

Economics of Productive Consumption as an Offshoot of Main Currents of Economic Theory¹

Ekonomie produktivní spotřeby jako přesah hlavního proudu ekonomické teorie

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Abstract

This article presents economics of productive consumption (EPC) as a relatively new and forward-looking trend in economic theory that reacts to the modern expansion in services associated with the acquisition, retention, and application of human capital. This article explains the substance of EPC, including the question of how and in what way it goes beyond contemporary neoclassical economic paradigms. It demonstrates that EPC seeks to find the general principles of human behavior, and yet also draws on current conditions. For this reason it compares the approaches used in EPC with those of classical and neoclassical economics, providing a view of how EPC is associated with other offshoots of neoclassical economics and why EPC is growing in the contemporary era.

Keywords

economics of productive consumption, utility, interest, capital contract, transferred price, productive services sector

JEL Codes

B21, D11

Abstrakt

Článek představuje ekonomii produktivní spotřeby (EPC) jako relativně nový a perspektivní směr ekonomické teorie, který reaguje na soudobý rozmach služeb spojených s nabýváním, uchováním a uplatněním lidského kapitálu. Článek vysvětluje podstatu EPC včetně otázky, v čem a jak přesahuje soudobé neoklasické ekonomické paradigma. Ukazuje, že EPC usiluje o nalezení obecných zákonitostí lidského jednání, zároveň však vychází z aktuálních podmínek. Srovnává proto postupy užívané EPC s postupy klasické i neoklasické ekonomie, podává přehled, jak EPC souvisí s dalšími přesahy neoklasické ekonomie i proč se EPC rozvíjí v současné době.

Klíčová slova

ekonomie produktivní spotřeby, užitek, úrok, human capital contract, přenesená cena, sektor produktivních služeb

¹ This paper has been prepared within the project Growth of the role of the productive services industry: Theory and practice No. 7427/2018/02 (University of Finance and Administration).

1 Introduction

Economic theory (and its trends) as a rule is based on real economic processes and phenomena present at the time the given theory was formulated. It attempts to describe these processes and phenomena, to explain them and discover their causes, effects, and respective links to other phenomena. From this perspective it can be stated that economic theory is dependent on history (Hunt and Lautzenheiser 2015). At the same time, however, solid economic theory attempts to find general principles of human behavior that transcend a given time period. Throughout this search, the given theory is confronted with already existing attempts at explanation that it expands and in some cases supersedes or replaces with other alternatives. From this perspective, this constitutes a logically recognizable shift in theory. For this reason we focus on the individual stages of the evolution of economic theory in order to show why it is relevant in the present time to discuss a substantial change to the economic paradigm in our approach to contemporary problems.

The objective of this article is to present economics of productive consumption as part of economic theory that seeks to find general principles of human behavior. At the same time it overturns the existing economic paradigm in the form of neoclassical economics and applies to other trends in economic thought that develop this paradigm further or seek to go beyond it or expand it. This article describes the reasons why economics of productive consumption is currently growing and what specific historical factors have given rise to this development, or rather how these factors influence human behavior.

The text of this article is structured as follows: the first and second sections briefly characterize classical or rather neoclassical economics and its offshoots. Its purpose is to categorize economics of productive consumption, or rather to show that the processes used by economics of productive consumption are similar to the processes of other economic theories, yet offer better explanations of the important phenomena brought by current developments. The third section focuses on economics of productive consumption itself as a significant shift of fundamental economic paradigms, or rather as an offshoot of the main currents of contemporary economic theory in its primary direction. In the author's opinion, the modern economy is seeing an increase in the importance of productive services, namely services contributing to the acquisition, retention, and application of human capital, which is resulting in substantial changes to the entire economic system. From this perspective, economics of productive consumption is a methodological basis for identifying and predicting these changes and conceptualizing complex reforms focused on support of the economic basis of development of productive services.

The primary differences between economics of productive consumption and neoclassical economics are as follows: According to neoclassical economics, the consumer is oriented on maximizing his utility in the sense of a subjective experience and consumption has effects only in the form of a subjectively perceived experience, whereas according to economics of productive consumption the consumption is productive in the sense that it brings significant income effects, the mechanism of subjectively perceived experience is solely decisive, consumers (more specifically, the economic subject) maximizes the current value of his future income over a long-term timeframe in accordance with his life strategy in the given social conditions.

2 Classical economics and its offshoots

Classical political economics has been evolving since roughly the 1770s to the 1870s. It is associated with such names as Adam Smith (1723–1790), who is considered the founder of economics as a science, David Ricardo (1772–1823), Jean Baptista Say (1767–1832), John Stuart Mill (1806–1832), and others. Proponents of classical economics saw economics as the study of the creation and distribution of wealth – they sought to determine the sources of the wealth of society and how this wealth is distributed among the individual members of society (for more details, see O’Brien, 2011). They were intrigued by the general issues that they were examining at the specific moment in time – the period of the industrial revolution, all manner of social changes that were reflected e.g. in the form of the French bourgeois revolution, the Napoleonic Wars, colonial conquest, and other events. Division of labor and specialization are included in general sources of wealth (A. Smith: “*An Inquiry into the Nature and Causes of the Wealth of Nations*” – Smith 2019), whereas specialization takes place on the basis of the principle of comparative advantage (D. Ricardo: “*On the Principles of Political Economy and Taxation*” – Ricardo 2010). Representatives of classical economics presumed that the laws acting as part of a market mechanism in conditions when individuals pursue their own interests and the market has a competitive character ensure the efficient use of economic resources as well as the harmony of private and public interests. Some proponents of classical economics, such as D. Ricardo (Ricardo 2010) at the very least indirectly formulated the law of diminishing returns. Through a theory of classes derived from ownership of individual factors of production he sought his own audience – the class of owners of capital. This represents the economic sector that was established at the time as dominant, i.e. industry. He perceives consumption in the case of owners of labor as reproduction of its own labor power, in the case of capitalists as investment into expansion of production, whereas it begins to become aware also of the importance of technological progress. He understands production as a process of repeated reproduction, a process of expansion and technical improvement.

Proponents of economic theories that go beyond classical economics may be said to include e.g. Thomas Robert Malthus (1765–1834) and Karl Marx (1818–1883).

While Malthus is often (e.g. Sojka 2010) classified among classical economics, his opinions are typically said to deviate from classical economics. Malthus sought to substantiate his theories using all manner of statistics drawn from the data of the time in which he lived. To whatever extent, therefore, that he endeavored to formulate a general theory, he was by necessity a product of his time. Nonetheless his theory in one sense is general, or rather timeless – in his essays Malthus warned of the natural limits on economic processes (Macfarlane 2014).

Marx (Sperber 2013, Harvey 2017) developed and refined the labor theory of value from classical economics into his own theory of surplus value. The main purpose of his theory of surplus value was to demonstrate scientifically that the worker class in capitalism was being plundered and to convincingly justify the necessity for social revolution leading to the replacement of capitalism by communism. Here Marx contradicted certain of his own ideas about the transition from one mode of production to the other (Marx 1957–1959). And yet neither his theory of surplus value nor his theory of reproduction were ever substantiated

scientifically or empirically. The majority of persons have multiple opportunities to apply their capabilities and their gain does not diminish below their opportunity costs. More beneficial was Marx's analysis of conflicts between what he called means of production (the relationship of man to nature and the degree to which man annexes nature by appropriating Nature's products to satisfy human wants) and relations of production (relations to natural resources and raw materials, relationships between people arising on the basis of their activity during production, exchange, distribution, and consumption). While contemporary economic theory does not utilize the given terms, institutional economics for example (Groenewegen, Spithoven, van den Berg 2010) notes that the existing structure of institutions (in Marxist terminology, relations of production) need not correspond to the given phase of technological development (in Marxist terminology means of production). Nonetheless the idea of the concept of development of society as a natural historical process (the self-creation of man and self-creation of society is derived from the process of recreation of nature by man through the means of his incorporation to society) is implicitly contained in a series of contemporary approaches. In the concept of the law of economics of time Marx identifies with the basic themes of economics of productive consumption (Marx 1974).

3 Neoclassical economics and its offshoots

Neoclassical economics has been developing since the 1870s and continues to be perceived at least in the field of microeconomics as the dominant trend of economic theories (for details see e.g. Henry 2012, Morgan 2015). Historicky je spojená se jmény jako Hermann Gossen (1810–1858), Leon Walras (1834–1910), Vilfredo Pareto (1848–1923), William Jevons (1855–1882), Francis Edgeworth (1845–1924), Alfred Marshall (1842–1924), John Clark (1847–1938), Arthur Pigou (1877–1959), Irving Fisher (1867–1947), Gustav Cassel (1866–1945), John Hicks (1904–1989) and other. In its microeconomic components it focuses on examining the principle of individual subjects, namely households and companies. It can be characterized as a theory of decision-making in conditions of scarcity, which seeks to find a response to the questions of how best to use precious resources both in terms of their production and in terms of their allocation (utilization), in order that increasing the production of one good may not be achieved otherwise than at the cost of reducing the production of another consumption good, or rather to increase the benefit to one consumer otherwise than at the cost of reducing the benefit to another consumer. Economic theory continues to seek a timeless answer to general economic problems in the form of the questions of what to produce, how to produce, and for whom to produce. Here Sojka (2010) indicates that in the neoclassical concept time is historically disappearing from economic analysis as ownership relations and the entire institutional organization of society are also fading into the background.

The basic characteristics of neoclassical economics are (Sojka 2010):

- The concept of the consumer as a rational subject who maximizes his benefit (derived from his preference).
- The concept of an economic process as a single act that begins with production and ends with consumption (the reproduction perspective is being abandoned).

- On explanation of human behavior from the perspective of selecting alternatives.
- Rejection of the classical model of exchange, replacing the concept of exchange in its dual determinacy as the result of marginal costs (in the form of marginal rates of product transformation) in the production of individual consumption goods with marginal utility (marginal rate of substitution in consumption) in the production of consumption goods.

The main motivation for replacing classical economics with neoclassical was the significant increase in the quantity of resources available to owners of labor power, i.e. consumers. Consumption has ceased to be the mere reproduction of labor power but is becoming an area characterized by a choice of various alternatives in consumption according to the individual preferences of the consumers and in accordance with their wage-earning capabilities. Classical economics did not address these issues, because at the time the importance of decision-making among consumption alternatives was marginal. In other words, neoclassical economics began to emerge at a time when employees (owners of labor) were receiving such high income that decisions regarding its utilization when obtaining consumption goods became one of the most important phenomena in economics (Valenčík et al. 2014). From this perspective, neoclassical economics is a product of its time, which nonetheless as intimated above seeks to find general economic laws and principles applicable to ahistorical time. Neoclassical theories had to react to social developments of the time in the form of the theory of imperfect competition, externalities, and other reasons for state intervention. After World War II a synthesis was gradually achieved predominantly of microeconomic neoclassical theories and macroeconomic Keynesian theory in the so-called neoclassical synthesis that now serves as the basis for economic theory. The proponents of this synthesis include Paul Samuelson (1915–2009), Franco Modigliani (1918–2003), James Tobin (1918–2002), Robert Solow (1924), and others. From the 1970s neoclassical synthesis has been enriched by other elements associated with contemporary developments, e.g. in the form of information asymmetry, the heterogeneous nature of work, price and wage inflexibility, etc.

A number of economic theories and approaches may be identified as offshoots of neoclassical economics, some of which anticipate the theoretical origins of economics of productive consumption. Here we briefly describe the most significant.

Innovation theory: innovation theory is considered to have been founded by Joseph Schumpeter (1883–1950). He operated from the perspective of the entrepreneur who seeks new qualitatively distinct solutions (innovations) and thus seeks to achieve a profit. Schumpeter then generally defined capitalism as a social democratic system based on a dynamic created by individual entrepreneurs (Sojka 2010). This concept corresponds to the time in which Schumpeter was active, and likewise Schumpeter's concerns about the self-destruction of capitalism as a result of the creation of large societies, the separation of ownership and management of companies are a product of his time. Schumpeter's approach (featured, for example, in *"Theory of Economic Development"*; Schumpeter 1981) generally emphasizes the positive meaning of "temporary" monopoly based on innovations compared to other forms of monopolies. He contributed to explaining the dynamics of the industrial revolution. He also managed to answer the question of why the economic position of the owner of labor power improves when he showed that

the expansion of innovation waves is a factor influencing the increased value of work in the competitive environment. Innovation theory also overturns the ideas of “gloomy economists” (Malthus et al., later economists associated with the Club of Rome) on the impossibility of ongoing economic growth. Schumpeter demonstrated the importance of the innovation potential of a society, which for the most part is dependent on productive services enabling the acquisition, retention, and application of human capital.

Institutional economics: Institutional economics can be differentiated into “old” institutional economics, which existed particularly in the USA from the end of the 19th century until around the start of World War II, and new institutional economics, which has been evolving since the 1960s, with its significant expansion occurring from the 1990s. The basic errors of neoclassical economics according to the new institutional economics (Groenewegen, Spithoven, Berg 2010) include the fact that neoclassical economics ignores (or does not devote sufficient attention to) transaction and information costs, issues of ownership rights, the influence of institutions and time, and the role of ideas and ideology. New institutional economics also does not agree with the principle of unlimited rationality and the absence of uncertainty in economic decision-making. In keeping with the learnings of experimental psychology (Loomes 1999, Bardsley et al. 2010) new institutional economics arrives at the conclusion that people do not have a clearly defined structure of preferences when solving problems, and therefore cannot even make decisions on the basis of any clearly given structure. It is thus more useful to consider behavior as based on the given context (from the given cultural and institutional environment) (Hodgson 2007). In brief, institutional economics can be characterized as: “institutions and time are important for economic decision-making”. Calling attention to the importance of the cultural and institutional environment in the context of identifying a number of problems associated with a model of decision-making based on maximum utility is also one of the important motivators for developing economics of productive consumption as the primary offshoot of today’s main current of economic theory. If we consider the targeted aspect of behavior of households to be their orientation toward maximum current value of future income, then it is clear that the investment of current income for the purpose of maximizing future income will take place differently under different cultural and institutional conditions. At the same time, the differences will primarily be distinguished by the various strategies of households for long-term earning orientations of households in different historical periods and different communities, thus secondarily by how these strategies are reflected in the utility of individual persons in the form of experiences or perceived experiences. As we will later see, the discovery of the role of invidious or conspicuous consumption by T. Veblen from the perspective of the institutionally conditioned relationship between investment into development of the capabilities of the person and his social status is also beneficial. This is one of the areas in which the theory of cooperative games offers a valuable theoretical apparatus.

Welfare economics: Welfare economics represents the part of economic theory focused on the effects of the entire economic process and its parts on the welfare of an individual or group of people. What is welfare? Is it possible to measure welfare? Does the perception of welfare differ for different people? What economic tools lead to maximizing or at least increasing welfare? Welfare economics attempts to answer all of these questions (for more details, see Johansson, 1991). Welfare economics devoted significant attention to

imperfect market structures, market failures, and the question of how to resolve these failures as well as large wealth and income disparities. Its conclusions are debatable – e.g. increased equality need not always take place at the cost of efficiency. Actual practice has also shown the impossibility of constructing “social indifference curves” and finding some optimal point at the edge of utility possibilities. Economics of productive consumption offers a solution that does not lead to a dilemma between equality and efficiency. The solution (in connection with institutional economics) is to refine the financial market and such a structure of exchange and redistribution mechanisms that in the areas of development, retention, and utilization of human capital would enable the most complete utilization of existing investment opportunities, on the basis of which the income of the debtor (one who acquires, retains, or better uses human capital) as well as the creditor who uses his investment resources for this purpose.

Game theory: Game theory is based on the frameworks of neoclassical economics, even though its emphasis on the thorough use of mathematical means in a substantial way shifts the definition of certain of its basic terms, including the term “preference”, which is fundamentally associated with neoclassical economics. Game theory points to the problems of defining it. It first devotes its attention (as part of non-cooperative games) on a description of human behavior, which cannot be confined to the frameworks of optimizing the behavior of the individual, but where the existence of other subjects must be considered who behave in accordance with their preferences. It offers a very intricate mathematical apparatus for this purpose. It then, in connection with the theory of cooperative games, raises the question of what produces or defines the distribution of the surplus created by cooperation (exchange, public choice, the role of an arbitrator acknowledged by the cooperating parties, etc.), so that the inordinate complexity of these issues and the usefulness of mathematical means in their resolution may be revealed. In terms of economics of productive consumption, game theory is important as we demonstrated above and will continue to demonstrate in analysis of contracts focused on investment into the acquisition, retention, and application of human capital. In connection with the multi-point spread of the Nash bargaining problem, the use of non-cooperative games also offers analysis of differing consequences of investment into development of human capabilities and social position (which can also be perceived as the differentiation of investment into human capital and investment into social capital).

Keynesian macroeconomics and the supply-side theory: Keynesian macroeconomics and its counterpart based on various trends from liberal positions significantly influenced the practice of the economic regulation of states. Supply-side theory calls attention to one of the very important aspects associated with economics of productive consumption. Keynesian macroeconomics, which emerged as a reaction to the Great Depression in the 1930s (Sojka 2010), attempts to find tools for regulation and stimulus of economic growth such as to mitigate economic cycles, or rather so as to prevent devastating crises based on the chain reactions of a depressed economy resulting in spontaneous reduction of income due to negative expectations leading to increased saving. The key concept of this theory is the expenditure multiplier, which can be used to invoke the opposite chain reaction based on repeated conversion of income into expenditures and expenditures into income. This process results in stimulating aggregate demand, which with its size should better approximate potential product. Contemporary Keynesian approaches take

into account influences that limit the effectiveness of the expenditure multiplier and seek to create complex models that would be a foundation for a prognosis of economic development and for its regulation using the tools available to the government and the central bank. To differentiate household consumption and the investments of companies, Keynesian macroeconomics remain fully within the framework of neoclassical economics. Supply-side theory (Canto, Joines, Laffer 2010) calls attention to problems that arise through overuse of demand stimulation of the economy, particularly associated with support of balancing trends to the detriment of innovation adaptation of the economy to changes of what are ultimately natural limits on its growth. In relation to this it takes into account the role of technological progress, education, the role of institutions, and appeals to the importance of low tax burdens. The theory in general emphasizes that economic growth is possible only on the basis of the economic activities of people, in particular business entrepreneurs, and that if barriers are created to these activities, growth will not be achieved. Supply-side theory thus endeavors to remove these barriers, whereas it presumes that this elimination will result in an increased number of factors of production – namely labor and capital, investments and savings, which will lead to increased production. Even supply-side theory is a product of its time – its origins are in response to the problems that market economies faced in the 1970s and that Keynesian, or rather neo-Keynesian economics was not capable of addressing. Use of the tools of Keynesian stimulus begin to fail for the very reason that an economy cannot be ramped up against a barrier that balanced growth itself creates. On a global scale it will be very important which economies will be capable of reacting to the changed situation and of creating space for economic growth on an entirely new basis.

Public choice theory: This theory spread in the period following World War II as a reaction to the growth of state interventions and the importance of the government in market economies. In general it examines (Butler 2012) processes of collective decision-making, i.e. decision-making as practiced by or to the benefit of a group. The subject of public choice theory is the manner in which this collective decision-making is carried out. Mostly this decision-making applies to methods of allocation (distribution) of resources (pensions, wealth) in society. The theory points to a series of failures resulting in public choice, i.e. it emphasizes the limited options to replace underdevelopment in the market with tools of public choice. The theory offers a perspective both of general causes of inefficiency (in public choice, people are not deciding about their own money, the decision depends on the method of decision-making, sometimes even on the order of voting), as well as its specific manifestations (bureaucracy, interest groups, the battle for the moderate voter, the political cycle, information asymmetry of decision makers, etc.). A critical view of the possibilities for public choice was important from the perspective of economics of productive consumption in order to overcome certain illusions associated with options for resolving social problems in the form of redistribution on the basis of public choice. Public choice theory played an important role also in the fact that it opened a path to the broader application of game theory when resolving economic questions associated with the distribution of collective wealth.

Neo-Ricardan and reproduction economics: Neo-Ricardan and reproduction economics (e.g. Sraffa 1975) attempted through several modifications and several waves to return a reproduction perspective to economic theory (i.e. a perspective based on constant

repetition of production and utilization of the result of production in the next production action act, which neoclassical economics abandons, or rather sacrifices to what constitutes the essence of its approach. The reproduction schemata could not be returned to the main current of economic theory particularly because no trends managed to incorporate Schumpeter's innovation theory into them. We can refer to the article by J. Von Neumann, *A Model of General Economic Equilibrium* (1945–1946), in connection with attempts to restore the reproduction concept to economics, in which he formulates the idea of a theoretical concept where all consumption goods are reduced to intermediate consumption goods. The article was based on the author's lecture at Princeton in 1932. It represents one of the most frequently cited articles, and yet to this day not all of the ideas the author incorporated into it have been sufficiently extracted (Napoleoni 1968). While J. Von Neumann along with O. Morgenstern (1944 pp. 617–632) axiomatized the neoclassical theory of utility in the appendix of the famous book that gave rise to the creation of game theory based on his own theory of preferences, J. Von Neumann gives priority in the article to expressing universal economic balance through the production power of consumption goods in the topological space he proposes, whereby he ultimately quite closely approximates the economics of productive consumption we will discuss further.

Human capital theory: this theory (e.g. Becker 1993) attempts to overcome the obsolete concept of three factors of production (labor, land, capital) that emerged during the ancient periods of classical economics. It takes into account that human capital is created through investment "in people", just as capital is created through investments in land, its transformation, its conversion to a tool, and technology. Human capital theory sprang from the earth of neoclassical economics and did not manage to come to terms with its fundamental prerequisite (and limitation), namely that consumption ends with utility. It devoted attention in only a partial manner to the retroactive influence of certain forms of consumption (or rather what appears to neoclassical economics as consumption) on production. Becker's ideas on the role of "imagination capital" (Becker 1997) were significant, detailing the method of intertemporal choice.

Behavioral economics: Behavioral economics is part of economic theory which has been evolving since approx. the beginning of the 1970s. It focuses (Dhimi 2017) on the impacts of social, cognitive, and emotional factors on economic decision-making by individuals and institutions. Whereas standard economics focuses on consequences and exterior circumstances of human behavior under the assumption of rationality, behavioral economics examines the systematic methods of human decision-making and their influence on human behavior under the assumption of limited rationality, pointing out errors in human thinking. It further focuses on issues of social norms and how these norms influence human behavior. The key theses of behavioral economics include the notion that only part of our behavior can be explained rationally. Often human behavior is based on emotions and other factors. Human preferences are dependent on context. People sometimes have the tendency to prioritize the current state, even when it doesn't benefit them in many respects. The selection of variants depends on the method in which it is presented (whether positively or negatively). Individual variants are compared not in terms of absolute value but relative to endogenous reference points. Preference also depends, among other things, on the preferences of other subjects; people take into account values such as reciprocity or fairness.

4 Period conditions of the development of economics of productive consumption

Just as with classical and neoclassical economics, the creation of economics of productive consumption is a product of its time. Objective demand for economics of productive consumption arise at a time when:

- Processes of spreading innovation waves and the technological advancement of the economy capable of carrying out innovation are on such a level that they offer essentially unlimited options for the use of accumulated human capital as the factor of production that contributes the most to economic growth and concurrently defines the form it takes.
- Development of an institutional system has reached a stage where the state is capable of technically, technologically, and organizationally supporting the practical execution of Human Capital Contracts (HCC). The state in particular helps secure transfer of part of income from those who in the past consumed some productive service and as a result of this consumption experienced increased income to those who provided the productive service. Practically, the given transfer can be carried out when paying taxes. With its activities the state can also contribute to ensuring that those who received the productive service do not avoid paying the relevant share, etc.
- On one hand this leads to ever greater economic disparity and subsequently to social segregation (including the emergence of excluded enclaves), the manifestation of which is the limiting of equality of opportunities to apply capabilities as a result of wealth and income barriers. On the other hand, technologies, methods of organizing labor, etc. concurrently offer the option to open paths to an economy making full use of investment opportunities in the acquisition, retention, and application of human capital, to a society in which the free development of each is a condition of the development of all.
- Households have sufficient resources to resolve immediate problems, so they can devote the saved time to a long-term strategy of lifelong development and application of the capabilities of their members as the basic and most important source of future income. This at the same time consists of a strategy connected with the enhancement of cross-generational cohesiveness, a strategy that is based on use of productive services as a resource for developing, retaining, and applying human capabilities.

The productive services sector (we recall that this consists of services whose objective is the acquisition, retention, and application of human and social capital of persons to whom a certain service, such as education, is provided) can become the decisive sector of the economy. Just as industry became this type of sector after the industrial revolution and likewise the sector of those services not immediately associated with the acquisition, retention, and application of human and social capital in developed countries after World War II. The production of the sector of productive services can lead to a sharp and long-term increase in the productivity of labor of those employed in other sectors. In other words, the sector of productive services offers services allowing the productivity of human activity to be increased. This will also harbor a focal point of innovation. The sector can further grow the spectrum of human needs in a substantial way. At the same time these

will consist of needs that are met on an ever growing scale by this production of the educational sector. The ever greater share will play a role in the need for self-realization, personal development, etc.; the productive services sector will contribute to their fulfillment.

5 The idea of economics of production consumption in current theoretical literature

The idea of seeing consumption as a productive (partially productive, predominantly productive, or completely productive with exceptions) phenomenon is so attractive that it has been appearing independently with numerous authors from various parts of the world, yet with a very close interpretation. One of the main proponents of cultivating this idea is Steger (2002), who gave the impetus for this in his article "*Productive consumption, the intertemporal consumption trade-off and growth*". In his concept of productive consumption enables the satisfaction of current needs and at the same time increases the productive potential of work. He emphasizes that the view of intertemporal choice thereby substantially changes. He places productive consumption into immediate connection with growth of the supply of human capital and on this basis creates simple macroeconomic growth models.

One of the most natural contributions to defining and analyzing productive consumption is the article "*Inclusive growth through creation of human and social capital*" (Dinda 2014), which partially builds on the above article by Steger, yet relies on other sources as well, some of which also reference issues of productive consumption. In the area of productive consumption, he draws a distinction between human and social capital. He sees social capital as a prerequisite for human application, yet does not identify the phenomenon we describe as investment into social position, where the option to obtain or apply human capital by one subject takes place to the detriment of another subject. It can be considered highly motivating that he presents productive consumption as associated with eliminating the inclusion of asset differences incurred and with the creation of equal opportunity for social advancement. In this sense, he interprets the positive role of social capital as well. He takes into account in detail the role of education and health care. He uses simple, primarily microeconomic models to express his ideas. He focuses on the issues in question in subsequent and previous essays as well, such as Dinda et al. (2000).

Psárská (2019) uses the theoretical basis of productive consumption for analyzing behavior of households in Slovakia. He takes into account deviations from fully rational behavior and seeks to explain their causes in terms of behavioral economics. From a methodological perspective this consists of a beneficial approach, because the "higher level of rationality" that is incorporated into the theoretical basis of economics of productive consumption is presented in direct confrontation with the actual behavior of people. Psárská gathered and analyzed extensive empirical material related to the actual behavior of households and used the theory of productive consumption to formulate certain recommendations for the area of various VAT rates.

It is worth noting certain other approaches to the use of the idea of productive character of consumption. Zwick (2013) shifts the issues of productive consumption into the position of philosophical essays of social visions associated with overcoming conflicts between labor and capital. His essay is inspiring, and yet rather remote from real economic processes. Suen, W., Mo, P. H. (1994) in their older study present an interesting idea based on the fact that every act of consumption has (as previously mentioned) two types of effects – utility and income effects. Taking into account the income effect, they construct a “shadow price” and attempt specific analyzes that are not entirely convincing. This is partially due to the fact that what we perceive as utility is also manifested in the human psyche by expected income. Ichiroh, D. (2010) interprets productive consumption from the perspective of population growth dynamics and with the use of a suitable mathematical model demonstrates that there is a very close correlation between productive aspects of consumption and population growth in less developed countries. Households compare future returns from growth in the numbers of members of households to options for investing in human capital for the purpose of acquiring and retaining capabilities, however relatively rationally. For similar findings see Yerznkyan et al. 2017).

Learnings obtained from study of essays that address issues of productive consumption or reference issues of productive consumption can be summarized briefly as follows:

- While the concept of “productive consumption” is relatively frequented, used in various contexts and various parts of the world, its content is interpreted very similarly and the idea of the importance of productive aspects of consumption both from the theoretical and the practical perspective is gradually growing.
- During an analysis of the duality of utility and income effects, we cannot lose sight of the fact that expected income effects are reflected directly in generating subjectively experienced utility, i.e. when examining the role of productive consumption we cannot get by with a simple supplementation of a neoclassical approach.
- Decision-making on the basis of productive aspects of consumption is associated with a higher level of rationality and the models that are based on the productive effects of consumption are a very suitable supplement (reflection) of phenomena identified by behavioral economics.
- One of the most significant roles when constituting the theory of productive consumption as a significant offshoot of the existing main current of economic theory is the exact differentiation of investing into development of capabilities and if applicable the prerequisites for its application, which does not come at the cost of the others, and investment into social capital, which is focused on limiting equal opportunities derived from asset and income disparities; theoretical tools used thus far are not sufficient for analyzing phenomena in this area.
- This is associated with the fact that, on the contemporary level of theoretical analysis of issues of productive (particularly income) effects of consumption, it is important to develop proprietary methods for the economics of productive consumption without which this area of research will not mature into the form of a relatively independent and forward-looking theory.

6 The essence of economics of production consumption

The essence of economics of production consumption can be expressed as follows: this theory (presented e.g. in Valenčík et al. 2014 and subsequent monographs) rejects one of the key prerequisites of neoclassical economics, that the consumer maximizes his utility in accordance with his preferences. Economics of productive consumption considers the mechanisms of preference based on subjectively perceived experience not to be goal-setting but decisive, from this perspective focused on a long-term strategy of use of current income for the acquisition and use of assets allowing for them to increase the current value of future income.

So that we may explain economics of productive consumption, let us first recall how neoclassical economics perceives utility:

1. Originally and predominantly as a subjective phenomenon of the perceived experience type (experience, pleasure and passion, etc.).
2. Sometimes and rather later as an expression of preference without its character or form being specified.

In one or the other interpretation, a presumption is made of the final and exogenous character of the utility in relation to the economic system. The finality of the utility is reflected in the fact that neoclassical economics presumes rational decision-making related to maximum utility, while the utility itself does not have feedback to economic processes. The exogenous character of the utility means that the method of functioning of the economic system has no influence on the creation of utility. If the theory presumes the final character of utility, then it must also presume that consumption serves solely for satisfying utility and has no productive character – people do not obtain any factor of production through consumption, e.g. in the form of human or social capital, that can be estimated and that serves as a source of future income. And yet if we look at the current real economic system, then in it the role is evidently and demonstrably growing of productive aspects of consumption, which cannot be abstracted from and cannot be considered an immaterial residual effect. This consumption (in the form of consumption of educational services, creation of social contacts, whereas this creation can also take place via conspicuous or club consumption, etc.) is concurrently both what evokes the utility (as a subjectively perceived phenomenon) and what leads to acquisition of human or social capital, which as a factor of production is an entry to production and therefore a source of future income. From the perspective of the exogeneity of the utility: if the theory presumes an exogenous character of the utility, it must presume that the relations or mechanisms in which the human economic subjects (bargaining people) are found and which economic theory discusses play no role when creating their subjectively perceived experience. Reality, however, is exactly the opposite: the relations and mechanisms by which a system is organized are an important factor in the creation of human preferences and therefore of utility.

The above corresponds with the issues surrounding interest. Neoclassical theory (for details see Sojka 2010) explains interest as the result of the joint action of two causes: willingness and opportunity. Willingness is based on the fact that people prioritize current

consumption. If they abdicate it, they will feel a loss of utility. In order for them to be willing to abdicate current consumption, they must expect satisfaction in the form of higher future consumption. At the same time each person has an individual level of satisfaction – is willing to abdicate current income and consumption only if the future income, and therefore also consumption, is n times greater (where the value of n is greater than 1). Willingness therefore may be designated as a subjective cause determining interest – it defines the smallest amount a person is willing to accept in order to abdicate current income and consumption. Opportunity is an objective cause determining interest. This consists of an opportunity for investors to invest today's pension into production methods bringing higher future pension. The ratio between expected future pension and today's (invested) pension determines the maximum interest rate the investor is willing to pay. The problem consists of the explanation of prioritizing current consumption over future consumption as a result of human impatience. Impatience, however, is not the sole factor of our psyche related to the future. We can, for example, look forward to something. This factor has the entirely opposite effect and leads to prioritizing future consumption. From the perspective of the debtor, therefore, interest is not a reward for patience, or rather satisfaction for abdicating current consumption. It is also a means by which people can achieve at least part of the future consumption. We further stress that the neoclassical explanation of interest also presumes thorough separation between consumption and investment – money or other resources may be used either for current consumption or future consumption. Nothing exists between them; it is not presumed that current consumption could serve as a source of future income, that is, that it could have a productive character. Nonetheless, in a series of cases, consumption is a source not only of current utility, but influences future income as well. Let us take a look at two illustrative examples:

1. A girl buys a purse, she is pleased with it, but partly due to the fact that with it she acts on her surroundings, opens a path to success, improved image, social position, etc.
2. A household acquires a backyard grill, members of the household are pleased with it, of course in part because they look forward to inviting visitors over and subconsciously value the utility from the social contact they will thus acquire.

Of course, the opposite dependency also applies: resources people use for investment, achieving future income, bring them utility in the present as well. A typical example may include resources expended for an training course, but even all manner of investment instruments such as stocks or gold. Future income is not the only thing of interest to people here. Current pleasure, joy, excitement, etc. has its influence as well. In the strategic orientation of a household and its members on maximizing current value of current income from creating and managing assets composed of non-human and human capital, as well as in the subjective estimation of the benefit of these assets, an important role is played by social context, social custom, traditions, etc.

From the above it can be concluded that economics of productive consumption, unlike the standard concept of neoclassical economics, presumes that consumption of a series of consumption goods does not suffice solely for satisfying current needs or achieving current utility but has a productive character and is a source of future income. We emphasize that economics of productive consumption is based on neoclassical

economics; its goal is not to create a different, completely alternative theory. Economics of productive consumption develop the prerequisite of neoclassical economics (for details see e.g. Friedman 1957, Becker 1997), that for comparison of current and future utilities people must have available the commensurate imagination capital – they must be capable of imaging future utility. At the same time, they must have the capacity itself to compare utility.

Economics of productive consumption emphasizes that people in their actions make the previously experienced present and relate their behavior to the future. People do not seek out solely current utility, but consider what relationship their current behavior will have in relation to their future. Of course, different people have differing abilities to relate their current behavior to the future and to make the past present in their current behavior. If someone has this ability to but a small extent, they will more frequently make all the different mistakes and errors that behavioral economics warns of. From this perspective the following generalization may be made: the more and more fully a person manages to make present what has been previously experienced into their current life and the more a person manages to relate their activities and current life to the future, the more complete (and free of mistakes) his life will be.

Economics of productive consumption acknowledges that a large part of human behavior is related to the future (more or less remotely). In his actions a person acts on (influences, transforms) the outer world in order to meet his needs and thereby achieve utility. At the same time he uses certain objects, performs certain activities, ends up in certain situations, while drawing from his previous experiences. By way of illustration: a fisherman uses a fishing net (an object) for catching fish (an activity), whereas he collaborates or on the contrary competes with other fishermen (situation) based on previous experiences when catching fish in order to satisfy his need (hunger). The need for which the person is expending effort of course influences his valuation and experience of the objects, activities, and situations that are associated with this need. The objects, activities, and situations themselves become needs (the person wishes to own a net, to fish, to collaborate or compete with other fishermen). These needs retroactively act on the original need (here the need that is hunger). In reality, given the complexity of human life and the fact that in his actions the person makes present what has already been experienced, it is actually difficult to determine which need was the original one. Moreover, both a certain resource and a certain activity and situation as a rule serve to satisfy a larger number of needs. This therefore results in a synthesis of experiences from satisfying a series of needs. The product of this synthesis is the creation of other needs that once again are based on previous experience and that act upon other needs.

7 Summary and discussion

The fact that people in their behavior do not endeavor solely for maximization of current utility, but also take into account how their current consumption influences their future returns, is a general principle of human behavior. In this respect, economics of productive consumption logically builds upon and surpasses neoclassical economics. At the same

time it relates to other theories seeking to go beyond this economic approach. We shall now show how:

- With its approach, economics of productive consumption takes certain inspirations and learnings of behavioral economics that show that the human psyche was created in a certain environment, its functioning has a certain momentum, and that there exist significant deviations from factual decision-making of individuals and groups of individuals from optimal decision-making. Economics of productive consumption acknowledges such phenomena as transfer of experiences from final satisfaction of a need to resources, activities, and conditions (situations) that can lead to the satisfaction of a need. The phenomenon of transfer of experiences on one hand increases the intensity of motivation leading to fulfillment of long-term strategy, streamlines choice, but can at the same time lead to several types of human psychological failure. The resources, activities, and situations may become a goal in and of themselves, they can lead a person away from his long-term goals and thereby lead to all manner of problems of human behavior.
- Economics of productive consumption reevaluates and reworks the concept of welfare economics by replacing the boundaries of achievable utility that is the subject of welfare economics with the boundaries of achievable future income (or the current value of achievable future income). Economics of productive consumption shows through the boundary of future income that under certain conditions, the optimum can be achieved, where equality (interpreted as equal possibility to use investment opportunities according to the level of their yield) is concurrently Pareto efficient, i.e. it meets the requirement of collective rationality. The prerequisite listed here is of course the refinement of the capital market, particularly in the field of investment in development and retention of human capital. On this basis the economics of productive consumption proposes complex reforms in the area of social investment and social insurance, which are essential for the industry of productive services to have a real economic base for its expansion as a dominant industry.
- Economics of productive consumption proposes a mechanism of price transfer as a method for subjects who do not have either sufficient capabilities or sufficient resources to develop their capabilities. The essence of this mechanism consists of subject A (e.g. a university), who is developing its activities, retaining human capital and contributing to the application of this capital to subject B, obtaining from subject B part of his income (which is the result and manifestation of the given investment). At the same time, a minimum boundary may be set from which the payment, payment period, and other parameters may result. The mechanism of transferred price generally interests providers of consumption goods associated with the development of human and social capital (as well as the provider of productive services) for the success of their clients – providers are rewarded only if their clients are successful. The area of contracts between the provider of productive services (services that are the result of development, retention, and application of human and social capital of the one to whom the service is provided), the customer of the provider, and any other applicable subjects, is called the human capital contract (Palacios Lleras 2007). Individual contracts falling into the category of HCC can be analyzed by cooperative game theory, whereas economics of productive consumption may contribute to the development of the given theory.

- Economics of productive consumption takes advantage of the concept of Schumpeter's theory of innovation for describing changes associated with constituting the industry of productive services as a dominant economic industry. Economics of productive consumption points to the analogy that the constitution of the industry of productive services shares with the industrial sector at the time of the industrial revolution. It further demonstrates that investment in human and social capital can be a source of constant innovation and thereby enable unlimited growth. In this sense economics of productive consumption returns to the reproduction concept of economics, where consumption (including consumption of individuals and households of an investment character) is perceived as one of the methods of accumulation and retention of human capital that retroactively acts on the economy as the most dynamic factor of production.
- Economics of productive consumption overcomes certain limitation of the Keynesian distinction of consumption of households and investments of companies, shows real trends in the development of consumption and investment of households both in the direction of productive consumption and of course in the direction of investment into social position, where a number of subjects use resources for obtaining a certain standing (position) and defending it. The position in question is associated with various advantages that other subjects do not have, which leads to income and asset disparity. Economics of productive consumption further points to risks of overuse of the multiplier effect for stimulus of economic growth. These risks consist for example in the fact that they do not give space for a much fuller application of human and social capital as a factor of production increasing the intensity and revolutionary quality of innovation.
- Economics of productive consumption is inspired by institutional economics and public choice theory in the area of identifying the role of the state when reducing transaction costs and eliminating other problems with contracts of the price transfer type and when limiting the influence of investment into social position. Economics of productive consumption further indicates that if development of human capabilities results from the sector of productive services, this development will influence the structure of formal and informal institutions and lead to easier development of inclusive political and economic institutions. It can also assume at least a partial resolution of certain problems identified by public choice (e.g. limitation of bureaucracy and interest groups).

At first glance it may seem that the replacement of maximum utility with maximization of current value of future returns, or the claim that utility serves as a resource for decision-making and not as a goal, are not substantial changes. Replacement of maximization of utility with maximization of current value of future returns is utility as a subjective quantity in the non-economic sphere replaced by a quantity which lies in the economic sphere. The change of the role of utility from goal-setting to decisive makes the description of our decision-making even more real. If something is beneficial to a person as a resource of his future income, the human psyche can manage to appreciate this in the form of subjective positive experiences that influence our decision-making. If we don't acknowledge that a number of consumed goods have a productive character, influence our future returns, and that people (at least some) are aware of this fact, economic theory will describe human behavior in a different way than this behavior truly takes place. Moreover, a choice

represented in this way by economic theory will be much less “economic” and much less realistic than the choice that people actual make. The objection is not sustained that economic theory cannot include all aspects of human behavior. The aspect of future return from current consumption can easily be incorporated into human behavior without the theory becoming complicated or too complex.

We would further state that if economic theory does not consider that consumption has a productive character, it will overlook the influence of real economy in the development of experience mechanism. At first glance, economic theory should not have to address this influence; it does not seem to be the subject of economic inquiry. Nonetheless, economic theory should be able to acknowledge not only the influence of the experiential mechanism on the economic behavior of people, but also the influence of economic reality on the development of the experiential mechanism, because this influence is substantially determined by the subsequent action of the experiential mechanism on the economic behavior of people. As we demonstrate above, the experiential mechanism of a person causes experiences generated during immediate satisfaction of needs to have a tendency to transfer to intermediary links (objects, activities, and situations that produce the satisfaction of the need). Standard economic approaches do not consider this fact. From this perspective the experiential mechanism is more flexible and “smarter” than it is presented in economic theory.

One of the most problematic areas of economics of productive consumption has proven to be differentiation between investment into development of capabilities (acquisition of human capital) and investing in social position (use of own human capital to the detriment of application of human capital by another person, which can grow into various forms of economic and social segregation, act against vertical mobility in society, or against creation of equitable conditions for social advancement independent of initial wealth. If we interpret investing into the development of capabilities and into social position, we can demonstrate a range of differences between both forms of investing, and at the same time we can show that in many cases one of the forms of this investment will transition into the other and that they are difficult to differentiate. This is partially due to the fact that it is a very significant theoretical problem. The use of the apparatus of cooperative games presents as a prospective path to resolving it, specifically the multi-point solution to Nash’s (S, d) bargaining problem. Meanwhile, the cooperative role has two interpretations:

- Either the execution of a Human Capital Contract (HCC), which allows one subject to take advantage of investment opportunities associated with the development or retention of capabilities with the use of the resources of another subject.
- Or the refinement of the institutional environment in order that such contracts could be executed and thereby the investment opportunities associated with development and retention of the capabilities of the individual subjects could be fully utilized.

In comparison, there is the option of investment into social position. If in a subset of cooperative improvement within a set S is determined by a point of disagreement d , then the alternative positional investment may be expressed as point p . The cooperative improvement is derived from point d , not from point p . In this way we obtain the basic concept for differentiating investment into development of capabilities and investment

into social position. It is the basis for a number of not insignificant models of non-cooperational and cooperational games with relevant interpretations.

8 Conclusion

The current level of development of science and technology ever more enables a reduction of the time necessary for satisfying basic life needs, or reducing the number of resources for these needs. The resources freed up and the resources which we would be unable to take advantage of without technical progress can be used for development of human capabilities, for expansion of human and social capital. The sector of “productive services” plays a significant role in the process of development, retention, and application of this capital. The offer of this sector comprises those who provide the given service. This can consist of all manner of educational organizations, organizations operating in health care, spas, recreation, etc. Demand consists of the customers of the given sector. If as a result of the services the sector offers them, its customers have higher income, or can secure this income for a longer period, and a space is created here for the compensation for the services provided to be paid in the form of a share of the income that the customer has obtained thanks to the service. Economic theory (e.g. Palacilo Lleras 2007) here refers to the “human capital contract”, or transferred price, where the customer of the sector of productive services, upon achieving a commensurate income, pays the provider of the given service (e.g. educational institution) an established percentage of that income (which can be reduced by an amount necessary to secure basic needs).

The development of the sector of productive services is associated with the development of part of economic theory – “economics of productive consumption”. This indicates certain limitations that affect the contemporary mainstream trend in economic theory: neoclassical economics. Its assumptions, that people maximize utility, whereas this maximization has no influence on other human behavior (“final utility”), or that the issue of utility is not determined or does not correspond to human activities (i.e. exogeneity of utility), does not match reality. Here reality is quite the opposite – human behavior does not end with the satisfaction of a certain need (in other words, maximization of utility). A number of needs have a productive character, by whose consumption people contribute to obtaining and retaining their future income. Utility, therefore, is not the final quantity. In the same way, it is not an exogenous quantity: the relations and mechanisms by which a system is organized are an important factor in the creation of human preferences and therefore of utility.

Economics of productive consumption emphasizes that a large part of human behavior is related to the future (more or less remotely). It presents utility as a means for decision-making. Via utility, people value individual needs as well as objects (resources), activities, and situations by which the given needs are satisfied, returns that will be derived in the future from current consumption. As a more realistic description of human behavior, the economics of productive consumption presents the theory according to which people endeavor in their actions to use current income such as to maximize current value of future income. Meanwhile they use current income for the purchase of goods whose

consumption demonstratively lacks a productive character, goods whose consumption has at least a productive character and can serve as a source of future income, and the procurement of investment resources (resources whose primary goal is to achieve future income). In other words, according to the economics of productive consumption people act in the creation and operation of their assets (their asset portfolio), which is composed of tangible and financial assets, from human and non-human capital, such as to maximize the current value of future income. Economics of productive consumption acknowledges the fact that individual people have the ability to relate our current behavior to all manner of future returns. And yet to presume that they do not have them at all, or that people in their decision-making do not take future returns into consideration, or that they take them into consideration only when making decisions about whether to save and how to invest, is not realistic.

Likewise, individual people have a different timeframe in which they seek to maximize the current value of future income. Undervaluation or overvaluation of the given timeframe, not including future returns for current behavior, later manifest as the "errors" of human behavior that serve as the focus of behavioral economics. Economics of productive consumption closely corresponds to this. Similar correspondence can be seen in other trends of economic theory that are based on neoclassical economics but seek to go beyond it. Economics of productive consumption, compared to other approaches working to develop economics as a science, is a relatively young and minor theory. And yet it can be assumed that its importance will grow, in the same way that the importance of productive services and the activities associated with them will grow. Here practice requires the development of a theory that can reflect what is actually happening.

Acknowledgments

This paper has been prepared within the project Growth of the role of the productive services industry: Theory and practice No. 7427/2018/02 (University of Finance and Administration).

References

- BARDSLEY, N. et al.** (2010) *Experimental Economics. Rethinking the Rules*. Princeton: Princeton University Press.
- BECKER, G.** (1993) *Human Capital: a theoretical and empirical analysis with special reference to education*. 3rd edition. Chicago: The University of Chicago Press.
- BECKER, G.** (1997) *Teorie preferencí*. Praha: Grada.
- O'BRIEN** (2011) *The Classical Economists Revisited*. Princeton: Princeton University Press.
- BUTLER, E.** (2012) *Public choice – a primer*. London: Institute for Economic Affairs.
- CANTO, V., D. JOINES and A. LAFFER** (1982) *Foundations of Supply-Side Economics – Theory and Evidence*. New York: Academic Press.
- DHAMI, S.** (2017) *The Foundations of Behavioral Economic Analysis*. Oxford: Oxford University Press.

- DINDA, S.** (2014) Inclusive growth through creation of human and social capital. *International Journal of Social Economics*. Bradford. Vol. 41, no. 10, pp. 878–895.
- DINDA, S. et al.** (2000) Social capital in the creation of human capital and economic growth: A productive consumption approach. *Journal of Socio-Economics*. Vol. 37, no. 5, pp. 2020–2033.
- GROENEWEGEN, J., A. SPITHOVEN and A. VAN DEN BERG** (2010) *Institutional Economics: an Introduction*. London: Palgrave Macmillan.
- HARVEY, D.** (2017) *Marx, Capital, and the Madness of Economic Reason*. Oxford: Oxford University Press.
- HESSLER, H., R. VALENČÍK a P. WAWROSZ** (2010) *Mikroekonomie středně pokročilý kurs*. Praha: Vysoká škola finanční a správní.
- HENRY, J. F.** (2012) *The Making of Neoclassical Economics*. London: Routledge.
- HODGSON, G. M.** (ed.) 2007. *The Evolution of Economic Institutions: a Critical Reader*. Cheltenham (UK): Edward Elgar.
- HUNT, E. K. and M. LAUTZENHEISER** (2015) *History of Economic Thought: A Critical Perspective*. 3rd edition. London: Routledge.
- FRIEDMAN, M.** (1957) *A theory of the consumption function*. Princeton: Princeton University Press.
- ICHIROH, D.** (2010) Productive consumption and population dynamics in an endogenous growth model: Demographic trends and human development aid in developing economies. *Journal of Economic Dynamics and Control*. Amsterdam. Vol. 34, no. 4, p. 696.
- JOHANSSON, P.** (1991) *Intro to Modern Welfare Economics*. Cambridge (UK): Cambridge University Press.
- LOOMES, G.** (1999) Some lessons from past experiments and some challenges for the future. *Economic Journal*. 109(2):35–45.
- MABSOUT, R.** (2018) Late Neoclassical Economics. The Restoration of Theoretical Humanism in Contemporary Economic Theory. *Erasmus Journal for Philosophy and Economics*. 11(1):107–116.
- MACFARLANE, A.** (2011) *Thomas Malthus and the Making of the Modern World*. Seattle: Amazon Digital Service, L.L.C.
- MORGAN, J.** (ed.) (2015) *What is neoclassical economics? Debating the origin, meaning and significance*. London: Routledge.
- NAPOLEONI, C.** (1961/1968) *Ekonomické myšlení dvacátého století*. Praha: Academia.
- NEUMANN, J.** (1945–1946) A Model of General Economic Equilibrium. *The Review of Economic Studies*. 13(1):1–9.
- NEUMANN, J. and O. MORGERNSTERN** (1953) *Theory of Games and Economic Behavior*. Princeton: Princeton university Press.
- PALACIOS LLERAS, M.** (2007) *Investing in Human Capital: A Capital Markets Approach To Student Funding*. Cambridge: Cambridge University Press.
- PSÁRSKA, M.** (2019) *Determinants of real decision making on productive components of consumption under the current economic conditions of the Slovak Republic*. České Budějovice: Institute of Technology and Business.

- RICARDO, D.** (1817/2010) *On the Principles of Political Economy and Taxation*. Carmel (Indiana, USA): Liberty Fund, Inc.
- SCHUMPETER, J. A.** (1934/1981) *Theory of economic development*. London: Routledge.
- SOJKA, M.** (2010) *Dějiny ekonomických učen*. Praha: Havlíček Brain Team.
- SMITH, A.** (1776/2019) *An Inquiry into the Nature and Causes of the Wealth of Nations*. New York: BookRix.
- SRAFFA, P.** (1975) *Production of Commodities by Means of Commodities: Prelude to a Critique of Economic Theory*. Cambridge (UK): Cambridge University Press.
- STEGER, T. M.** (2002) Productive consumption, the intertemporal consumption trade-off and growth. *Journal of Economic Dynamics & Control*. Amsterdam. Vol. 26, no. 6, pp. 1053–1068.
- SUEN, W. and P. H. MO** (1994) Simple analytics of productive consumption. *The Journal of Political Economy*. Chicago. Vol. 102, no. 2, p. 372.
- VALENČÍK, R.** a kol. (2014) *Perspektivy a financování odvětví produktivních služeb*. Praha: VŠFS.
- YERZNKYAN, B., L. GASSNER and A. KARA** (2017) Culture, institutions, and economic performance. *Montenegrin Journal of Economics*. Vol. 13, no 2, pp. 71–80.
- ZWICK, D.** (2013) Utopias of ethical economy: A response to Adam Arvidsson. *Ephemera*. Leicester. Vol. 13, no. 2, pp. 393–405.

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