Growth as an Institution

an Interdisciplinary Sketch of a Modern Economic Paradigm

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abstract

The study of economic growth has always been in the focus of Institutional Economics. Hereby, most researchers have pledged for the importance of a certain institutional framework to achieve growth as the ultimate aim. Turning to a deeper level of social analysis, institutions can be conceptualized as the ‚rules of the game' that govern exchange. Emerging in an evolutionary process, individual strategies become enforced collective problem-solving patterns. It is then that growth itself can be conceptualized as an informal institution - as a social norm that guides action on the market. Why did growth emerge to become the essential economic paradigm of our time and what are the implications of the mechanisms behind the phenomenon?

While economic sociology guides the attempt to grasp historical narratives of capitalism, it is the cognitive strand of new institutional economics that bridges the theoretical gap between the individual and the social level. A precise sketch of individual behavior allows to trace back mechanisms to their problem-solving roots, while the concept of evolutionary competition debunks reasons for its ever lasting prevalence. Seeking profit guarantees survival on the market on a micro-level, while growth enables Pareto improvements on the macro-level. The application of the profit heuristic then stands as an effective strategy to compete within the market, governed by the social norm of growth. Yet, limitless growth cannot persist as an efficient path, but eventually generates inequalities and exhausts limited resources. Within this approach, change is itself guided by the growth of knowledge, and it is as such that the analyzed paradigm appears both as a restraint as well as a potential to overcome current default-strategies. While important limitations arise from the paper's interdisciplinarity, it equally offers new perspectives for the analysis of current economic dynamics.

Introduction

The study of economic growth has ever since been in the focus of Institutional Economics. In fact, most economists have pledged for the importance of a certain institutional framework to achieve growth, thus analyzing when the latter induces economic stagnation, decline or success (North, 2007). Institutions were taken as given, with growth being their optimal result. Yet, as Weingast & Wittman (2006) note, the newest and least explored field, yet the deepest level of institutional analysis, takes „institutions themselves as endogenous" (p. 6). It is here that the study of Mantzavinos (2004) can be localized, as he focuses on institution's emergence. Interestingly, they then appear in the first place as „nothing more than shared problem solutions that individuals have acquired while interacting with their environment" (Mantzavinos, 2004, p. xiv). Meanwhile, the concept of growth has

become a *raison d'être* for most institutional economists and its paradigmatic status pervades most ideals of our modern economies, deeply embedded in markets' functioning (cf. Schmelzer 2015, p. 262)[1]. Sketching institutions as the „rules of the market game", growth could promptly appear as not merely an outcome of a certain institutional framework, but as a paradigm of capitalistic markets guiding their direction (Mantzavinos, 2004, p. 161).

This work aims to conceptualize growth as an institution itself in order to provide for a new perspective on our modern market's functioning. Introducing Mantzavinos' (2004) theory of institutions I will first lay out a general frame of how an institution emerges. We will then focus on the evolutionary competition in the market. In a second part, a digression towards economic sociology will allow for a historical perspective on growth as a rule of the market game. At this point the framework laid out in part one provides for an evolutionary account of the emergence of growth as an institution, more precisely as a social norm. The third part will then be dedicated both to lessons we might learn from such a conceptualization as well as to those we won't.

Methodological Note

Asking whether growth is an institution or not first appears as an ontological enterprise. In fact, Mantzavinos (2006) himself notes that a type of reasoning that only seeks to determine exact denominations of phenomenons following „what is x?" questions leads to what he calls a *cul de sac* (p. 86). For him, „methodological essentialism channels the creative capacities of scientists in an unproductive direction" (p. 91). For reasons of clarity this paper nevertheless thoroughly examines the characteristics of phenomenons as defined by the authors and/or strands. Yet the conceptualization of growth as an institution shall eventually lead to answering the question „*why growth?"* from an evolutionary perspective[2]. The ultimate aim of this paper then becomes to illuminate why growth has evolved to become the essential paradigm of our time; its relevance stemming from the implications of growth as a default-strategy.

The starting point of the study is Institutional Economics[3], where Mantzavinos'

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[1] Schmelzer (2015 shows that in 2010 almost 20% of articles published in economic academic journals in the JSTOR database contain the term „economic growth" (p. 263). Institutional economics have become tightly linked to development economics, as growth is seen as the path which leads to an eradication of poverty. To put it short: growth is pictured as an undisputed ideal end of human interaction on markets (cf. Schmelzer, 2015).

[2] Evolutionary in the sense that it draws developments from the past in order to explain the status-quo.

[3] We do not differentiate between New and Old Institutional Analysis. Let us note that this paper starts from a newer strand of institutional analysis which takes institutions as endogenous (cf. Weingast & Wittman, 2006, p. 6). Stinchcombe (1997) defends old institutionalism as having emphasized the responsibility of actors on the basis of an understanding of the market as an amalgamation of contracts (p. 4). His criticism targets the „new Durkheimian institutionalism in which collective representations operates on their own" (p. 2). However, the cognitive approach of Mantzavinos' (2004) allows to bridge individual action with collective patterns. For a comparison of new and old institutional economics see Staden & Bruce (2015).

theory (2004) serves as a basic framework. Since understanding an evolutionary process requires a historical approach to our economic system, the paper will gain from both classical and recent studies in the field of economic sociology. In fact, a sociological perspective on economics allows starting from methodological individualism, nonetheless taking into account the interconnectedness of behavior through social actions (cf. Smelser & Swedberg, 1994, p. 5). The weakness of institutional economics within the neoclassical tradition is its use of pure methodological individualism, which „makes it difficult to recognize how economic action is constrained and shaped by the structures of social relations in which all real economic actors are embedded“ (Granovetter, 1992, p. 4). The choice to draw on Mantzavinos' institutional framework also stems from his achievement to overcome the split between economy and sociology, through integrating the social sphere in individual action and vice versa, achieved through building on a cognitive model of the emergence of institutions. While rejecting the two pure traditions of both rational choice and social embeddedness, Mantzavinos (2007) focuses on „how human beings actually reason, learn and choose, drawing from research in cognitive science“ (p. 15).

Let us note here that the interdisciplinarity of this study can both be seen as its potential strength and weakness. In fact, an evolutionary study of economic growth as an institution could shed light on the apparent exclusive character of the growth-strategy when it comes to progress. If the following work surely forfeits methodic rigorousness due to a lack of full exegesis of the various disciplines with their distinct assumptions and implications, it stands as a mere trial to understand growth through a new perspective. Thus, it eventually rather aims to challenge existing views than to provide definite answers.

1. Insights from Cognitive Institutionalism

In his oeuvre *Individuals, Institutions and Markets,* Mantzavinos (2004) tries to build a framework that accounts both for how social institutions and how markets work. Building on insights from cognitive science, the latter develops cognitive institutionalism, a „theory of how the institutional framework of a society emerges and how the exchange processes within this framework take place“ (Mantzavinos, 2004, p. xiii). The following part will be structured along his work in order to give the reader an introduction to the main ideas that will shape our conceptualization of growth. After laying out the problem-solution model applying at the individual level we will sketch characteristics of institutions as an aggregate phenomenon according to Mantzavinos' (2004) theory. The third section will be dedicated to the theory of evolutionary competition, which provides a sketch of the subconstitutional level, that is, of actions within rules. In fact, it is in this part that the latter sketches the market as a competitive environment in which only certain problem-solving

strategies of the economic agents survive through time but become vital for its functioning.

1.1. Introducing the Problem-Solving Model

Following methodological individualism, the study draws from psychology's empirical results (idem, p. 3 et seqq.). Considering the dynamic aspects of behavior and the subjective base of decision-making, Mantzavinos (2004) disentangles individual action along the three aspects of motivation, cognition and choice (p. 8 et seq.). Hereby, the motivational assumption is that all humans strive to increase their utility - understood as the ultimate problem man faces[4]. Herein, individual uniqueness stems from „the way he imposes self-created problems upon himself" (idem, p. 13). How these problems are encountered and eventually solved is conceptualized in a sketch of both the cognitive and the choice aspect within Mantzavinos' (2004) ‚problem-solving model' (p. 22 et seqq.)[5]. According to the latter, the human brain develops mental models to tackle problems. In the first step, the mind identifies a certain problem and tries to assimilate an already-developed cluster of known problem situations. If one is to be recognized, the mind interprets the faced problem as an old one and applies routine solutions already available from former situations. If this pattern is successful in the sense that after trial, the individual interprets the problem as resolved, it will survive as a solution to that class of problem. Yet, if the applied solution fails, the problem will be interpreted as a new one. The same processes now applies, as if the mind had interpreted the problem as a new one from the beginning. Here, inferential strategies are mobilized at the first stage and - in case of their failure - choice is made over either ready-made solutions from the environment or over several the „creation of new alternatives with the aid of imagination"[6] (Mantzavinos, 2004, p. 41). This second stage is then repeated until a successful new solution to the (new) problem is thought to be found. Note that both the subjective as well as the social momentum have a high impact: motivation depends on the structure of one's own utility - coined by internal and external factors -; cognition depends on classification and interpretation of old and new problems as sought in past and present environments and on the

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[4] This stands as a deliberately broad hypothesis. In fact, human actions are motivated by very distinct factors, both internal (needs, preferences etc.) as well as external (culture, institutions etc). For Mantzavinos (2004) the striving for utility is a motivation that encompasses all individual behavior, where an external judgement of action as boundedly rational, rational or irrational need not be applied.

[5] see figure 1 (appendix) for a sketch of ‚The Problem-Solving Model' as developed by Mantzavinos (2004). Its relevance for this paper is its explanation of how the human mind handles problem situations. It thus stands as an encompassing model of individual behavior in general which will later be expanded to the societal level through the concept of institutions.

[6] The a full account of the relevance of imagination, see Mantzavinos, 2004, p. 45 et seqq. In fact, which role imagination plays for institutional change will shortly be discussed in the third section and is sketched in Patalano (2007).

imaginary capabilities in defining innovative solutions; where choice then eventually builds on both the motivational and cognitive aspects (cf. idem, pp. 16-42).
It is important to note two points here: first, the path of the solution finding depends on the interpretation of the individual where „interpretation and classification errors are far from impossible“ (idem, p. 40). Second, already-learnt solution patterns are highly relevant, since they stand as the first resort answer to a problem in both cases of interpretation as a new or old problem, either as routines, inferential strategies or ready-made solutions from the environment (idem, cf. p. 41).

1.2. From A Model of Individual Behavior to a Model of Collective Action

As we are ultimately concerned by societal phenomenons, this problem-solving model of the individual behavior has to be aggregated to a frame able to account for the apprehension of problems of a whole society. A consistent analysis is a two-step sketch of firstly, the constitutional level of institutions, that is the level of rules and their emergence with which we will be concerned in this part, and the subconstitutional level, analyzing action within rules (cf. Mantzavinos, 2004, p. 66).
For Mantzavinos (2004) the first step towards common problem-solving strategies are shared mental model (p. 67). Constituting a common social reality, such patterns give a common framework for interpretation and as such enable social interaction (ibid.). Constituting the theoretical and practical knowledge of a society, shared mental models evolve in a process of an inheritance model of cultural evolution through transmission[7] and selection at the micro-level, whereby the „knowledge of a society, understood as its problem-solving capacity“, grows through time (idem, p. 73)[8].
However, accounting for the emergence and evolution of institutions does not only yield a model of the evolution of social knowledge understood as its interpretation patterns, but one that accounts for the character of institutions as shaping action:

> „Institutions are normative social rules, that is, the rules of the game in a society, enforced either through law or through other mechanisms of social control that shape human interaction“ (Mantzavinos, 2004, p. 83).

With regard to the research aim of this paper, a further examination of why institutions exist, emerge and persist or change as well as into the mechanism through which they are adopted or enforced seems relevant[9] (p. 84 et seqq.).

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[7] the evolutionary process of practical knowledge in society can be understood as a process of trial and error similar to the individual model, whereas the transmission mechanism „rather consists of direct imitation of the performance of others“ thus grows very quickly (Mantzavinos, p. 77).

[8] note that an idea of growth is present in the model of cultural evolution itself and is intertwined with the notion of time. Axiomatically, Mantzavinos (2004) states that with the course of time, knowledge grows without considering the possibility of the decline of the knowledge of, say, former generations (cf. pp. 73 et seqq.).

[9] Note that in the following, the broad framework for institutions is laid out - however, a more precise differentiation can be made according to what kind of institutions is treated. Social norms will be analyzed more specifically in section 2.

- institutions *exist* in order to overcome social conflict that arises from the individual strive to increase one's utility. What is more, they stand as an unburdening in allowing to overcome restrictions of the human cognitive capacity through using routines „rather than deciding each time anew how to act and react" (idem, p. 87). The cause for their existence is „the need of individuals to have an orientation in a complex world", the effect the stabilizing of expectations (idem, p. 95, p. 89).
- institutions *emerge* either as pragmatic or as organic institutions where the first are the result of deliberate collective action towards their establishment whereas organic ones „are the unintended result of human efforts aimed at attaining essentially individual goals", thus of ‚spontaneous' nature (Menger, 1883). Both can be explained through the problem-solving model with the crucial difference that in the latter case individuals „need not to be conscious" that their activities „affect other individuals" (Mantzavinos, p. 92). Broadly, institutions emerge deliberately due to a common perception of a problem that is communicated, leading to a collective choice[10] within shared mental model depending on the prevailing configuration of interests (ibid.). Institutions emerge spontaneously if each individual tries to solve a personal problem through a certain solution in order to increase his or her utility which gives rise to a cumulative process of imitation (cf. idem, p. 94).
- to account for why institutions *persist* is to explain why institutions *change*. While persistence of institutions is to be explaining through the existence of enforcement mechanisms and the corresponding sanctions, it does not imply that they can never change[11] (cf. idem, p. 123). A focus on the phenomena of institutional change is thus crucial if we want to remain on a deeper level of analysis. In fact, institutional change is unpredictable and is either due to an innovation initiated by one individual and imitated by others or through collective action in response to a perceived new problem (cf. idem, p. 95). Most importantly, change depends on whether or not a change in the environment that calls for a new adaption is perceived (cf. idem, p. 123). It is influenced by various factors such as economic well-being or ideology that affect individual's perception of reality (p. 99).
- institutions can best be classified according to how they are *adopted or enforced*, differentiating informal institutions as conventions, moral rules and social norms and formal institutions as the law (ibid., p. 85). More broadly Mantzavinos (2004)

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[10] It seems important for us to note the full argumentation line especially to illustrate the process of *collective choice*: „a social rule emerges deliberately whenever many individuals perceive the problem situation as a new one requiring a conscious choice. A shared mental model of the problem situation is formed after repeated acts of communication between the individuals involved in the collective setting have taken place. These shared mental models are the prerequisite of the collective choice that follows the communication process. The choice of rules is a conscious act of individuals mutually recognizing the existence of a social problem requiring solution. The final outcome of the collective choice depends on the configuration of interests prevailing at the time, and on how these interests are perceived and understood as such by agents" (Mantzavinos, 2004, p. 92).

[11] The issue of persistence is more or less left open by Mantzavinos (2004). The latter argues that the focus should be on change, which can be accounted for through the problem-solving model.

stresses that a „learning process underlies the adoption and enforcement of any institution“ (p. 99 et seqq.).

We have now sketched institutions as understood by Mantzavinos (2004), which forms the framework for our further conceptualization of growth. In fact, the latter offers a more precise account of mechanisms at work through the categorical distinction of institutions. Yet, since only a certain category will be relevant for this work, deeper examinations will be laid out when picturing economic growth.

1.3. Evolutionary Competition in the Market: Action within Rules

Analyzing the subconstitutional level, or the level of action within rules, is asking about the role of institutions when „individuals follow their problem-solving activities on the market“ (Mantzavinos, 2004, p. 161). The market works within the institutional framework which evolves in an evolutionary process and determines both the content and the direction of its dynamics (Mantzavinos, 2004, pp. 164-177). While institutions on the market emerge as enforced problem-solving strategies of actors on the supply and demand side, they evolve to become the rules by which is to be played. The crucial assumption of the problem-solving model holds: the individual's motivation is his strive for utility which he tries to solve through the problem solving model. In building his theory of evolutionary competition, Mantzavinos (2004) pictures how both the supply and demand side are affected by institutions. On the supply side, the entrepreneur's primary goal is making a profit[12] (ibid., p. 165). In fact, the idea of the capitalist firm „as a special type of economic organization which is run for profit“ is already stated in Weber's economic sociology (Swedberg, 2002, p. 238).

As such, entrepreneurs test several profit-seeking strategies in a competitive process of innovation within certain allowed action parameters. In fact, the consuming patterns are also generated through a trial-and-error process. The consumer tests his or her strategy - the made choice over the buying of a certain good - and compares how the „properties of an external object may satisfy his wants and thus solve his consumer-problem“ (idem, p. 201). Those strategies that best satisfy the strive for utility are thus imitated and then become rules of the game that are to be preferably followed. In fact, exchange and communication between individuals on both sides but also between demand and supply are of crucial importance, for the „uniqueness of markets lies in the fact“ that both sides are affected by transmission of knowledge during the exchange process, where this intersubjective knowledge can best be understood as a shared mental model (idem, pp. 203-204). However, this knowledge of successful solutions to problems

[12] This assumption is one simply stated by Mantzavinos (2004). It is to emphasize that the strive for profit appears not as a universal goal of individuals, but of entrepreneurs. Section Two will be further concerned with understanding profit as the primary utility of actors within the supply side of the market.

on the market evolves to sustainably shape interaction in becoming a rule within a deliberate or spontaneous process. Mantzavinos (2004) stresses that most shared knowledge between demand and supply is punctual[13], while institutions are of a more stable nature, as they emanated from an evolutionary process. In referring to economic development, Mantzavinos (2004) argues that „the view of the market as an evolutionary process operating within rules can provide some insights concerning real-world market outcomes“ (p. 208). In fact, understanding growth as having become one of the rules of the game helps to understand current (socio-)economic dynamics.

To conclude this introduction to the framework that will be applied in the following, let us recall what is taught by Mantzavinos (2004). In fact, economic institutions understood as „the rules of the market game“ (p. 161) evolve according to the problem-solving model. Institutions are thus the aggregate outcome of individual problem-solving strategies, either deliberately or spontaneously emanating to become determinant of how the game has to be played. The following part argues that economic growth can in fact be understood as a highly stable social rule that drives the dynamics of the market in a certain direction, emerging from individual's solutions to their utility-problem.

2. The Idea of a Growing Economy

In this second part, the paper will argue that growth can be seen as an institution steadily governing dynamics on the market, eventually encompassing society. The following part will be dedicated to understanding the concept of growth from an institutional perspective. Here, we will not picture economic growth as a mere outcome of a certain institutional framework but as having become a guiding institution within the market. It is thus relevant to sketch the development of the socio-economic system that promotes growth which is - as we will argue - capitalism as a system driven by individual's motivations', but eventually governed by the social norm of growth. In a first section, a brief sketch from the phenomenon to the idea of growth shall elucidate which mechanisms drive individuals' motivations. The analysis of these will lead us to recognizing growth as having become paradigmatic, in order to eventually picture the latter as a social norm.

2.1. Short Economic Sociology of Growth

What is economic growth? While generally defined as the annual increase in the production of all goods and services within a country (GDP or GNP), growth can be

[13] In each transaction, supplier and buyer share certain informations. The role of knowledge is not to be underestimated, as it is the punctual asymmetry which grants an entrepreneur the lead in competition.

understood as a much deeper idea of certain progress[14]. The macro-economic phenomenon ‚more production' can be traced to its micro-economic roots deeply embedded in our modern economy.

The type of economic system governing the prosperity of the post 1770 fast growth had often been referred to as capitalism, remaining until today „the backbone of contemporary economies" (Greif, 2005, p. ix). Sketches of the motivations governing this socioeconomic system can be abundantly found within the academic field of economic sociology, dating back to Marx and Weber (ibid.). In fact, Weber (2005 [1930]) recognized the spirit of capitalism as one in which „man is dominated by the making of money" which appears as „the ultimate purpose of his life" (p. 18). Herein, the making of profit is the problem which is to solve. Yet, it is not „unlimited greed for gain" that constitutes capitalism, but the *forever renewed* profit (idem, p. xxxii). This ‚spirit', that Weber finds originated in Protestantism is one that Schumpeter had seen in the most intrinsic motivation of the entrepreneur to create something new (cf. Swedberg, 2002, p. 232). As such, it is the strive for endless profit and the passion to create that characterize individual action on the supply side in this specific socio-economic system. While this study explicitly focuses on the supply side of the market, arguments of a ‚consumer-society' are dispensable. Mantzavinos (2004) considers the demand side as one with unlimited wants. Thus, assuming that the entrepreneur seeks renewed profit directly leads to the latter triggering new ‚wants' with more and/or new commodities. Micro-economic axiom of the equal status of needs leads us to the consequence that „saturation of purchase motives can de facto not occur"[15] (Hirschle, 2012, p. 94). Concluding, in its original and most prosperous form, „capitalism is not about money, it is about growth" (Weaver and Fry, 2012, p. 782). Accounts for such a ‚spirit' do, however, not yet make the case for growth as a shared mental model. The sketch laid out by Mantzavinos (2004) allows for a trial to trace back the emergence of growth as a belief system. While shared mental models evolve through transmission, continual increases in wealth perpetuated themselves as means to solve the strive for profit to become what Rosa (2009) calls a ‚systemic imperative' (p. 98).

If we will see in the following how growth is institutionalized through its distinct enforcement mechanism, let us recall here that growth evolved from an individual motivation to become a belief system which both originated and sustains capitalism.

2.2. Origins and Scope of Paradigmatic Growth

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[14] the idea of growth as progress is the shared belief that through growth „civilization has moved, is moving, and will move in a desirable direction" (Bury, 1920, p.6a).

[15] For an attempt to sketch the politics of consumption see Sennett (2006), most notably chapter three.

The idea of growth does not only stand at the roots of our modern socioeconomic system but is deeply embedded in its *system-immanent* processes. Jansen (2013) notes that „growth is interweaved in the acceleration spiral of capitalism - through a trick hardly to eradicate of our world: the interest rate“ (p. 96). In fact, positive interest rates make growth an indispensable process within the capitalistic system. In the strive for renewed profit, individuals borrow capital to a certain interest rate. As is noted by Weber (2006 [1930]) debt primarily means the exchange of currently unavailable, but henceforth excessively available goods or money - against currently available goods or money (p. 86). Yet this act of exchange is characterized by the anticipation of an overplus. The interest rate stands here as a rational premium: it is assumed that the debtor only takes the credit because of his expectation to be apt to refund both the credit as well as a certain surplus (idem, p. 101 et seqq.). Already this brief consideration of the concept of the interest rate which governs modern economies shows that growth is an expectation towards economic entities; not least because the supply side serves the market largely through debt. The latter thus stand as a constraint for the entrepreneur to generate more wealth in the forthcoming period[16], constituting the core of growth's enforcement mechanism.

Rosa (2009) interprets amongst others the interest rate as entailing a ‚growth paradigm‘, which he sees as one of two principles of dynamisation governing modern capitalism (cf. p. 98 et seqq.). Individual constraints have become a *systemic imperative* - they have evolved from being individual strategies to be embedded in modern economies. Today, the idea of growth seems ever-present unquestioned: even the crisis of these systems are always and only crises of growth (ibid.). Schmelzer (2015) analyzes an outburst in the prevalence of growth within the academic field after WWII. In 1940, the percentage of articles published in all academic journals in the JSTOR database that contain the term ‚economic growth' was close to 0% - whereas in 2010 it had reached an average of 3.5%, within economics even close to 20% (cf. Schmelzer, 2015, p. 263). Analysis of the public discourse shows that „economic growth became self-evidently regarded as the key goal of economic policy-making by social scientists, politicians, and the general public“ (ibid.). Albeit the normative stance of the latter, his findings are not to be underestimated and show: growth has become a paradigm as an „entire constellation of beliefs, values, techniques and so on shared by members of a given community“ (Kuhn, 1996, p. 175). ‚More is better‘ thus stands as a shared belief within capitalistic socioeconomic systems. Considering its paradigmatic status,

[16] Showing that the interest rates leads to macro-economic growth in *real output* is a more delicate undertaking as the interest-rate is at first a constraint to generate more *value* within the monetary system. The monetary system is yet part of the capitalist system, thus generating at least an incentive for the individual to grow.

growth appears as a constraint which „is internalized by individuals in terms of boundaries to human activities“ (Patalano, 2007, p. 224).

Our economic system - capitalism - has evolved out of the individual values of profit-seeking and entrepreneurial spirit, both standing as a strive for growth. These can in fact be understood as shared mental models in the sense of Mantzavinos (2004), where the social reality becomes one shaped by the belief in and of ideas of growth. On the other hand, institutions stand as the social manifestation of these beliefs in the sense that they are intertwined with their very specific enforcement mechanisms. The interest rate leaves but no choice to produce more if a firm is to survive in the market. As such the prior sections have accounted for growth as a value at the individual level yet its hegemony manifests its social reality and the imperative of its application within the market of capitalistic systems. The following part will thus be dedicated to a detailed conceptualization of the idea of growth as a social norm, an informal institution according to the concept of Mantzavinos (2004) that had previously been laid out.

2.3. Growth as a Social Norm

Streeck (2010) pictures „capitalism as a system of social action, or as an institutionalized order“, meaning „a specific set of institutions accommodating a specific, regularized actor disposition (*habitus*, character) and a specific distribution of resources, or powers of agency“ (p. 677). This specific order is an order of growth as we have previously laid out. Yet, what are the characteristics of an institution that can be seen in the idea of growth? Within informal institutions as the rules of the game, Mantzavinos (2004) differentiates between conventions, social norms and moral rules. A moral rule is characterized by the fact that it requires a kind of behavior which is at first sight contrary to the interests of the individual, while socially beneficial (idem, p. 106). Yet growth as an idea is - at first sight - beneficial for each individual, not least because it permits to expand personal wealth, thus solving the utility problem of profit. We are not facing a prisoner’s dilemma. On the other hand, conventions appear as solutions to coordination games: It is a situation of interdependent problem solving, in the sense that no individual has an incentive to act ulteriorly (idem, pp. 101-105). Yet, as we have seen, growth is not self-policing but is subject to third party enforcement. The following section will thus summarize how growth can be understood as a social norm, a certain rule within the market game.

In the market - a „form of economic contracting“ (Mantzavinos, 2004, p. 102) - society seeks to solve their common problem of scarcity (idem, p. 162). For Hayek (1980 [1948]), the market evolves as a means to overcome complexity, „an effective way of making man take part in a process more complex and extended than he

could comprehend“ (p. 14). It is in this sense that the market could be understood as a „human institution“ (idem, p. 57) build to channel individual motivations in order to overcome the problem of coordinating efficient allocation of scarce resources[17]. Although Mantzavinos (2004) does not explicitly identify markets' specific institutions, he identifies them as the „allocating machine that solves the main problems of society, that is, what to produce, how and for whom“ (p. 162). There exists several works that understand the market as an institution itself[18] and one could indeed argue that the latter appears as a convention that solves the coordination problem of allocation. Yet, most importantly, the market can be defined as a ‚process‘ with institutions as its rules, channeling the process in a certain direction (Mantzavinos, p. 161).

Why does growth exist as a social norm? For Mantzavinos (2004), social norms exist because they solve social problems in which conflicting individual interests prevail. What is the social problem solved by growth? As we have seen, within the capitalistic socio-economic system individuals strive for profit. Considering scarcity of resources, if every individual strives for profit, the market process must be one of redistribution. Fligstein (2002) argues that social norms exist within markets in order to produce „stable outcomes (i.e. survival) for the firms that use them“ (p. 11). Growth enables the attainment of a dynamic Nash equilibrium in the allocation of resources, guaranteeing survival for all firms that ‚use‘ it as a strategy. While originally conflicting individual interests exist, growth permits to overcome them by making it an informal rule that there has to be more wealth in order that no individual suffers loss if another gains. In the optimistic terms of Hayek (1980 [1948]), growth as a social norm exists because „man could be induced, by his own choice and from the motives which determined his ordinary conduct, to contribute as much as possible to the need of all others“ (p. 13). As a normative informal institution, the strive for profit manifests itself in the macro-economic institution of growth, thus setting the direction of the market process.

How did growth emerge as a social norm? If growth is a social norm, the process of its emergence is of spontaneous nature in the sense of Hayek, that is as an „unintended outcome of free interaction of individuals separately pursuing their own

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[17] An alternative explanation of institutions emphasizes the fact that they provide stability. For instance, Fligstein (2002) argues that „the purpose of social structures in the creation of markets is to produce stable outcomes (i.e., survival) for the firms that use them“ (p. 11). Yet Mantzavinos (2004) argues that stability cannot be sketched as the reason for existence of institutions, but as their effect (p. 89).

[18] Although Hayek (1980 [1948]) states explicitly that markets are institutions, it remains secondary to his work. In fact, in many studies the definition of institutions is applicable to the understanding of markets of the respective authors (cf. i.a. Streeck (2010), Screpanti (2001) and Mantzavinos (2004)). For an explicit study of markets as institutions see Fligstein (2002) and Polyani (2001).

ends“ or of deliberate nature as the outcome of a process of collective choice[1] (Mantzavinos, 2004, p. 66). For an invisible-hand explanation, Mantzavinos (2004) distinguishes three stages according to the problem-solving model (cf. p. 120). In the first stage, individuals face a problem that individuals interpret as a ‚new‘ one. When a market emerges, individuals see themselves in an exchange. However, as resources are scarce, they recognize that not every individual can strive for profit without inciting loss of another[20]. As such, growth is a strategy that feeds the hope that „growth would mean prosperity for all with sacrifice by none“ (Daly, 1974, p. 150). Growth can thus be seen as an attempt to *solve the economic problem peacefully,* that is, „providing the necessities of life“ for everyone (cf. Stiglitz, 2010, p. 41). In fact, the „reason for demand for norms is the external effects of actions undertaken by an individual and affecting more than one other individual“ (Mantzavinos, 2004, p. 119). Individuals thus develop a problem-solving strategy which enables them to overcome the problem: they grow in either producing more in quality or quantity. In fact, those who do not hold the capital to invest and generate more wealth borrow money. Within the theory of evolutionary competition, growth has asserted itself as the most successful strategy to make profit on the market. It increased the utility of the agent who employs it by generating profit: „the capitalist expansion of businesses in competition with one another became a rationale that justified itself“ (Weaver and Fry, 2012, p. 782). Through communication and imitation, the problem-solving strategy further spreads up to a point where it becomes a social norm, enforced through the necessity of producing more wealth to survive on the market: The shared mental model[21] of the strive for profit manifests itself in the rule of growth.

How is growth enforced within the economy[22]? Social norms are enforced by social

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[19] While we will focus on the spontaneous emergence of growth, Schmelzer (2015) argues that the establishment of growth as a paradigm did not follow a spontaneous process, but makes the case for its emergence as a deliberate process. According to the latter, policy makers established the idea that „economic growth is a universal remedy for some of the most pressing challenges of modern societies and imperative to avoid economic and social crisis“ (idem, p. 266). In his historical analysis of the political discourse, Schmelzer (2015) concludes that while based on a long tradition of measuring the riches of kings, growth in output evolved to become a universal metric of worth (p. 264). In fact, it would be interesting to analyze how growth is institutionalized within the formal institutions of our economies, that is economic law.

[20] This argument allows for a broader perspective than the simple neoclassical assumption of striving for profit. The emergence of the social norm of growth is one that does not only originate in the pursuit of economic goals but is also linked to „non-economic ones as sociability, approval, status and power“ (Granovetter, 1992, p. 4).

[21] mental models can be understood as institutions from within as they „can best be understood as the final prediction that the mind makes or expectation that it has regarding the environment before getting feedback from it“ (Mantzavinos et al., 2003, p. 4).

[22] The first question would rather be: why does it have to be enforced? Mantzavino's (2004) answer is simple: „the effect of deviant behavior will harm the interests of the whole group, not just of one individual“ (p. 121). In the case of growth, one could argue that because of redistribution through the state, individuals could free-ride on growth, benefiting from high profits of other firms because „the welfare state relies on a tax system dependent on aggregate output“ (García-Olivares & Solé, 2015, p. 33). Weak performance of a firm can thus harm overall performance of the market and of the economy.

forces through sanctions (Mantzavinos, 2004, p. 125). As simple as it is, a firm which does not make profit is excluded from the market.

> „For it must be so: in a wholly capitalistic order of society, an individual capitalistic enterprise which did not take advantage of its opportunities for profit-making would be doomed to extinction.
>
> Weber, 2005 [1930], p. xxxii

In fact, one could argue that in addition, the interest due on borrowed capital makes generating profit an issue of survival even outside of the market. The entrepreneur who cannot pay the interests of the provider of capital risks his economic existence. He who does not follow the rules of the market game is in the best case banned from it. A deeper accounts of reasons of permanence and prospects for change will in fact be the subject for the third part of this work. The following table tries to give an overview of the conceptualization of growth as a social norm.

Table 1. Characteristics of Institutions, Social Norms and Growth

	Mantzavinos (2004) pp 84-100 Institutions	Social Norm pp. 118-126	Growth
Reasons for existence	◆unburdening individuals ◆overcome social problems	solving the social problems in which conflicting individual interests prevail	solution to problem of strive for profit
modes for emergence	◆deliberately: common problem perception and collective action ◆spontaneous: individual strive for utility and imitation	spontaneous in an evolutionary process of the invisible hand type - „reason for demand for norms is the external effects of actions undertaken by an individual and affecting more than one other individual“ (trial and error and imitation) or deliberate	spontaneous: growth successful strategy of attaining Pareto improvements in which every firm using growth strategy can survive deliberate: discourse of policy-makers
reasons for change or permanence	◆change: innovation and imitation or collective solution to new problem ◆permanence: unpredictable	persist: punishment (metanorm game: punishment of the non punishment) change: change in the environment that calls for adaptation	possibility for change: change in the environment and thereby interpretation of a problem as a new problem and successful new strategy to solve utility problem
means of adoption and enforcement	◆self-policing ◆first party ◆third party: social forces ◆third party: State	third party: social forces	pressure for survival on the market

Let us retain here that growth can be understood as a social norm in the sense that emanating from individual's problem-solving behavior, it manifested itself in the market as the strategy for survival. Once evolved as a social norm, it unconsciously guides the behavior of actors on the market and has become a system-immanent rule of the game.

3. What We can Learn from Strategic Growth

So what do we learn from the conceptualization of growth as a social norm? The problem-solving model delivers answers to the question of why patterns of problem-solving strategies, once they have become institutions, serve as unquestioned heuristics. A first section will consider the ‚fast heuristics' aspect of growth as a social norm. This will lead us to the question over the actual utility of modern growth strategies. Last but not least shall this work discuss perspectives of change.

3.1. Social Norms as Fast Heuristics

The social norm of growth's persistence is due to the existence of sanctions tied to the enforcement mechanism as removal from the market. Yet, looking closer at a growths' characteristics as a social norm emerging from the problem-solving model may be more fruitful in trying to find answers to the question of ‚why we do not see that it won't work in the long run'. Up until the 1970s, ‚heuristics' „has been used to refer to useful and indispensable cognitive processes for solving problems that cannot be handled by logic and probability theory" (Goldstein & Gigerenzer, 2002, p. 75). In fact, this early definition seems adequate for us to understand how the problem-solving strategies as defined by Mantzavinos (2004) spread as default rules that guides behavior in a certain direction. The mind can be understood as a „complex structure that actively interprets" and classifies experiences (Mantzavinos et al., 2003, p. 3). However, cognitive limitations of the human mind compel them to reason though inductive inferences under limited time and knowledge (cf. Gigerenzer & Goldstein, 2011, p. 33). Several ‚heuristics' as thumb-rules have been studied in the past decades based on psychological experiments. Goldstein and Gigerenzer (2002) have argued that individuals also make inferences following the ‚recognition heuristics', based on scarce knowledge and information from the environment (p. 88). These processes of reasoning through interference is part of understanding the evolution of institutions based on the problem-solving model: „Once the problem solutions are learned by agents, they are unconsciously applied each time similar problems arise" (Mantzavinos et al., 2003, p. 14). The extent to which growth is applied as a thumb-rule to solve problems thus depends on the problems interpreted as similar. The categories, in turn, are defined by the shared mental models underlying the social norm which - if stabilized - can be understood as something like a belief system (cf. Mantzavinos et al., 2003, p. 4). In fact, we

argue that the growth-strategy is applied to problems which would yield more differentiated solutions. Through the process of institutionalization, growth has become a transcendent concept not only followed by the market-supply, but also by the demand side. Consumers strive for the endlessly more, thus evaporating the concept of saturation: „saturation of purchase motives can de facto not occur“ (Hirschle, 2012, p. 94). The pace and direction of growth are eventually set: accumulation and acceleration are the dictate of the underlying belief in growth (Rosa, 2009, p. 98). Modern capitalism is characterized by cumulative growth that aims to quantitatively expand monetary resources (cf. Weaver and Fry, 2012, p. 786). Meanwhile the relevance of the dogmatic use of the social norm of growth cannot be underestimated (cf. Schmelzer, 2015). That the assessment of problems is defined by a certain belief[23] that has evolved as a problem solving mechanism but stands as a default option considered first when confronted with any problem, „may structure the economic game in a standardized way through time and lead societies to play a game that results in undesirable consequences“ (Mantzavinos et al., 2003, p. 14 et seqq.). The power of a norm is thus to be explained at a much deeper level than through the enforcement mechanisms, but can be thought of as its applicability an unconscious default option, thus the relatively high speed of its unreflected spread. If Fuchs (2011) speaks of the ‚comfort‘ of modern economies, growth just appears as the most comfortable and ecologically rational answer to any problem, as it is based on an apparently successful, already elaborated strategy (p. 7).

> „The fact that in the present order of things such economic problems are not solved by the conscious decision of anybody has the effect that most people are not conscious that such problems exist“ Hayek, 1948, p. 123

To make it simple: it is the unconscious application of social norms, once they have evolved, that lead to a biased apprehension of current problems that might inhibit much needed change.

3.2. Effectiveness versus Efficiency of the Growth Strategy

After all, the spread and further success of growth as a social norm is due to the fact that it has been recognized as a successful strategy in our socio-economic system. Yet, what does success mean?

One of Granovetter’s (1992) objections to New Institutional Economics has been that institutions are „interpreted as the efficient outcome of rational individuals

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[23] If shared by all market participants, a stabilized mental model is a belief (Mantzavinos et al, 2003, p. 4). However, „from an external point of view, institutions are shared behavioral regularities or shared routines within a population. From an internal point of view, they are nothing than shared mental models or shared solutions to recurrent problems of social interaction“ (idem, p. 7). Thus, a belief can be understood as an institution from within.

pursuing their self-interest“ (p. 4). Yet, within the problem-solving model of Mantzavinos (2004), outcomes are not necessarily seen as ‚efficient‘. Institutionalization of a problem-solving strategy happens if - in the first place - a strategy repeatedly proves to be successful. Here it appears crucial to differentiate between effectiveness and efficiency of institutions. Fligstein (2002) notes that an institution is thought to be effective according to its survival from period to period[24] (p. 11). We have seen that the only way to survive in a market is to make profit. Here, the most effective strategy appears as growth, because it grants survival for all. However, this focus on survival leads to a certain agnosticism inherent to the effectiveness approach because it does not focus on the optimal allocation of resources (Fligstein, 2002, p. 11).

Macro-economic efficiency has to be defined with regard to a certain result. We have argued in the former section that the reason for existence of the growth norm is the social problem of allocating resources while increasing the welfare of all. Can growth serve this problem? The idea that unlimited growth is a macro-economically inefficient outcome is not new. It were already the classical economists who agreed on the impossibility of cumulative growth due to the problem of incoherent dynamics of population and resources (cf. Caldari & Masini, 2008, p. 168). The accounts of long-term unsustainablity of productive growth are numerous and mainly draw on the great paradox of presuming endless production factors while resources are scarce (García-Olivares & Solé, 2015, p. 36). As such, long-term inefficiency of the growth-norm is due to the fact that our modern growth relies on resources that become less and less available (ibid.).

However, understanding growth as a norm that solves the social problem of allocating resources leads us to identify rising inequality as a factor for failure to achieve its aim. As Henry Wallich, former governor of the Federal Reserve Bank has famously noted: „Growth is a substitute for equality of income. So long as there is growth there is hope, and that makes large income differentials tolerable“ (Wallich, 1972). Can one claim that a norm is efficient if it has not solved, but substituted the core social problem of allocation, the distribution question? In fact one could argue that growth contributes to solving *the economic problem* as defined by Keynes (2010 [1930]) in the sense that it helped provide the necessities of life. Three main objections should be mentioned here. First, considering that at the beginning of our theory stand insatiable wants, no normative difference is made between absolute and relative wants. Yet, „those [wants] which satisfy the desire for superiority may indeed be insatiable: for the higher the general level, the higher still they

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[24] The effectiveness approach originates from organizational theory. The idea that survival of organizations is central stems from the argument that it is the behavior of organizations that guides social change (cf. i.a. Hannan & Freeman, 1993). Whether an institutional set thus enables the survival of an actor is thus crucial for any socio-economic analysis.

are“ (Keynes, 2010 [1930], p. 21). If one can only be satisfied with his profits if better than those of his neighbors, the run for physical growth is in fact endless. Second, growth has masked inequality in the sense that while an increase in production guaranteed „aberrant earnings for the most favored of the economic system“, it also led to a „spillover effect“ which reached all social classes (García-Olivares & Solé, 2015, p. 33). However, Piketty (2014) has shown that through the rising paste of capital growth, inequalities in the distribution of wealth are considerably rising[25]. At last, physical limits of growth undermine the hope of global convergence towards the possibility for everyone to strive after his unlimited wants: „such a catch-up process cannot take place globally“ (Piketty, 2014, p. 93).

Alternative propositions to a growing economy have been extensively discussed. While the 1970s have brought up both Meadow's Limits to Growth (1972) and Daly's suggestion of a Steady-State economy (1974), more recent attempts have also focused on the interest rate as the herder of growthmania (cf. i.a. Gesell, 2009). Yet, it remains questionable whether reinventing the economic system within the academic field can push a change in norms. Moreover, through the conceptualization of growth as a norm one can grasp why a macro-economically institution persists: it is its micro-economic effectiveness within the system. After all, rules matter because „complex patterns of interaction that are stable require actors who share cognitive assumptions and expectations“ (Fligstein, 2002, p. 27). Thus, the institutions of a socio-economic systems will certainly not ‚successfully‘ change without their endogenous emergence, „for we have been trained too long to strive“ (Keynes, 2010 [1930], p. 23). If institutions in general grant stability, the question whether an economy without growth can be socially just has to be considered, „given that in the current global economy lack of growth is synonymous with crisis“ (Blauwhof, 2012, p. 254). As we have argued before, a certain inefficient equilibrium had been/could be attained with improvement of prosperity and the hope for everlasting growth, namely the tolerance of growing inequality (cf. García-Olivares & Solé, 2014, p. 33). To make it short: „if profits cannot be made by growing the pie, it is to be done by cutting the rest in smaller slices“ (Blauwhof, 2012, p. 259).

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[25] In his historical analysis of the distribution of income and wealth, Piketty (2015) has argued that one has to differentiate two rates of growth, notably *g*, the growth rate of the economy (what we have referred to as productive or physical growth) and *r*, the rate of return on capital (p. 450). Growth as a norm originated from the social strive for profit, through the production of outcome, thus of income. Yet, various shocks have led to a rising paste of capital growth through high rates of return (cf. Piketty, 2015, p. 450 et seq.). Yet, as r>g, the dynamics of wealth and income distribution tend in different directions. In fact, the important point is that small changes in r-g generate large changes in inequality (ibid., p. 452). For the sake of accuracy, Piketty (2014) does also argue that growth can in fact serve as a factor for equalization (p. 83 et seq.).

3.3. Perspectives of Change

Within the problem-solving model of Mantzavinos (2004), one can learn about the perspectives of change if considering the process of their emergence. In fact, for the profit-seeking entrepreneur, growth has become the default rule when confronted with the economic problem within the market. As such, applying the growth-strategy first depends on recognizing a problem as within the same category as striving for profit. Thus, within this framework, as long as the social reality is one in which the strive for profit appears as the ultimate aim of humans, no change is likely to happen (cf. Mantzavinos et al., 2003, p. 14). As soon as in 1930 did Keynes express the hope that „when the accumulation of wealth is no longer of high social importance, there will be great changes in the code of morals" (Keynes, 2010 [1930], p. 23). But how, in fact, could there be change if the prevailing norm in the markets is the strive for profit, both facilitating and restraining his actions[26] (Granovetter, 1992, p. 7)? The importance of individual actors cannot be underestimated since „an institutional change takes place whenever one or more agents think that his or their interests are better served under a new institutional arrangement than the prevailing one" (Mantzavinos, 2004, p. 96). It is in fact the role of the creative entrepreneur as defined by Schumpeter (1975 [1942]) to stimulate change. However, can he overcome the institutions which define his reality thus his apprehension of problems? Within the model of cognitive institutionalism, „learning is the complex modification of the mental models according to the feedback received from the environment" (Mantzavinos et al., 2003, p. 4). In an optimistic attempt to clarify the role of imagination in institutional change Patalano (2007) has argued that the meanings underlying norms „are subject-dependent and society-dependent at the same time" (p. 233). Drawing on Castariadis (1987) theory of social imagination the latter notes that „the imaginary capacity is partially independent from real referents or functions, it is, to some extent, autonomous" (Patalano, 2007, p. 230). Applying this concept of radical imagination gives new hope for new solutions albeit the prevalence of growth as an institution which in turn is argued to „shape the cognitive capabilities and dispositions of actors" (Aoki, 2007, p. 67).

For Schumpeter (1975 [1942]) the impulse for economic change does not only come from within but is exactly what defines the capitalist system: „This process of creative destruction is the essential fact about capitalism" (p. 82). Yet the latter emphasizes that such progress can only be achieved within competition that does

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[26] Let us note here again that the assumption of the strive for profit as the prevailing motivation is only valid for the entrepreneur - thus for the supply-side of the market. This paper does not elucidate potentials for change within the demand-side of the market. One could in fact imagine that a shift in values here could lead to the growth-strategy becoming unsuccessful on the market.
What is more, questions of institutional competition have not been considered neither. For it might be thinkable that certain moral rules evolve as a response to very different individual problems but are as strong as to take the lead in the dynamics, even of the market.

not strike at the margins of profit but quality competition (idem, p. 84). More recently, Fuchs (2011) called for ‚growing without growth', arguing that growth on grounds of increased resource and energy-consumption need to be replaced by qualitative growth building on knowledge (p. 25). However it remains questionable whether growth of knowledge can be considered separately from productive growth. While the spread of new technology through learning can stand as a hope for endogenous change, „the player's tempo of learning depends on the intensity of the competition, which is in turn set by the institutional framework" (Mantzavinos et al, 2003, p. 13). If the social norm of economic growth sets the paste for the knowledge growth of societies, how could scientific progress be achieved without growth? In fact, „larger markets and larger stocks of resources create substantially bigger incentives for discovering new ways to use the resources" (Romer, 1996, p. 1). As such we want to argue that economic growth as a social norm is in fact both a restraint - in the sense that it leads society to an inefficient outcome - but also a chance for new perspectives[27]. The competitive process for profit in the market will guide institutional change and „by spreading information, it creates that unity and coherence of the economic system" (Hayek, 1948, p. 106). As such, despite the potentials of human imagination, it seems that within Mantzavinos' (2004) model, perspectives for a change in paradigm rely on spontaneous[28] evolution because „the generation of technologies is mediated by the market test - that is, by profitability considerations" (Mantzavinos et al., 2003, p. 13).

Limitations

This paper stands as an attempt to conceptualize economic growth as a social norm in order to shed new light on a great paradigm of our time. In fact, such an attempt makes it possible to trace back the roots of growth as it evolved as a strategy to solve the economic problem of the strive for profit in the market. Shedding light on the evolution of the growth-norm also enabled to dare an outlook on possibilities for change as they are characterized within the problem-solving model. Yet, the strength of Mantzavinos (2004) evolutionary perspective is also the greatest weakness of the former sketch. Tracing back the origins of growth may at times have led us to tautological aberrations. At this point I want to note that I do not claim full assessment of all theories brought up.

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[27] Through re-endogenizing Solow's unexplained technology or knowledge residual, endogenous growth models also emphasize the correlation between knowledge and production, where „savings can be used to invest in knowledge and thereby generate innovation or new knowledge" (Martens, 2004, p. 19).

[28] „Why spontaneous? Because the organizations that participate in the economic game - that is, firms - are primary concerned with increasing profits. In the process of solving this primary problem, they employ a very wide range of competitive parameters. Technology is just one of them. Scientific knowledge is used, and also partly produced, by firms only to the degree that entrepreneurs expect economic profits from its use" (Mantzavinos et al., 2003, p. 13).

However and most importantly does an evolutionary approach „implicitly assumes a system i equilibrium, since a still-evolving institution might not reveal by inspection what problem it had evolved to solve“ (Granovetter, 1992, p. 5). In fact, within this work a moment in time and space - however not specific - has been identified, where the idea of growth emerged as a norm. Nevertheless, if the main task of the theoretical social science, as Popper (1963) argues, „is to trace the unintended social repercussions of intentional human actions“ (Popper, 1989, p. 342), it is only through assessing the motivations of the individual that one will find answers to social outcomes. Although we have tried to remain positive in our arguments, it is exactly where it comes to interpret human actions as somehow intentional that normative axioms have to be made. In fact, while the assumption of the strive for profit seems meaningful when applied to a market situation, it is the assumption of unsatisfied wants that seems biased. What if modern economics would differentiate between absolute and relative wants (cf. Keynes, 2010 [1930])? What if even the entrepreneur in the market is at some point satisfied in his wants? In fact - albeit his own ideological stance - Daly (1974) notes that:

> „By treating all wants on equal footing one is not, of course, avoiding value judgments. Instead one is making a particularly inept value judgment, namely that relative wants (the insatiable needs of vanity) should be accorded equal status in economic theory with satiable absolute wants, and that wants in general should be considered insatiable.“
>
> Daly, 1974, p. 153

What is more, our attempt to sketch growth has left out most of the semantic field of power, agency and sanctioning tied to the enforcement mechanism and prominent in institutional economics literature. While it has been our goal to work out issues at a deeper level of analysis, the focus on the problem-solving model obscures mechanisms that have been well elaborated in current research.

However, as many limitations as an interdisciplinary sketch may produce, I hope that I could shed light on differentiated aspects of modern economic growth - emphasizing not only its limits but pointing out that it might after all be itself the driver for change. Rather than giving definite answers, a further research agenda in modern economics emphasize the social dynamics within the markets. As such, it seems that one of the most interesting questions that arose is whether growth of knowledge is possible without economic growth. In fact, how could competition be sketched without the strive for profit as the main motivation of entrepreneurs?

Conclusions

Building on Mantzavinos' (2004) problem-solving model, this paper started with displaying an individual model of behavior. Here, institutions are pictured as evolving from successful individual problem-solving strategies towards shared mental models internalized by agents. These shared realities manifest themselves as enforced rules of the game, thus as institutions. In fact, the theory of evolutionary competition on the market can draw on the same processes, where the strategy that best serves the entrepreneur's strive for profit manifests itself as the rule of the market game. A short economic sociology of growth then suggested that in fact, growth can be understood as one of the core institutions of capitalism. Albeit its emergence as an individual's strategy to solve his utility-problem on the market, growth has evolved to become not only a shared mental model, but becomes the default strategy granting survival on the market, thereby remaining widely unquestioned yet understood as progress. As a social norm, I have argued that growth has evolved to enable all individuals to strive for profit, where the pie is growing and does not need to be shared. However, if conceptualized as a social norm, growth can be understood as the default rule and it is its unconscious application that might lead to biased apprehension of current problems that might inhibit much needed change. In fact, although growth appears as an effective norm as it grants survival of the firm on the market, it is dubious whether it can be understood as leading to an efficient outcome. For now, the growing pie does function as a stabilizing institution, generating hope that wealth will come to all. Yet, relative wants are insatiable but resources finite. While attempts to sketch alternative socio-economic systems are numerous, the possibility of a system without growth seems questionable with regard to the functions of growth as a norm to both socially and economically stabilize the economy. Within the problem-solving model, a change of institution is likely to happen if the problem growth initially evolved to solve is either perceived as a new one or if the growth strategy is not efficient any more. If the institutions which are the reasons for the need for change constitute the shared reality in which new solutions should grow, how could change ever happen? In fact, capitalism as a socio-economic system does not only promote productive growth but market competition is a driver for knowledge growth. However, within the problem-solving model, new technologies only arise spontaneously as their development is dependent on their contribution to the entrepreneur's profit. As an optimistic hope for the change thus stands human imagination, which is believed to be - at least to some extent - autonomous from the social reality it evolves in.

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Appendix

Figure 1. The Problem-Solving Model (Mantzavinos, 2004, p. 41)