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**Baumol's Productive, Unproductive
and Destructive Entrepreneurship –
a Classic Revisited**

Wolfgang Lattacher

A decorative graphic at the bottom of the page consists of several overlapping, swirling lines in various shades of green, creating a sense of movement and depth.

**Discussion
PAPERS**

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Institut für Soziologie, Alpen-Adria-Universität Klagenfurt
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Abstract

In 1990 William J. Baumol published his seminal paper ‘Entrepreneurship: Productive, Un-productive and Destructive’. Discussing the relationship between entrepreneurial activities and macroeconomic prosperity, he provided easy-to-follow, yet revolutionary insights. In the present paper, I reflect on these central points and evaluate their importance for research. This reflection is based on own reasoning as well as a comprehensive study of literature. As I will show, Baumol’s at first sight straightforward argumentation lines yield complex issues to be discussed. Systematically elaborating on them I provide a reflection of an entrepreneurship classic and a review of related literature.

Keywords: Entrepreneurship, Innovation, Economic Development, Institutions, Baumol

1 Introduction

“Brilliant, invaluable, significant ...” these are just a few ways how fellow researchers record Baumol’s seminal work ‘Entrepreneurship: Productive, Unproductive and Destructive’ (Boettke & Piano, 2016; Borozan, Arneric, & Coric, 2017; Douhan & Henrekson, 2010; Sobel, 2008). Looking at citation statistics, Baumol’s impact on academia becomes even more apparent: his paper appears on the 8th rank in the field of entrepreneurship (Web of Science, Topic = Entrepreneurship, accessed 7 Nov. 2018). One main reason for this prominence may be the straightforward, yet often misunderstood, link between entrepreneurship and economic prosperity that Baumol provides (Boettke & Piano, 2016). Entrepreneurs, influenced by the institutional setting, either engage in productive, unproductive or destructive activities. This allocation of efforts finally determines the economic value of entrepreneurial efforts.

With these assumptions, Baumol significantly contributes to research and practice. As far as research is concerned, a particular strength are the clearly visible links to some of the most important classics of economic and entrepreneurship theory. Baumol explicitly builds on Schumpeters’ five types of entrepreneurial innovation. In addition, links to Kirzner (entrepreneurial alertness towards profit-promising activities) and Smith (connection between individual profit-seeking and macroeconomic prosperity) are identifiable. Besides research, Baumol also holds important insights for practitioners, namely policy makers. While not providing explicit policy agendas, he still hints where to focus on, i.e. to create institutions that support productive entrepreneurship.

Nearly 30 years after its publication, Baumol’s paper has deeply impacted academia and practice. In research, the categorization of productive, unproductive and destructive activities has been applied to several contexts (e.g. Social Entrepreneurship, Developing countries, Mafia). In addition, some papers directly discuss Baumol’s seminal work. They broach issues like definitional challenges, possible expansions to Baumol’s classification and existing inconsistencies. While these research efforts could improve the understanding of Baumol and the clarity of his concept, they still represent fragments of a blurry larger picture. Given the continuous expansion of contributions to Baumol’s paper, this picture eventually becomes even more complex. This complexity mirrors both - the importance of Baumol’s contribution and the challenges arising from his - at first view - straightforward assumptions. Indeed, despite the brilliance of the points raised, there are some shortcomings with regard to concept clarity, comprehensiveness and consistency. Consequently, a systematic, literature-based elaboration of these aspects appears interesting.

With the present paper I aim at such a careful reflection of this entrepreneurship classic. This comprises to seek for answers to the following questions (based on own insights and contributions from other researchers):

1. What are the central points Baumol provides in his seminal paper?
2. What are strengths and weaknesses of these points?
3. How has Baumol impacted and contributed to academia and practice?

By answering these questions, I contribute to research in at least two ways. First, I provide a comprehensive reflection on a classic of entrepreneurship. Second, I take stock of existing follow-up research on Baumol's paper and thereby provide a common knowledge base for future research endeavors.

2 Method

The present paper is based on an intensive study of Baumol's seminal work and referring literature in peer-reviewed journals. As a primary source for literature, I chose the Web of Science database of Thomson Reuters. This source provides one of the most comprehensive databases of peer-reviewed journals in social sciences (for a similar approach see e.g. Crossan & Apaydin, 2010). As far as applicable, I followed methodological processes for systematic literature reviews (Short, 2009). This procedure enables a complete and reproducible search. According to the business relationship, I limited the search to core collection items including emerging sources. I searched for all articles in English language. This led me to 898 publications which became the basis for a screening of titles and abstracts. The inclusion criterion was that the paper had to explicitly focus on Baumol's seminal work. This is the case if the paper either (1) reflects on Baumol, (2) advances/modifies his work, (3) empirically tests his hypotheses or (4) provides an application of Baumol's concept while also reflecting on his theorizing. A total of 57 publications fulfilled this criterion at first view. Subsequent full reading led to the exclusion of 30 articles which did not ultimately contribute to the study purpose. Alternatively, some papers provided additional relevant references which were included (12 cases). Consequently, my final literature sample consisted of 39 articles. After literature search I continued with elaborating the central points of each contribution, starting with Baumol's seminal paper. In an iterative process I formed categories and assigned the regarding points from literature. This procedure allowed for a comprehensive overview and set the basis for comparing and integrating insights from different sources of literature.

3 Baumol's central points

Baumol's theorizing targets the role of entrepreneurship for explaining economic growth. Citing Hobsbawm (1969), he disputes an automatic, positive impact of entrepreneurship on macroeconomic measures. Consequently, the total supply of entrepreneurial input is not primarily decisive for a country's prosperity.

Entrepreneurs seek for profit and thereby take different avenues towards this objective. Some of these paths may - on a macro level - hamper economic growth. In order to illustrate the variety of potential entrepreneurial activities, Baumol refers to and extends Schumpeter's model of innovation (Schumpeter, 1934). This concept comprises (1) the creation of new goods/a new quality of goods, (2) the introduction of new methods of production, (3) the opening of a new market, (4) the conquest of new sources of supply and (5) the implementation of a new industry organization. Baumol stresses that also the transfer of existing technologies to a new geographic region may be of entrepreneurial character. Most importantly, he adds innovations in rent-seeking procedures, e.g. the usage of legal gambits

to increase individual profits. By extending Schumpeter's systematization Baumol paves the way to one of his main contributions: the differentiation of entrepreneurial activities into productive, unproductive and destructive operations. Productive entrepreneurial efforts are those which do not only satisfy the entrepreneurial need for profit but also positively contribute to economic growth. Alternatively, unproductive and destructive activities have no or even negative impact on the macro level. These activities comprise e.g. rent-seeking, organized crime as well as litigation and tax evasion.

The second central point Baumol makes in his paper refers to the allocation of entrepreneurial efforts. The decision whether to focus on productive or unproductive/ destructive activities is substantially shaped by the 'rules of the game', i.e. the institutional context. Entrepreneurs are ingenious and creative in expanding their own wealth. Thus, they choose the activity that, given a certain institutional setting, is most profitable at individual level. In this way, suboptimal institutions may lead entrepreneurs to activities which - on a macro level, are unproductive or even destructive. Besides theorizing, Baumol also illustrates his arguments by referring to institutional settings at different places and times in history: Ancient Rome, Medieval China, Dark Age Europe and the Late Middle Ages. These episodes provide a better sense for the large variety entrepreneurial activities encompass, ranging from business to political and military context. Further, the long observation periods (many decades) provide the opportunity to illustrate the impact of institutional changes. Given these illustrations Baumol demonstrates where growth policy has to target at: Despite trying to change the (relatively stable) entrepreneurial supply or objectives, practitioners should aim at providing an institutional set-up that supports productive entrepreneurship.

To sum up, Baumol sheds light on the (often assumed) link between entrepreneurship and growth (see Figure 1). He argues that not the overall entrepreneurial activity but the level of productive entrepreneurial operations is decisive for growth. The entrepreneur's decision whether to devote her/his resources to productive or unproductive/destructive operations is substantially influenced by the institutional context.

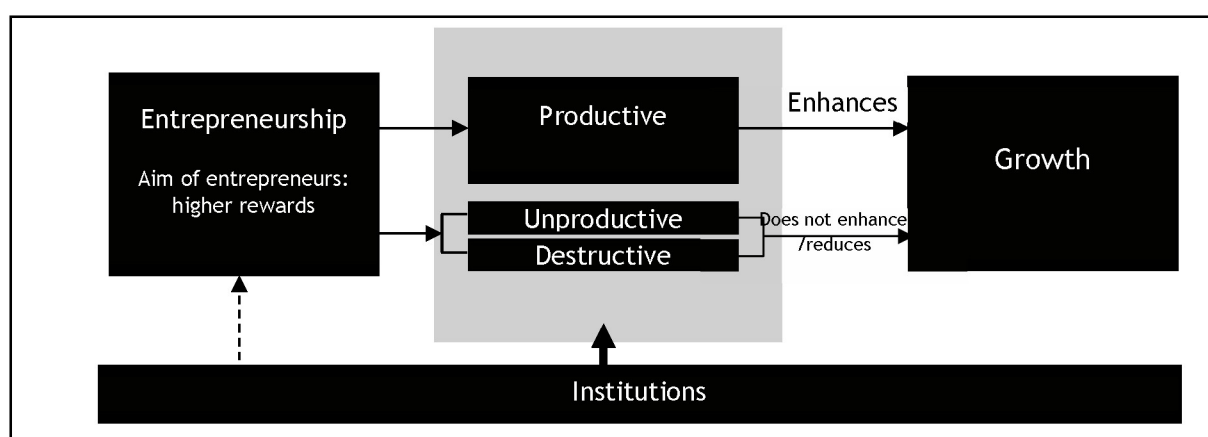


Figure 1: Baumol's concept of how entrepreneurship influences growth

4 Productive, unproductive and destructive: definitional issues

The differentiation of entrepreneurial activities into productive, unproductive and destructive activities is a central contribution Baumol provides in his seminal paper. Interestingly, the elaboration of these three types - despite being formative even for the paper title - is not comprehensive. Baumol does not provide clear definitions and characterizations of each type. This particularly applies to destructive entrepreneurship and its distinction to unproductive activities (March, Martin, & Redford, 2016). Consequently, for a better understanding of Baumol's idea it appears necessary to refer to subsequently published work aimed at elaborating his concept.

Productive entrepreneurship

According to Baumol, productive entrepreneurship directly or indirectly increases the net output of an economy. Indeed, it generates a joint surplus in form of net social profits (Foss & Foss, 2002; Sauka & Welter, 2007) and is of value to society (Minniti, 2016). While being usually associated with innovation (Szirmai, Naudé, & Goedhuys, 2011), Baumol also considers rather replicative endeavors (e.g. the transfer of a technology to another geographical region) to be productive.

Unproductive entrepreneurship

Unproductive entrepreneurship takes place if wealth is transferred from one group to another without creating new wealth. While from the individual's perspective, unproductive entrepreneurship enables gains in 'wealth, power and prestige', it does not increase prosperity on macro-level. Consequently, unproductive entrepreneurship is perceived without value or even harmful to society (Padilla & Cachanosky, 2016). This becomes strongly apparent, if the described "zero-sum game" is extended by transaction cost (Sobel, 2008). Efforts taken to achieve or fight against such a wealth transfer eat up resources that could otherwise be utilized for productive activities (Sobel, 2008). Baumol in his theorizing and subsequent illustrative episodes provides a range of possible unproductive activities, like litigation, takeovers and tax evasion/avoidance. He, as other researchers, refers to these activities as 'rent-seeking'. This creates the impression that rent-seeking is per se unproductive. Yet, it should be mentioned that there may be exceptions to this rule. Davidson and Ekelund (1994) provide the example of the Institutional Church of the Middle Ages. Their assurance of salvation, welfare and other 'social services' might have been positive on both - individual and macro level.

Destructive entrepreneurship

Despite its presence in the paper title, Baumol only devotes limited attention to elaborating the characteristics of destructive entrepreneurship (March et al., 2016). In fact, the term "destructive" is used four times and lacks deeper clarification. The reader only receives hints that destructive entrepreneurship may be worse than purely unproductive activities (Borozan et al., 2017). Given this lack of clarity, several researchers attempted to provide a clear conceptualization of destructive entrepreneurship (Desai & Acs, 2007; Douhan & Henrekson, 2010; Sauka & Welter, 2008). They found themselves confronted with several challenges, e.g. the blurry border to unproductive entrepreneurship (Borozan et al., 2017). As these issues are only partly solved, Desai (2016) attributes destructive entrepreneurship

to be even after 25 years of research a black box. Nevertheless, one has to state that there is considerable progress in finding the essence of destructive activities - even if the approaches vary.

More general characterizations see destructive entrepreneurship as the truly negative type of entrepreneurial endeavors, i.e. a more severe form of unproductive activities (see e.g. Desai, Acs, & Weitzel, 2013). Typical examples are warfare and slavery (Minniti, 2016). Referring to Baumol's view of productive entrepreneurship, Padilla (2016) sees destructive entrepreneurship as a net reduction in social income and wealth. Desai et al. (2013) take an evolutionary perspective and highlight that destructive entrepreneurship is harming economic potential not only at present but also destroys inputs for the creation of future wealth. They provide the example of child soldiers. Such endeavors do not only destroy resources at present (via war activities) but also for the future (if the soldier gets wounded) (Desai, 2016). While the examples above seem straightforward, looking into the literature one will find a number of diverging views on how to classify other activities. Coyne and Leeson (2004) classify crime into unproductive entrepreneurship while Douhan and Henrekson (2008) consider it destructive. This shows still existing inconsistency with how to classify and characterize non-productive entrepreneurial activities.

5 Productive vs unproductive: challenges beyond definition

Apart from the definitional issues discussed above, Baumol's classification of entrepreneurial activities seems straightforward. Yet, when applying it, at least two further challenges become apparent.

One major issue is the level of analysis. An entrepreneurial endeavor may consist of productive *and* unproductive sub-activities which presuppose each other (Borozan et al., 2017). Consequently, they form de facto one activity that has to be evaluated. This conglomerate of sub-activities may appear in a sequential or simultaneous manner. Sequential sub-activities could be the foundation of a business via evading legal restraints followed by the receipt of an official license (Douhan & Henrekson, 2010). One could argue that at least for the time of evasion, the entrepreneur does not devote these resources to productive activities. Alternatively, this unproductive episode is decisive for the productive one to follow. Therefore, an overall evaluation could be based on the question if the entrepreneurial activity as a hole adds to economic measures or not. A similar, yet not equal situation is the simultaneous performance of linked activities. Take an entrepreneur who evades taxes to maximize his profits. Provided that this entrepreneur perceives the tax evasion as essential for his activity (and would otherwise cease operations), the activity again can be evaluated on a holistic level. An evaluation of the activity as unproductive (based on the rent-seeking against the state) would not consider its overall positive contribution to welfare.

Another relevant issue flanking Baumol's activity classification is which institutional setup to take as unit of comparison. Douhan and Henrekson (2010) criticize Baumol for applying a first-best alternative view. In reality, entrepreneurial activity is constrained by a set of formal and informal rules (Kalantaridis, 2014; Lucas & Fuller, 2017). One may imagine the example of an oil company that disposes of an oil well under a mountainous area. On one point, a digging of 50 meters is required to reach the oil. If however, a flat price for every

oil well that requires less than 300 meters makes the oil production unprofitable, the company can decide to dig from another point that requires to go down 310 meters. While the entrepreneur could devote his/her resources to alternative (according to Baumol more productive) endeavors, by digging 310 meters he/she still indirectly contributes to wealth generation. From this example it becomes apparent that activities should not be categorized without considering the prevailing institutional setup. Consequently, activities which might be clearly unproductive under efficient institutional rules may still be second best alternatives in the actual institutional setting (Padilla, 2016).

6 Institutions

Baumol's second important contribution is the insight that the distribution of entrepreneurial resources among productive, unproductive and destructive activities is substantially shaped by the 'rules of the game', i.e. the institutional setup. Institutions are mechanisms invented by society to act as a guide for relations or human behavior (Diaz, Almodovar, Sanchez, Martinez, & Mogollon, 2013). One can distinguish formal institutions (e.g. laws, property rights, governmental procedures) and informal institutions (e.g. ideas beliefs, attitudes, values). Informal institutions can either complement (and thereby enforce) or substitute formal institutions. Taken together, they form the rules of the game which determine the allocation of entrepreneurial efforts (Diaz et al., 2013; Tonoyan, Strohmeier, Habib, & Perlitz, 2010).

Institutions shape decisions

The process of resource (activity) allocation works via the determination of relative payoffs. If institutions let entrepreneurs achieve high profits from productive efforts, they will deploy their resources to productive entrepreneurship. Should however, entrepreneurs feel the chance of getting higher profits via unproductive activities, they will move into unproductive direction. From this insight, one may derive two consequences. First, the institutional setup can - from a growth perspective - be more or less efficient, depending on its impact on entrepreneurial activity (Douhan & Henrekson, 2010). Second, institutions themselves may provide entrepreneurial opportunities (Padilla, 2016).

Consequently, research found types of entrepreneurial activities beyond Baumol's typology: evasive and indirectly productive entrepreneurship. Evasive entrepreneurship is a profit-driven business activity aimed at circumventing the existing institutional framework (Elert & Henrekson, 2016). Examples are the evasion of taxes or tariffs, smuggling and bribing politicians or bureaucrats. One could argue that these examples can undoubtedly be assigned to Baumol's categories unproductive or destructive: In order to execute evasive activities entrepreneurs have to divert resources from directly productive endeavors (Borožan et al., 2017; Douhan & Henrekson, 2010). Further, if the evading activity is illegal, they might be required to artificially stay small in order not to get detected (Coyne & Leeson, 2004). Therefore, it seems adequate to evaluate these examples as unproductive or even destructive. Yet, based on the argument that institutions can be themselves inefficient, one may understand that under certain circumstances, evasive activities may represent second-best solutions in cases of a suboptimal institutional setup (Henrekson & Sanandaji, 2011). In addition, they may be the first step towards a change of the referring institutions (Elert &

Henrekson, 2016). A quite similar concept is provided by Padilla and Cachanosky (2016). The authors argue that profit opportunities may be directly derived from inefficiencies of government regulation. They provide the example of the TSA lock. In the course of legislative activities against terror attacks on airplanes, officials were allowed to open each suspect suitcase - if necessary via destroying its lock. As a reaction, the TSA lock was developed. This is a special lock which TSA officials can open with a master key. In this way, the TSA lock represents a convenient answer to inefficiencies stemming from legislation.

The examples above as well as Baumol's examples within his seminal work demonstrate that the institutional setup does shape entrepreneurial activity. However, it is important to keep in mind that this does not mean entrepreneurs always comply with these rules. Instead, given the radical power of the Schumpeterian entrepreneur, it seems feasible that at least some see their fortune in evading, maybe also intentionally altering the institutional setup (Elert & Henrekson, 2016). Thus, it is possible that within the same institutional setup, different entrepreneurs react differently. The question of individual-level factors influencing entrepreneurial decisions is in this context still under-researched (one starting point may be the work of Hmieleski and Lerner (2016) looking at specific personal characteristics).

Institutions and entrepreneurship: a two-way relationship

Baumol focuses on the influence institutions have on the allocation of entrepreneurial activities. In his examples he also tries to provide some dynamic dimension, showing how institutional change alters entrepreneurship. While his theorizing was an advancement over existing research, it leaves out the opposite influence direction (Douhan & Henrekson, 2010). In fact, institutions and entrepreneurial activities share a complex, two-way relationship (Diaz et al., 2013). Thus, the critical point is that there is a continuous interaction between entrepreneurship and institutions (Davidson & Ekelund, 1994). Buchanan (1980) concludes that entrepreneurs affect institutions by market innovations, evading innovations and direct influence on politics. Henrekson and Sanandaji (2011) build on this insight and try to elaborate possible avenues how entrepreneurial activity influences institutions. In case of market innovations, i.e. innovations that can be categorized under Baumol's productive dimension, the relationship to institutions is extremely complex. What can be expected is that successful market innovations - via following the existing rules of the game - legitimate existing institutions. They demonstrate that individual profit and macroeconomic advancement can be achieved. In case of radical innovation levels, however, they may create a disruptive environment that requests for new institutional structures. The influence directions of unproductive and destructive entrepreneurial activities are very heterogeneous. Davidson and Ekelund (1994) argue that the possibility for rent seeking will be utilized for unproductive activities and eventually lead to an increased interest in the referring area of operation. This may then either lead to legal changes or encourage productive activities as substitutes. Evasive entrepreneurial activities may on the one hand undermine the effectiveness of existing (legal) institutions. Further, Padilla (2016) sees an important characteristic of evasive entrepreneurship in the attempt to eventually change institutional settings. On the other hand, by finding ways of evasion it may attenuate negative effects of existing institutions and thereby extend their life-span. Indirectly productive activities are ascribed to have a similar effect of attenuating problems arising from suboptimal institutional settings.

Policy implications

One great strength and weakness at the same time of Baumol's paper are the implications he provides for policy. Based on his argumentation line, the implications appear straightforward but still revolutionary. One essential insight is that not the total amount of entrepreneurs, but the level of productive entrepreneurship is decisive for a country's growth (Ghura, Li, & Harraf, 2017). It may explain why many government programs aimed at broadly subsidizing entrepreneurship have limited success (Douhan & Henrekson, 2010; Minniti, 2016). According to Baumol, governments should instead focus on creating an institutional framework that supports productive and reduces unproductive activity (Ghura et al., 2017; Sobel, 2008).

While this insight is important, it comes along with at least three limitations. First, one may not forget that the institutional setting is a complex construct that cannot be solely influenced by government policy and requires considerable time for changing (Boettke & Piano, 2016; Henrekson & Sanandaji, 2011). This can be empirically observed looking at countries like Russia during transition from planning to market economy (Boettke & Piano, 2016). Second, given the two-way relationship between institutions and entrepreneurship it is very difficult to create effective policies (Henrekson & Sanandaji, 2011). Policy makers always have to consider potential reactions from entrepreneurs and other stakeholders. The third limitation may be a logical consequence: Baumol only provides a hint, where to focus activities on but does not offer more concrete suggestions about the process and the content of institutional change (Kalantaridis, 2014).

7 Impact on academia

Baumol's paper has had a significant impact on academia influencing research in economics, politics, public policy and business (Boettke & Piano, 2016). Being cited more than 5,700 times (Google Scholar) this paper has not reached the level of entrepreneurship classics like Schumpeter's 'Capitalism, Socialism and Democracy' (44,000 citations) or Hayek's 'The use of knowledge in society' (15,900 citations). Yet, Baumol's seminal work may be considered one of the most cited sources in entrepreneurship research (Boettke & Piano, 2016). Looking at the outlets, one can see that most citing articles appeared in high-class entrepreneurship journals like *Small Business Economics* (8,3 %), *Journal of Business Venturing* (3,5 %), *Entrepreneurship and Regional Development* (3,0 %) and *Entrepreneurship Theory and Practice* (2,8 %) (Web of Science). Moreover, also top economic journals like the *American Economic Review*, the *Quarterly Journal of Economics* and the *Economic Journal* acted as publication outlets (Boettke & Piano, 2016).

In several articles, Baumol's seminal work was itself target of observation (e.g. Boettke & Piano, 2016; Douhan & Henrekson, 2010; Eliasson & Henrekson, 2004; Kalantaridis, 2014; Minniti, 2016). Academia tried to bring more clarity to the concept of productive, unproductive and destructive activities (e.g. Boettke & Piano, 2016; Borozan et al., 2017; Minniti, 2016). Further, some authors extended Baumol's categorization (e.g. Elert & Henrekson, 2016; Padilla & Cachanosky, 2016).

One important and for a long time untapped undertaking was an empirical test of Baumol's hypotheses. While Baumol provided illustrative examples from various times and places in history, he did not rigorously test if the assumption that entrepreneurial activities were influenced by the rules of the game, was true. One has to admit, that at the time Baumol's paper was written, possibilities for rigorous tests were very limited. They at a maximum allowed for tests of certain parts of the theory. Furthermore, given that all variables are truly unobserved (Sobel, 2008) and fuzzy with regard to definition, measuring appears a considerable challenge. Yet, following improvements in data availability and IT-processing power, studies were eventually created of which most confirmed Baumol's theory (for an overview see Borozan et al., 2017). The first complete test of Baumol's assumptions was executed by Sobel in 2008. Utilizing cross-sectional data from the continental 48 U.S. states, Sobel developed the concept of net entrepreneurial productivity. His conceptualization, however, did not distinguish between unproductive and destructive operations. Another, more complete approach considering this distinction was conducted recently by Borozan et al. (2017), again leading to a confirmation of Baumol.

Apart from articles directly focusing on Baumol's theory, there is vast research utilizing his concept in different contexts. Among them are studies on social entrepreneurship, which evaluate the role of productive, unproductive and destructive activities for social value creation and problematize that not all social entrepreneurial activity might be positive (Acs, Boardman, & McNeely, 2013; Andersson & Ford, 2015). Further, Baumol's theory is applied to analyze differences between developed and developing countries (Sautet, 2013). Nicotra, Romano, Del Giudice, and Schillaci (2018) propose a framework for measuring and testing the causal links between ecosystem and productive entrepreneurship. Unproductive entrepreneurship is often analyzed in the context with Mafia, as can be seen in the works of Champeyrache (2018) and La Rosa, Paternostro, and Picciotto (2018). To sum up, one can say that Baumol's conceptualization acted as a means of analyzes in many different contexts.

8 Contribution to academia

In his seminal paper Baumol explains growth through entrepreneurial activity, which itself is influenced by the institutional setup. As Boettke and Piano (2016) state, the simplicity of Baumol's argumentation line is part of its brilliance. The proposition is - like in case of other classics in economics - so basic that it seems amazing that others did not come up with it beforehand. Baumol contributed to theory and practice in several ways. First, he brought entrepreneurship in economic (growth) theory. He put the innovative, productive entrepreneur at the core of the economic process (Minniti, 2016). This happened in a century, in which only a few economists (most notably Schumpeter and Kirzner) found entrepreneurship to have a key role in economic expansion (Sautet, 2013). Further, his work even allows to frame empirical analysis referring to the fundamental questions of why some nations are rich and others are poor (Boettke & Piano, 2016). Second, as part of his theorizing Baumol extended Schumpeter's characterization of innovative entrepreneurial activities (Davidson & Ekelund, 1994). While one could argue, that the five ways to innovation as characterized by Schumpeter also cover rent-seeking efforts, it at least creates awareness of the broadness of innovation. Third, Baumol fundamentally shifted academic inquiry toward the role

of institutions (Minniti, 2016). He thereby also - in a way - reversed the relationship between entrepreneurship and the prevailing context. Lastly, Baumol considerably contributed to policy making. Minniti (2008) even ascribed Baumol's categorization of entrepreneurial activity to be - to date - the 'most satisfactory framework' for discussing entrepreneurship policy (Minniti thereby also highlights the role of North's analysis of institutions, which in the literature is often used together with Baumol's theorizing).

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