism*. New York: MacMillan.

Coutu, Michel and Thierry Kirat. 2012. "John R. Commons, Max Weber et les orders juridique de l'économie: les prémisses d'une sociologie économique du droit." *Revue Française de Socio-Économie* 9 (2012/2), 209-225.

Deakin, Simon, David Gindis, Geoffrey M. Hodgson, and Kainan Huang. 2017. “Legal institutionalism: Capitalism and the constitutive role of law.” *Journal of Comparative Economics* 45 (1): 188-200.

Dichev, Ilia D. 2017. “On the conceptual foundations of financial reporting.” *Accounting and Business Research* 47 (6): 617-632.

Diehl, Karl. 1922. *Theoretische Nationalökonomie*. Vol. 1. 2nd ed. Jena: Fischer.

Diehl, Karl. 1941. *Die sozialrechtliche Richtung in der Nationalökonomie*. Jena: Fischer.

Dobretsberger, Josef. 1927. “Beziehungen zwischen Rechts- und Wirtschaftstheorie.” *Archiv für Rechts- und Wirtschaftsphilosophie* 20 (4): 571-590.

Erlei, Mathias, Martin Leschke, and Dirk Sauerland. 2016. *Institutionenökonomik*. 3rd ed. Stuttgart: Schäffer-Poeschel.

Eucken, Walter. 1952. *Grundsätze der Wirtschaftspolitik*. Bern: Francke.

Gonce, R. A. 1971. “John R. Common’s Legal Economic Theory.” *Journal of Economic Issues* 5 (3): 80-95

Hagemann, Harald. 2017. “Ordoliberalism, the Social Market Economy, and Keynesianism in Germany 1945-1974,” in *Liberalism and the Welfare State*, edited by Roger E. Backhouse, pp. 57-74. New York: Oxford University Press.

Harcourt, G. C. 1972. *Some Cambridge controversies in the theory of capital*. Cambridge: Cambridge University Press.

Hayek, F. A. 1945. “The Use of Knowledge in Society.” *American Economic Review* 35 (4): 519-30.

Heinsohn, Gunnar, and Otto Steiger. 2009. *Eigentum, Zins und Geld*. 7th ed. Marburg: Metropolis.

Hesse, Albert. 1926. “Gegenstand und Aufgabe der Nationalökonomie,“ in *Festgabe für Rudolf Stammler zum 70. Geburtstage*, edited by Edgar Tatarin-Tarnheyden, pp. 151-204. Berlin: de Gruyter.

Hesse, Albert. 1950. “Karl Diehl und die sozialrechtliche Richtung in der Nationalökonomie.“ *Schmollers Jahrbuch* 70 (6): 641-60.

Hesse, Albert. 1955. “Wirtschaftsform und Rechtsordnung,“ in *Festgabe für Georg Jahn: zur Vollendung seines 70. Lebensjahres*, edited by Karl Muhs, pp. 87-98. Berlin: Duncker & Humblot.

Hesse, Albert. 1956. “Sozialrechtliche Schule,“ in *Handwörterbuch der Sozialwissenschaften*, pp. 576-578. Stuttgart: Fischer.

Hitz, Jörg-Markus 2007. “The decision usefulness of fair value accounting – a theoretical perspective.” *European Accounting Review* 16 (2): 323–362.

Hodgson, Allan, and Mark Russell. 2014. “Comprehending Comprehensive Income.” *Australian Accounting Review* 24 (2): 100-110.

Hodgson, Geoffrey M. 1992. “The Reconstruction of Economics: Is There Still a Place for Neoclassical Theory?” *Journal of Economic Issues* 26 (3): 749-767.

Hodgson, Geoffrey M. 2003. “The Enforcement of Contracts and Property Rights: Constitutive versus Epiphenomenal Conceptions of Law.” *International Review of Sociology* 13 (2): 375-91.

Hodgson, Geoffrey M. 2000. What Is the Essence of Institutional Economics? *Journal of Economic Issues* 34 (2): 317-329.

Hodgson, Geoffrey M. 2014. “What is capital? Economists and sociologists have changed its meaning: should it be changed back?” *Cambridge Journal of Economics* 38 (5): 1063–86.

Hodgson, Geoffrey. 2015. *Conceptualizing Capitalism*. Chicago: University of Chicago Press.

Hodgson, Geoffrey M. 2016. “Some Limitations of the Socialist Calculation Debate.” *Schmollers Jahrbuch* 136 (1): 33-58.

Hovenkamp, Herbert. 1995. “Law and Economics in the United States: a brief historical survey.” *Cambridge Journal of Economics* 19, 331-52.

Kaulla, Rudolf. 1916. “Das Objekt des Tauschwerts,“ in *Festschrift für Lujo Brentano zum Siebzigsten Geburtstag*, pp. 297-309. Berlin: Duncker & Humblot.

Kaulla, Rudolf. 1919. *Über das Verhältnis der Volkswirtschaftslehre zur Rechtswissenschaft und zur Politik*. Berlin: Rothschild.

Kaulla, Rudolf. 1919/20. “Die ‚Weltfremdheit‘ der Juristen und die National-Oekonomie.” *Archiv für Rechts- und Wirtschaftsphilosophie* 13 (2): 135-41.

Kaulla, Rudolf. 1951. *Staat, Stände und der gerechte Preis*. 2nd ed. Basel: Recht und Gesellschaft.

Kingston, William. 2017. *How Capitalism Destroyed Itself. Technology Displaced by Financial Innovation*. Cheltenham, UK: Edward Elgar.

Kirzner, Israel M. 1997. "Entrepreneurial Discovery and the Competitive Market Process: An Austrian Approach." *Journal of Economic Literature* 35 (1): 60-85.

Marbach, Fritz 1935. "Über das Wesen der National-ökonomie und deren Grundbeziehung zum Recht," in *Festgabe der Juristischen Fakultät der Universität Bern zum Schweizerischen Juristentag 1935*, pp. 569-579. Bern: Stämpfli.

Meriam, R. S. 1924. "Diehl's Theoretische Nationalökonomie." *Quarterly Journal of Economics* 39 (1): 124-135.

Mises, Ludwig von. 1949. *Human Action – A Treatise on Economics*. New Haven: Yale University Press.

Müller, Klaus O. W. 1994. "Zum Vermächtnis der sozialrechtlichen Schule der Nationalökonomie: Überlegungen zum Werk Karl Diehls." *Jahrbuch für Wirtschaftsgeschichte* 35 (2): 121-130.

Pearson, Heath. 1997. *Origins of Law and Economics. The Economists' New Science of Law, 1830–1930*. Cambridge: Cambridge University Press.

Pistor, Katharina. 2013. "A legal theory of finance." *Journal of Comparative Economics* 41 (2): 315-330.

Pribram, Karl. 1951. "Prolegomena to a History of Economic Reasoning." *Quarterly Journal of Economics* 65 (1): 1-37.

Rodbertus, Karl. 1884. *Das Kapital: vierter socialer Brief an von Kirchmann*. Berlin: Puttkammer & Mühlbrecht.

Roesler, Hermann. 1868a. "Zur Theorie des Werthes." *Jahrbücher für Nationalökonomie und Statistik* 11, 280-313, 406-19.

Roesler, Hermann. 1868b. "Zur Lehre vom Einkommen." *Jahrbücher für Nationalökonomie und Statistik* 10, 302-35.

Roesler, Hermann. 1878. *Vorlesungen über Volkswirthschaft*. Erlangen: Deichert.

Röpke, Wilhelm. 1950. *The social crisis of our time*. Translated by Annette and Peter Schiffer Jacobsohn. Chicago: University of Chicago Press.

Rothbard, Murray N. 2009. *Man, Economy, and State: A Treatise on Economic Principles*, 2nd edition. Auburn, AL: Mises Institute.

Samuels, Warren J. 1989. "The Legal-Economic Nexus." *George Washington Law Review* 57 (6): 1556-78.

Samuels, Warren J. 1993. "Law and Economics: Some Early Journal Contributions." In *Economic Thought and Discourse in the 20th Century*, edited by Warren J. Samuels, Jeff Biddle, and Thomas W. Patchak-Schuster, pp. 217-285. Aldershot (GB) and Brookfield (VT): Edward Elgar.

Samuels, Warren J. and Nicholas Mercuro 1984. "Posnerian Law and Economics on the Bench." *International Review of Law and Economics* 4 (2): 107-130.

Swedberg, Richard. 1998. *Max Weber and the Idea of Economic Sociology*. Princeton, NJ: Princeton University Press.

Schumpeter, Joseph A. 1908. *Das Wesen und der Hauptinhalt der theoretischen Nationalökonomie.* Leipzig: Duncker & Humblot.

Stammler, Rudolf. [1896] 1924. *Wirtschaft und Recht nach der materialistischen Geschichtsauffassung. Eine sozialphilosophische Untersuchung*. 5th ed. Berlin: de Gruyter.

Steiger, Otto. 2006. "Property Economics versus New Institutional Economics: Alternative Foundations of How to Trigger Economic Development." *Journal of Economic Issues* 40 (1): 183-208.

Stolzmann, Rudolf. 1896. *Die soziale Kategorie in der Volkswirthschaftslehre*. Berlin: Puttkammer & Mühlbrecht.

Stolzmann, Rudolf. 1909. *Der Zweck in der Volkswirtschaft*. Berlin: Puttkammer & Mühlbrecht.

Suranyi-Unger, Theo. 1932. *Economics in the twentieth century: the history of its international development*. Translated by N. D. Moulton. London: George Allen & Unwin.

Urquhart, Robert. 2013. "Taking the modern for nature: methodological individualism as an interesting mistake." *European Journal of the History of Economic Thought* 20 (5): 812-44.

Wagner, Adolph. 1894. *Grundlegung der politischen Oekonomie,* Vol. 2: *Volkswirthschaft und Recht, besonders Vermögensrecht, oder Freiheit und Eigenthum in volkswirthschaftlicher Betrachtung*. 3rd ed. Leipzig: Winter.

Weber, Max 1911. [Max Weber's comments on a talk by Andreas Voigt about Economy and Law.] In *Verhandlungen des Ersten Deutschen Soziologentages*, pp. 265-270. Tübingen: Mohr (Siebeck).

Weber, Max, and Martin Albrow. 1975. "R. Stammler's 'Surmounting' of the Materialist Conception of History, Part 1." *British Journal of Law and Society* 2 (2): 129-152.

Wilber, Charles K., and Robert S. Harrison. 1978. "The Methodological Basis of Institutional Economics: Pattern Model, Storytelling, and Holism." *Journal of Economic Issues* 12 (1): 61-89.

Winkel, Harald. 1977. "Hermann Roesler vor dem Hintergrund der deutschen Nationalökonomie im 19. Jahrhundert," in *Vorlesungen über Volkswirthschaft*, authored by Hermann Roesler, pp. ix-xii. Frankfurt: Keip.