

Article

Not peer-reviewed version

Application of the Power Theory of Exchange and Money to Social Phenomena: What is money?

[Yaroslav Stefanov](#)*

Posted Date: 29 November 2023

doi: 10.20944/preprints202311.1867.v1

Keywords: economic sociology; power theory of exchange and money; power; generalized power



Preprints.org is a free multidiscipline platform providing preprint service that is dedicated to making early versions of research outputs permanently available and citable. Preprints posted at Preprints.org appear in Web of Science, Crossref, Google Scholar, Scilit, Europe PMC.

Copyright: This is an open access article distributed under the Creative Commons Attribution License which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Disclaimer/Publisher's Note: The statements, opinions, and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions, or products referred to in the content.

Article

Application of the Power Theory of Exchange and Money to Social Phenomena: What is money?

Yaroslav Stefanov

Moscow State University; E-mail: yrsstf@gmail.com, ORCID: 0000-0002-0653-368X

Abstract: The Power Theory of Exchange and Money (PTEM) refines the economic neoclassical two-equation model of exchange. PTEM replaces the statistical average condition of exchange, which represents the equality of supply and demand for all transactions in the market, with a more specific equation of the equality of the generalized power of the parties in relation to their objects of exchange. The purpose of the article is to show the application of PTEM for the study of various social phenomena. Along with a brief summary of the main statements of this theory, its integration into the existing corpus of theories and ideas in economics and sociology is considered. The conclusions of power theory are then applied to consider the following topics: the objective motivation of exchange by the desire to increase power, the power nature of market equilibrium, the power nature of money, the accumulation of power through profit, the creation of money as a power act, the role of the state in the creation of money, the measure of power as a possible tool for social and political research.

Keywords: economic sociology; power theory of exchange and money; power; generalized power

JEL Classification: A10; A13; A14; D00; D41; D46; D51; E40; G00; Z13

Introduction

The article will focus on economic exchange. Such an exchange is characterized by the following properties (Blau 1964):

- preliminary negotiations are held on the terms of the transaction (bargaining)
- the terms of the transaction are fully fixed at the time of deal
- terms of the transaction include the exact names and quantities of exchanged objects
- sanctions are provided for non-compliance

It should also be mentioned that only voluntary transactions are considered in the economic context.

Such exchanges play a key role in the economic life of society. The classic of the Austrian economic school, Ludwig von Mises, believed that "the exchange relation is the fundamental social relation." (Mises 1994) According to William Jevons: "It is impossible to have a correct understanding of economic science without an ideal understanding of the theory of exchange." (Jevons 1924) The important role of exchange in the modern capitalist system is quite clear: "the market,... is the focus of capitalist society; it is the essence of capitalism," and the "mainspring" of the market is "the hope of profit... for it is only this hope that moves it and keeps it running" (Mises 1994). But this sole capitalist goal—profit—is achieved only through exchange.

Leon Walras built a fairly complete model of exchange. Mathematically, it is a system of two equations with two unknowns, and one of them (the equation of marginal utility) compares the subjective assessments of the parties in relation to the objects being exchanged, that is, it sets the subjective condition of exchange. The second (the equation of equality of supply and demand) has a generalized, statistical meaning, compares supply and demand on the market as a whole and sets an objective condition for exchange. Due to the average statistical nature of the objective condition, this approach does not allow to model any single exchange, and does not allow to explain different prices

in the same market. This flaw in Walrasian theory is known as the “one price problem.” (Donzelli 2011)

The power theory of exchange and money (PTEM) (Stefanov 2022), a brief summary of which will be given in the first part of the article, offers its own version of the exchange model. Instead of the equation of equality of supply and demand, an equation of equality of the magnitude of the power of exchange participants in relation to their objects of exchange is introduced. Within the framework of PTEM, the key economic phenomenon of exchange turns out to be embedded in power relations. At the same time, “Power is often considered a central concept in social and political thought that can help explain many different social phenomena” (Menge 2017). Therefore, the inclusion of exchange in the system of power relations, affirmed by PTEM, gives rise to a new understanding of phenomena based on exchange or related to exchange. In the article we will look at some cases of applying power theory to various social phenomena.

The proposed exchange approach can help bring economic and sociological theories closer together. Y. Veselov wrote: “The disunity between economists and sociologists is the reality of today. Apparently, there is not yet the necessary internal potential to connect these areas of knowledge” (Veselov 1999) Another circumstance in the relationship between economics and sociology was noted by V. Radaev: “From the point of view of the requirements of evaluative neutrality and rigor of empirical verification of judgments, the use of complex mathematical and statistical models, economic theory undoubtedly had and has a greater chance of presenting itself as a “true science.” (Radaev 2008) PTEM involves power as a basic comparable relationship in the sphere of economic exchange, which makes it possible to trace dependencies with other social phenomena through power connections. In addition, power theory essentially provides a mathematical tool for the numerical measurement of power, which may well be useful in sociological research.

The most important result of PTEM is a new understanding of money. The question of the essence of money has long occupied both economists and sociologists. “One of the greatest mysteries generated by human society lies in the essence of money. It is difficult to find a phenomenon so common and at the same time so inexplicable.” (Radaev 2008). The power theory offers its own solution to this riddle. Consideration of the equation of exchange for money leads to the conclusion that money is a measure and certificate of generalized power. Thus, money turns out to be an integral part of the power system in society, which also leads to a new look at many socio-economic phenomena.

We will begin the article by outlining the main provisions of the power exchange theory and show connections with other theories. Let us consider some consequences of the power theory that have not only economic but also social significance. Then we move on to the question of the meaning of money. Let us show the phenomenon of profit from the point of view of the power theory of money. In conclusion, let us draw attention to some possible promising directions for the development of power theory in the socio-economic context.

Power exchange theory—Relationship with other theories

The Power Theory of Exchange and Money (PTEM) is most fully presented in the work “Power Theory of Exchange and Money” (Stefanov 2022). First, we will briefly outline the main points of this theory and at the same time show the relationship with other theories. The first step will be the definition of the concept of “generalized power”, including cases of power both in relation to objects that have their own will (for example, human) and in relation to objects that do not have their own will (for example, things). All kinds of objects change uniformly: actions (requiring submission, that is, power over an “animate” object) are naturally exchanged for things (when the owner’s will is directed to an “inanimate” object). During the exchange, the homogeneity of the power of the subject is revealed, regardless of the nature of the object, that is, regardless of the object’s possession of its own will. Based on this, it is defined: *generalized power is the ability of a subject to exercise there will in relation to an object* (regardless of the nature of the object). Expanding the concept of “power” to “generalized power” does not change previous ideas in any way, but only adds “power over objects.”

The next important part of the power theory is the postulate about the measurability of power, in the sense that there is a function $B(H,O)$ such that for any object O and its owner H : $B(H,O) = B_H(O) = B \in [0,+\infty)$ (two equivalent options for writing the function B are given, where the parameter H is written either as an argument or as an index). The function $B_H(O)$ measures with a non-negative number the amount of power of a person H over an object O . Many scientists directly or indirectly assumed the measurability of power. Already in Max Weber's classic definition there is a hint of measurability: power is "the probability that an actor in a social relation will be able to execute his will even in the face of resistance" (Weber 1957). The word "probability" used by Weber in this definition is consistent with the quantitative measurability of power, because probability is a mathematically measurable quantity. Some studies have attempted to use this probability metric to model power relations (Bosworth 2022). However, probability (which is measured as a number from 0 to 1) is in no way suitable for measuring power. Indeed, if the power of one ruler A over his subordinates is almost equal to one: $B(A,x) \approx 1$ and the same is true for the second ruler B : $B(B,y) \approx 1$, then it turns out that their power is almost the same $B(A,..) \approx B(B,..)$, but it is possible that ruler A will have almost complete power over B , then if, in absolute value, power A will be greater than power B , which is subordinate to it, we obtain a contradiction. Therefore, for the above definition of generalized power, instead of Weber's "probability", following Peter Blau (Blau 1964), the word "ability" was used. Here there is a visible similarity with physics, where energy is defined as "the ability to do work." Many researchers directly pointed out the analogy between social power and physical energy. According to Bertrand Russell, "the fundamental concept in the social sciences is power in the same sense in which energy is the fundamental concept in physics" (Russell 2004). The commonalities between social power and physical energy have been discussed in more detail by Jonathan Hearn. He found many similarities in these phenomena and suggested the existence of a deeper connection between them (Hearn 2012). And if power in society is similar to physical energy, then power is also measurable, just as energy is measurable. Talcott Parsons described the theories of power of G. Lasswell and C. Mills (Mills 1956) as a zero-sum game: "in a system, every increase in power by unit A is an effective cause of the loss of a corresponding amount of power by other units B, C, D " (Parsons 1997). By the way, the analogy with energy arises again, because the above quote is a paraphrase of the energy conservation law. It is not important to us here that Parsons disagreed with their approach, but what is important is the use of the word "quantity", and also the fact that a zero-sum game exists only if the presence of quantities, adding which we get zero, which cannot be done unless we assume the measurability of the quantities in question. There are models for the practical measurement of power in which power is represented as a two- or six-dimensional quantity, and attempts have been made to measure two-dimensional power experimentally (Jonathan 1992). All the above examples show that the idea of the measurability of power has existed for quite a long time and has been found in different theories and in different variations.

What is power based on and how does it manifest itself in exchange? In addition to Weber, many other definitions of power have been proposed, both based on coercion (H. Lasswell, E. Kaplan, R. Dahl, D. Cartwright, S. Lukes, E. Giddens) and based on agreement (T. Parsons, H. Arendt) (LedyaeV 2015). We will proceed from the fact that different authors consider the phenomenon of power from different angles, so that both coercion and agreement underlie the phenomenon of power. Moreover, other authors have directly pointed this out (Bosworth 2022). This duality should be examined in more detail, since it manifests itself in many cases. According to the above definition, (generalized) power is the ability to implement the will of a subject in relation to an object. When an object has its own will, then the exercise of will by the subject over the object means submission, which can arise both due to coercion and due to agreement. A combination of these reasons ("carrot and stick") is also possible. In any case, the will of the subject "overcomes" or "dominates" the will of the object, and this dominance always has limits. Note that the line between coercion and agreement is not necessarily very clear. Often, the reasons for obedience include both carrot and stick, that is, there is both reward for following orders and punishment for non-compliance. A certain continuous scale of motivation for submission emerges, including extreme points (cases of pure coercion and encouragement) and intermediate options (a combination of carrots and sticks).

Now let us turn to the case when the object of power does not have its own will. It would seem that the subject of power should not overcome the will of others. However, in reality, when a subject possesses a thing, this presupposes the exclusion of the ability of other members of society to exercise their will in relation to this object. Such exclusion of the will of the remaining members of society can be both in the nature of an agreement (legal right of ownership) and in the nature of coercion (forceful/illegal seizure). As a result, it turns out that the prerequisites for any generalized power are naturally dual in nature, and include both coercion and agreement, drawn up in some proportion.

In the case of economic exchange, the basis for interaction between the parties is an agreement. The agreement allows the participants to make a mutual transfer of power over the objects of exchange. The new power over the received object that appears as a result of the exchange is the consequence of an agreement. However, the exchange also reveals a coercive component of power. Thus, if one of the parties violates the agreed terms, this party may be forced to fulfill its obligations. That is, both components of power are manifested in the exchange.

Let's move on to modeling economic exchange. As mentioned above, the first complete two-equation model of exchange was proposed by Walras. However, in his theories the objective condition of exchange is common to all transactions on the market, which does not make it possible to explain the individual price in a separate exchange. To clarify this model, it is necessary to find an objective condition that relates directly to a specific exchange. This condition must compare something that is passed from hand to hand. But the primary transferred essence in the case of exchange is power over the object of exchange. As Menger wrote, in an exchange, "power over a certain quantity of goods A is transferred to B and power over a certain quantity of goods B is transferred to A" (Menger 2007). All other entities associated with the exchanged item (any useful properties, the ability to use, the ability to exchange, etc.) are at the disposal of the new owner only *as a consequence of* gaining power over the object. During the bidding process, before the exchange, the parties jointly solve a system of two equations. One equation compares marginal utility, that is, the subjective ratio of the utility of the last parts of the received and given goods. The other equation is to compare what objectively changes hands, that is, the parties' generalized power over their items of exchange.

Thus, the following system of equations is obtained:

$$\begin{cases} B_1(x) = B_2(y) & (1.1) \\ \frac{\varphi_1(a-x)}{\psi_1(y)} = \frac{\varphi_2(x)}{\psi_2(b-y)} & (1.2) \end{cases}$$

where x is the quantity of good A from the available a , given by the first participant and y is the quantity of good B from the available b , given by the second participant.

Here the first equation expresses the statement of the power theory PTEM about the equality of generalized power, and the second is the equality of marginal utility. Equation (1.2) is the classical Jevons-Walras equation (Jevons 1924, Walras 2000), written in the form proposed by Edgeworth. Equation (1.1) equates the generalized power that each party has in relation to their object of exchange (function $B_i(x)$). This equation allows to determine the objective ratio of the quantities of exchanged objects, that is, the price of one object expressed in the quantity of another object. The price specified by this equation is the objective result of a compromise between the parties, therefore equation (1.1) establishes an objective condition of exchange: participants in the exchange strive to give exactly as much generalized power as the other party will lose. Equation (1.2) equates the subjective assessments of the parties, allowing one to compare subjective price calculations based on the utility ratios for exchange participants with the objective price from (1.1), that is, this equation establishes the subjective condition of exchange.

Many researchers have pointed out the fundamental role of power in economic exchange. Peter Blau wrote: "Power refers to all types of influence between people or groups, including those exercised in exchange transactions" (Blau 1964). Quite specific mechanisms of influence of power on the results of exchange were also discovered. Richard Emerson observed that power can directly influence the proportion of exchange. Summarizing his observations and the conclusions of other

scientists, he concludes that “within economics itself, many discussions about the uncertainty of the x/y [price] ratio lead to the conclusion that this is a problem of power.” (Emerson 1976). The effect of power on price is that if one exchange participant has power over another, then there is a high probability of a change in the price ratio in favor of the first participant compared to the average market price. Emerson considered such a change in price to be a violation of the equilibrium of exchange. However, the exchange ratio cannot be non-equilibrium, because the exchange proportion is Pareto optimal and a change in this proportion in favor of one side means worsening conditions for the other side. Within the framework of the discussed power theory of exchange, the imaginary “imbalance” disappears. Since when establishing the proportion of exchange, a comparison of power occurs, and the first participant has objective power over the second, this power affects the proportion of exchange in favor of the first participant, turning out to be an additional “weight” on the scales of exchange. It turns out that Emerson's conclusions are yet another proof of the powerful nature of the objective equation of exchange.

A separate issue is the relationship between the price equation (1.1) and the Walras market equilibrium equation. It is important to note that the price equation does not contradict, but details the market equilibrium equation, giving it a new deeper meaning. Here we will not present mathematical calculations that can be found in the original source (Stefanov 2022), but briefly say that averaging formulas (1.1) over all transactions in a certain market leads to the formula for the equality of supply and demand, that is, the Walras formula is the averaging of all equations (1.1) throughout the market. It turns out that the basis of the equation of equality of supply and demand in the market is the average measure of the generalized power of the owners of goods, that is, this economic relationship acquires a power basis. Within the scope of the above explanation the desire of companies for a monopoly position in the market fits well, because obtaining such a position is a seizure of power in a certain market segment, and therefore a shift in the average balance of power in the market in its favor.

Some implications of the power theory of exchange—Objective motivation for exchange

Equation (1.1) means the equality of the power of the parties in relation to their objects of exchange *before* the transaction. *After* the exchange, when objects fall under the power of the other party, the amount of generalized power of the subject over the object may change, because power depends both on the personality of the subject and on his social position. Here the picture is exactly the same as in equation (1.2), which equates marginal utilities, that is, both equations equate the values of certain entities that will change as a result of an exchange, which means exchange is an action to change these entities, and the parties to the exchange are precisely they strive to change these entities. Indeed, with regard to equation (1.2), when an object is transferred to another party during an exchange, the overall utility of the object after the transaction changes, because the utility of the same item is different for different owners.

This property of utility made it possible, in particular, to explain the subjective motivation of exchange: by conducting an exchange, the parties strive to obtain greater utility. All previous theories of exchange had considerable difficulties in explaining objective motivation. All these theories assumed that objects are exchanged that have certain equivalent measurable properties of their own (labor content, rarity, etc.). But if these intrinsic properties of objects do not change during the exchange, if their value is preserved, then why exchange? The power theory of exchange provides an explanation of objective motivation: after an exchange, the generalized power at the disposal of the subject changes, and by conducting an exchange, the parties strive to increase their generalized power.

Can the parties know for sure before an exchange how much generalized power they will receive as a result of the exchange? Apparently, it will not be possible to find out the exact value, because in order to measure the received power, a new exchange must be carried out, and this exchange will be possible only when the object of exchange is already at the disposal of the new owner. It turns out that it is possible to accurately estimate what is lost, but it is impossible to reliably estimate what is gained. Perhaps it is precisely because of such uncertainty that it is more important for a person to

measure the loss of what the participant had before the exchange. When considering exchange, Aristotle wrote about it this way: "What is our own, moreover, given, seems to everyone to be worth a lot" (Aristotle 1997). A more recent explanation for the relative importance of assessing losses versus assessing gains was provided by the famous "prospect theory" of Tversky and Kahneman, which states, in particular, that "the damages of change seem greater than the benefits, which causes a desire to maintain the status quo" (Kahneman 2014) (so-called "loss aversion"). Fearing greater loss than the other party, the party to the exchange will agree to the transaction if they believe that they are giving away exactly the same amount of generalized power as the other party.

At the same time, losing power over there object of exchange, the participant gains power over another object. One power disappears, another is created. Moreover, the new power created in relation to the acquired object may differ in magnitude from the lost previous power. The magnitude of this new generalized power depends, among other things, on the personal and social qualities of the new owner. Here the question may arise whether the influence of a person's individuality on the amount of power does not contradict the objective nature of equation (1.1). However, no contradiction actually arises, because the amount of generalized power, depending on the individual, is measured objectively during bidding, when the opposing interests of rival parties, each of which is interested in its own benefit, collide.

In the quantitative equation (1.2), on the contrary, the values of each of the marginal utility functions are completely determined internally by the exchange participant in the own "coordinate system" of each participant. This equation can be understood in such a way that each of the participants finds out whether the subjective price of a given quantity of the exchanged good corresponds to the objective price calculated from the price equation (1.1).

Power theory of money—Profit

As already noted, the question of the essence of money has a long history. There are several dozen different answers to this question. There is even a position that although "money is considered a central element of modern society, it remains an unanalyzed sociological category." (Zelizer 2000). The very question "What is the essence of money?" may be specified. As Socrates noted: asking the question correctly is already half the answer. To ask the question more precisely, one needs to isolate the invariant quality of money, which can suggest in which direction to look for the answer. To do this, following John Keynes, we note that money acts as an abstract designation for a unit of account. (Keynes 1914) But the abstract unit of account is simply a number. To discover that money is numbers, it is enough to look around in our modern world and notice that the overwhelming mass of today's money is numbers in computer memory. In many countries, the share of cash is 9-15% (Bruno, Denecker 2020) Moreover, cash itself is united by the same feature: each coin or banknote carries a number. A number is an invariant of all the money in the world at all times. And now we can ask a full-fledged question about the meaning of money: what does the number of money measure? Before we move on to a substantive consideration of this issue, it is advisable to understand what answer can be considered satisfactory, what are the criteria for a "good answer"? A "good" answer should not only explain what money-numbers measure and mean, but also solve other problems about money, for example, uniformly explain the different functions of money, its economic and social properties.

Let us now consider the exchange of object A in the amount of x units for money D in the amount of k units. According to equation (1.1), with such an exchange, the amount of generalized power on both sides must be the same: $B_1(x) = B_2(k)$. Moreover, the $B_i()$ function only requires that the values on the right and left be the same, and whether this value is equal to 1 or 100 or 1000 does not play any role. Moreover, money itself is a number. Money has no other invariant properties of its own. Simmel wrote that money is "free from any qualities, and is determined solely by quantity" (Simmel 1990). If it were otherwise, and money had other properties of its own, then all money, including money in computer memory, would have these properties. But only numbers are stored in computer memory, and without knowing what these numbers mean, we cannot distinguish them from any other numbers. It follows that we are free, without loss of generality, to use the quantity of money k

as the value of the function $B_i()$ for money, that is, $B_i(k) = k$. Then we get: $B_1(x) = B_2(k) = k$, thus money measured the amount of generalized power binding exchange participant 1 with its exchange object x .

Note that the commodity owner who sold his goods to the buyer has lost the previous generalized power that they had in relation to the goods. And what did they get in return? Losing generalized power during the exchange, the participant receives new equal generalized power, and in the case of selling a product, this new generalized power relates to money in the amount of k units. This money can be used in future exchanges just like any other objects, thus revealing another meaning of money: it certifies the amount of generalized power at the disposal of its owner. The name of monetary units plays the same role as the name of any other units of measurement. For example, if we say "weight in the amount of 100 kilograms / pounds / troy ounces" when measuring weight, then to measure generalized power one can say "power in the amount of 100 dollars / yuan / euros." As a result, we come to an answer to the question about the meaning of money: *money is a measure and certification of generalized power.*

Georg Simmel wrote that money is a form of human relations (Simmel 1990), and Karl Marx argued the same thing: "the monetary form of things is something extraneous to themselves... it is only a form of manifestation of human relations hidden behind it" (Marx 1983). The power theory of money shows what kind of human relations are hidden behind money, these are power relations. Talcott Parsons guessed about the power nature of money, he wrote: "money is a symbolic intermediary" and "in the case of politics, power serves as an intermediary similar to money." (Parsons 2008) In general, Parsons spent a lot of effort to show the parallelism of money and power. He noticed and demonstrated the symmetry between the emergence of money in banking and power in political systems (Parsons 1997). Now we see that the point here is not a matter of similarity, but of a common nature, because money is an abstract numerical symbol that is a substitute for power.

Understanding money as an abstract symbol of power allows, in particular, to explain the functions of money. There is considerable disagreement in the scientific community in the definition of these functions (Salimonenko 2013), so we will mention only the most established ones. The measurement function acquires specificity in the power theory: a measure of generalized power. Functions of payment, turnover, etc. only mean that money is involved in exchange. The accumulation function is explained by the possibility of increasing generalized power through the accumulation of money. As for the social functions and properties of money, from the position of PTEM, vast scope opens up for a new look at known phenomena. Let us consider, for example, the social significance of such a phenomenon as profit.

We have already mentioned that profit is the only goal of capitalism, which is achieved only through exchange, so considering the issue of profit is no less important than understanding exchange itself. From the point of view of PTEM, the production profit arises when the generalized power of the company increases after the sale of manufactured products. The emergence of trading profit is explained by the same reason, profit will arise if the generalized power of the trader increases during the chain of transactions.

Making a profit is an increase in generalized power. What does this mean in a socio-political context? Since power and money have the same nature, they can easily be transformed into each other. The actual power of the state is directly converted into money, and the abstract power in the form of money is converted in different ways into actual power of various types (administrative, ideological, informational, political, etc.). If political power is formed from monetary power, then, obviously, such power was obtained without the use of democratic procedures, without elections and voting, that is, the power obtained in this way cannot in any way be considered democratic. (Stefanov 2022)

Another problem that arises in connection with the power understanding of money is the following: accumulation through profit leads to the concentration of significant power in one hand, should the state exercise control over the use of power in such cases? If political power in the private hands of a group of the richest citizens exceeds the power of the state (oligarchy), then democratic procedures no longer influence political processes. Does this mean that democratic systems must

control the behavior of big capital in order to prevent the takeover of power? As one can see, approaching the issue of profit from the position of power theory opens up new topics for research.

Many scientists have addressed the issue of the role of the state in the creation of money. Some (J. Ingham) consider the main role of the state, others (G. Simmel), in addition to the state, call trust the key reason for the functioning of money (Makarov, Tikhomirov 2021). From the point of view of the power theory of money, and taking into account that money symbolizes power, then the solution of the problem should be found in the nature of power. And indeed, as we have already mentioned, various researchers point to the dual nature of power, where both coercive and contractual components are combined. This duality also manifests itself in the creation of money, when the basis can be both coercion (state money), and agreement (pre-state money, crypto-money), and a combination of both components. It is interesting that Parsons, as part of his concept of the parallelism of money and power, also pointed to a combination of coercive and contractual components that underlie money and power. He wrote that "the connection between commitment and 'trust' [in the case of money]... parallels the connection between coercion and consensus in the case of power" (Parsons 1963)

Parsons also dwelled on the question of who and how money is created in the financial system. He showed that the creation of money occurs at the level of commercial banks at the time of credit creation. This conclusion is true in essence, but something should be said about the peculiarities of the procedure. In his consideration, Parsons relied on the outdated "credit multiplier" model, where the issuance of new loans is conditional on the bank's availability of appropriate reserves. This model is criticized today (Carpenter 2012), since in the actual work of banks, the initial prerequisite for issuing a loan is not the availability of reserve funds, but the existing demand for loans (McLeay, Radia 2014). This means that banks' ability to create money is not limited by the financial regulator, but by the bank's willingness to take risk. From the point of view of the power theory of money, banks turn out to be centers for the creation of economic power in monetary form. The state grants commercial banks the right to create and subsequently distribute monetary power.

Conclusion

The power theory PTEM refines the previous theory of exchange, so that of the two equations, one turns out to be of a power nature. The logical consequence of this approach is to explain the essence of money as a measure and certification of generalized power. Incorporating power into the exchange model opens up several possible avenues for further research.

Firstly, theories already built in economics, the foundation of which is the theory of exchange or theories concerning money, can now be considered from the point of view of their significance for power relations in society. The article provides examples related to profit and market equilibrium. Other economic phenomena can be viewed in the same way.

Secondly, the measurability of power through money may make it possible to present power phenomena in a more convenient numerical form for research. It may be interesting to measure power-money flows in society in this way. Perhaps such a measurement will allow an audit of the entire power-monetary system, to identify shortcomings, abuses, leaks not only in the economic, but also in the political sense.

References

1. Aristotle. 1997. *Nicomachean Ethics*. Philosophers of Greece. M: ZAO Publishing House "EXMO-Press"
2. Walras L. 2000. *Elements of pure political economy or Theory of social wealth*. Isograph.
3. Veselov, Yu. V. 1999. *Economic sociology in Russia: history and modernity*. *Journal of Sociology and Social Anthropology*. – T. 2. No. 2. – P. 63-70.
4. Kahneman D. 2014. *Think slowly, decide quickly* - AST, Moscow
5. Kuznetsov A.G. 2012. *Sociological interpretations of power in social exchange theory*. *Magazine Power*.
6. Ledyayev V.G. 2015. *Modern concepts of power: an analytical review* // *Sociological Journal*. No. 3-4. S.S. 109-126.
7. Makarov E. S., Tikhomirov D. A. 2021. *The problem of determining the essence of money in modern economic sociology: between the state and trust*. *Economic sociology*. 22(5), 108-136.

8. Marx K. 1983. *Capital. Critique of Political Economy, Volume One*. Politizdat.
9. Mises, L. 1994. *Socialism. Economic and sociological analysis*. Catallaxy.
10. Parsons T. 1997. On the concept of "political power". *Anthology of world political thought: In 4 volumes*. M.T.P.S. 479-486.
11. Parsons T. 2008. *Social systems. Issues of social theory. Volume II. Vol. 1(2)*
12. Radaev, V.V. 2008. *Economic sociology*. Moscow: National Research University "Higher School of Economics", 608 p.
13. Salimonenko, D. A. 2013. Classification of the functions of money. *Russian Humanitarian Journal* 2 (5), 435-447.
14. Stefanov, Ya. N. 2022. Profit from the position of the power theory of money. *Economic science of modern Russia*. No. 4(99). – pp. 17-29. – DOI 10.33293/1609-1442-2022-4(99)-17-29.
15. Blau PM 1964. *Exchange and Power in Social Life* - John Wiley & Sons, Inc.
16. Bosworth. 2022. Social Power and Non-cooperative Game Theory. *Journal of Theoretical Politics*, 34(2), 262–279. <https://doi.org/10.1177/09516298221081810>
17. Bruno, Philip and Olivier Denecker, Marc Niederkorn. 2020. *The 2020 McKinsey Global Payments Report*
18. Carpenter S. Demiralp S. 2012. "Money, reserves, and the transmission of monetary policy: Does the money multiplier exist?" *Journal of Macroeconomics*, Volume 34, Issue 1, 59-75
19. Donzelli F. 2011. Negishi on Edgeworth on Jevons's law of indifference, Walras's equilibrium, and the role of large numbers: a critical assessment. *Department of Economics, Business and Statistics, Università degli Studi di Milano*, October 3
20. Emerson R. M. 1976. *Social Exchange Theory*. *Annual Review of Sociology* 2: 335-62.
21. Hearn, Jonathan. 2012. *Theorizing power*. Palgrave Macmillan.
22. Jevons JV. S. 1924. *The theory of political economy*, Fifth edition. London: Macmillan and. Co.
23. Jonathan E. Brill 1992. "Scales to Measure Social Power in a Consumer Context," in *NA - Advances in Consumer Research Volume 19*, eds. John F. Sherry, Jr. and Brian Sternthal, Provo, UT: Association for Consumer Research, Pages: 835-842.
24. Keynes, John Maynard. 1914. *A treatise on money. Volume I. The pure theory of money*. London: Macmillan and Co., Limited.
25. McLeay M, Radia A, Ryland T, of the Bank's Monetary Analysis Directorate. 2014. "Money creation in the modern economy." *Bank of England Quarterly Bulletin* 2014 Q1
26. Menge, Torsten. 2017. The role of power in social explanation. *European Journal of Social Theory*. 21. 136843101771442. 10.1177/1368431017714426.
27. Menger Carl 2007. *Principles of Economics*. Ludwig von Mises Institute.
28. Mills CW 1956. *The Power Elite* - New York, Oxford University Press.
29. Parsons T. 1963. On the Concept of Political Power. *Proceedings of the American Philosophical Society*, Vol. 107, No. 3 (Jun. 19, 1963), pp.232-262
30. Russell, Bertrand. 2004. *Power: A New Social Analysis*. Basingstoke: Palgrave Macmillan.
31. Simmel Georg. 1990. *The Philosophy of Money*. London: Routledge.
32. Stefanov Y. 2022. Power Theory of Exchange and Money. *Economies*.10(1):24. <https://doi.org/10.3390/economies10010024>
33. Weber M. 1957. *The theory of social and economic organization* - The Free Press.
34. Zelizer V. 2000. Money. In: *Encyclopedia of Sociology*. 2nd ed. Edited by Edgar F. Borgatta and Marie L. Borgatta. New York: Macmillan Reference USA.

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.