

Richters, Oliver; Siemoneit, Andreas

**Working Paper**

## How imperative are the Joneses? Economic growth between individual desire and social coercion

VÖÖ Discussion Paper, No. 4/2017

**Provided in Cooperation with:**

Vereinigung für Ökologische Ökonomie e.V. (VÖÖ), Heidelberg

Suggested Citation: Richters, Oliver; Siemoneit, Andreas (2017) : How imperative are the Joneses? Economic growth between individual desire and social coercion, VÖÖ Discussion Paper, No. 4/2017, Vereinigung für Ökologische Ökonomie (VÖÖ), Heidelberg

This Version is available at:

<http://hdl.handle.net/10419/150539>

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*



<https://creativecommons.org/licenses/by-nc-nd/4.0/>

## How imperative are the Joneses? Economic Growth between Individual Desire and Social Coercion

Oliver Richters<sup>a</sup>, Andreas Siemoneit<sup>b</sup>

<sup>a</sup> Department of Economics, Carl von Ossietzky University Oldenburg, [www.oliver-richters.de](http://www.oliver-richters.de)

<sup>b</sup> Berlin, [www.effizienzkritik.de](http://www.effizienzkritik.de)

**Abstract:** Worldwide, economic growth is a prominent goal, despite its severe conflicts with ecological sustainability. Are ‘growth policies’ only a question of political or individual will, or do ‘growth imperatives’ exist that make them ‘inescapable’? And why do people consume ever more, even in ‘rich’ countries? These questions are of political relevance, discussed since long – and essentially contested, especially along the dimensions free will vs. social coercion, and ‘socio-cultural’ influences vs. ‘economic’ reasons.

We carefully derive definitions of the key terms ‘social coercion’ and ‘growth imperative’, referring to the concept of methodological individualism. Based on the assumption derived elsewhere that an economic growth imperative actually exists, we analyze some socio-cultural influences on individual behavior, dividing the debate into three subgroups. On the demand side, we study why people seemingly consume beyond basic needs to compare with others for social and cultural reasons, or to increase opportunities, while on the supply side, we analyze why people work more than needed given their consumption plans.

When socio-cultural influences are truly forceful, they are usually based on economic pressure. Also, accumulation and certain consumption decisions can be traced back to quite ‘rational’ motives, making an often demanded ‘cultural transformation’ towards sufficiency a difficult project. Reproductive considerations (mating) and technology as households’ investment may be considerably underestimated as consumption motives, the second probably causing a positive feedback loop. We conclude that, with regard to inescapability, socio-cultural mechanisms are secondary, compared with economic pressure on individuals.

**Keywords:** economic growth, growth imperative, social coercion, cultural drivers of growth, conspicuous consumption. **JEL codes:** Q01, O44, A13.

A German abstract is available at [www.voeoe.de/dp4](http://www.voeoe.de/dp4).

**Lizenz/Licence:** Creative Commons BY-NC-ND 4.0. [creativecommons.org/licenses/by-nc-nd/4.0](http://creativecommons.org/licenses/by-nc-nd/4.0)

**Herausgeber/Publisher:** Vereinigung für Ökologische Ökonomie e. V., Heidelberg.

c/o: Corinna Vosse, Kaskelstr. 17, 10317 Berlin, Germany. [info@voeoe.de](mailto:info@voeoe.de) · [www.voeoe.de](http://www.voeoe.de)

VÖÖ-Diskussionspapiere stellen Forschungsergebnisse und Thesen für eine sozial-ökologische Wirtschaft und Gesellschaft vor.  
VÖÖ discussion papers present research results and theses for a socio-ecological economy and society.



## 1 Introduction

The growth of Gross Domestic Product (GDP) was associated with progress and improved human well-being, it was seen as “panacea” (Schmelzer, 2015, p. 266). But its suitability to measure social progress is questioned, as are the promise of growth to improve social aspects (Easterlin, 1973; Kubiszewski et al., 2013; Stiglitz et al., 2010) or the ability of growing economies to stay within “planetary boundaries” (Steffen et al., 2015). This initiated claims for a non-growing economy, which remained largely unheard: Economic growth remains “the supreme and largely unquestioned objective” (Schmelzer, 2015, p. 267).<sup>1</sup>

The reasons for this lopsidedness are contested. Even those making a case for zero growth or degrowth are far from being unanimous: For some, growth is intended (‘desire for more’), and abstaining from the quest for growth is only a question of mentality or political will. Others argue that “growth imperatives”<sup>2</sup> exist, i. e., system immanent mechanisms such that maintaining economic stability requires economic growth, and parting from growth would have more or less unacceptable economic or social consequences (‘fear of less’). Many theories are offered on how individual agency leads to aggregate GDP growth, with two ‘dimensions of reason’ rather dichotomized in this debate: Free will vs. social coercion (which is related to the “structure and agency” debate, O’Donnell, 2010), and ‘socio-cultural’ influences vs. ‘economic’ reasons. Especially contested is the question whether the “the iron cage of consumerism” (Jackson, 2009) really is ‘iron’, i. e., whether a strong social pressure to consume ever more exists and if so, how it can be successfully evaded.

We view a well-founded answer to the question ‘Why can’t we stop clinging to growth?’ as crucial for the further discussion of policy options. If growth imperatives exist, they will undermine any willful attempt to achieve growth independence, which would have far-reaching implications for many concepts of sustainability. Section 2 presents some positions on ‘clinging to growth’ and highlights the difficulties and desiderata of the ongoing debate. Elsewhere we have argued that an economic growth imperative on the supply side actually exists (Richters and Siemoneit, 2017). The aim of this article is to discuss some implications of this growth imperative for the socio-cultural domain, especially the role that social pressure and cultural patterns play for individuals to expand their consumption and to strive for occupational success. While the key term ‘growth imperative’ is hardly contested for the economic domain, here a

more precise definition is required that takes into account social and cultural influences, which in turn demands several other clarifications, discussed in section 3. In section 4, we analyze different socio-cultural explanations of why societies have to increase their economic activity. We study whether these influences on individual behavior satisfy our definition of a social coercion and whether they explicitly require economic growth. We discuss them jointly in section 5 and propose some further research activities in section 6.

## 2 Economic Growth between Individual Desire and Social Coercion

In neoclassical theories, “growth is a matter of taste” and “no more than preference between present and future consumption” (Gordon and Rosenthal, 2003, p. 26). Robert Solow argued that there is “nothing intrinsic in the system that says it cannot exist happily in a stationary state” (Stoll, 2008, p. 92). Accordingly, the following authors see the fixation on economic growth primarily as an individual inclination or cultural phenomenon. It has been criticized that growth is a goal and belief of politics, science, media and the public (Seidl and Zahrt, 2010), the “Holy Grail of modern societies” (Rubin, 2012, p. 13), and has become a “mental infrastructure” (Welzer, 2011). This was called an “ideology” (Maier, 2010, p. 48), “fetish” (Hamilton, 2003; McNeill, 2000, pp. 334–6), “quasi-religious adoration” (Schmelzer, 2016, p. 6), “obsession” (Eichengreen, 2007, p. 59), or “tyranny” (Fournier, 2008, p. 529). Daly spoke repeatedly of “growthmania” as a “paradigm or mindset” (Daly 1973, p. 149, 1991, p. 183; Daly and Farley, 2011, p. 23). Schmelzer summarized the political desire for economic growth in the last decades as “planning euphoria, technocratic optimism, international competition, and Cold War rivalry”. Growth was seen as “the most essential symbol and key foundation of national power”. Also, growth “helped to overcome the political focus on equality and redistribution” (Schmelzer, 2015, pp. 266–7).

Other authors suspect that growth imperatives exist, thus “modern supply systems cannot be economically or socially stabilized without growth” (Paech, 2012, p. 95). Marx (1906, p. 649) argued that “external coercive laws” compel the capitalist “to keep constantly extending his capital”, and Schumpeter (1942, pp. 30–3) shared the view that “capitalist economy is not and cannot be stationary”, looking at the “capitalist reality as distinguished from its textbook picture” (p. 84). Heinsohn and Steiger (2009, pp. 386–7, own translation) claimed that growth is no “free choice” or “arbitrarily controllable dimension of human history”, but an “iron force”. Kallis (2011, p. 875) illustrates that “the edifice starts trembling” if growth ceases: “Debts cannot be paid, credit runs out and unemployment sky-rockets.” Binswanger (2013) claimed the only alternative to growth to be shrinking, and Deutschmann (2014, p. 513) resumed that growth is necessary to keep our standard of living merely on

<sup>1</sup> The argument that in the ‘old’ industrialized countries economic growth has actually ceased – zero growth being already reality (Deutschmann, 2014) – is not supported empirically: Growth rates drop in mature economies, but absolute growth seems to remain quite constant, indicating linear growth (Wibe and Carlén, 2006).

<sup>2</sup> The term ‘growth imperative’ seems to be established in the discussion on economic growth, even though we would prefer ‘growth coercion’, in analogy to ‘social coercion’.

the current level. Focusing on social disadvantages, Rogall (2012, 160, own translation) assumed that “a society with a fixation on growth can lead to a growth *imperative* for all members of society, with a resulting stigmatization of the ‘dropouts’ and economically weak”. Rosa (2013) observed “social acceleration” (which is intertwined with economic growth), and abstaining from this “dynamization” would entail unacceptable social drawbacks. Schmelzer (2015, pp. 266–8) summarized that growth was needed “to avoid economic and social crises” and “deemed imperative to fight widespread unemployment, create economic and political stability”.

In spite of the widespread debate on threatening consequences that make fostering economic growth virtually inescapable, a scientific consensus is missing about the properties any socio-economic mechanism must have to qualify as a ‘growth imperative’. Beltrani (1999, p. 123, own translation) defined an economic growth imperative as a system immanent mechanism, independent of the will of the economic agents, that the GDP has to grow by a minimum rate to avoid economic crises. Definitions like this have since long been the basis for the discussion of economic growth imperatives, by simply applying the idea of ‘growth’ to the single firm (‘grow or die’), deliberately leaving out other microeconomic agents (e. g., consumers, cf. section 4). This (macro) perspective essentially captures the effects of a growth imperative *analytically*, but is missing a starting point for an *explanation*. Deutschmann (2014, pp. 514–5, own translation) is one of the very few who discussed this topic in detail. Explanations based on a process that “develops over our heads, whether we like it or not”, in his opinion should be refuted, “because societal processes and aggregated phenomena never develop ‘objectively’ like natural laws, but always mediated by individual actions.” Instead, he referred to the ‘Model of Sociological Explanation’ (MSE), developed in the tradition of rational choice theory (e. g. Esser, 1999; Greve et al., 2009). Deutschmann demanded a “sociological explanation” that analyzes the intended and not-intended interdependencies between individual actions and collective structures to show how the growth imperative emerges as aggregate effect of individual actions.

### 3 The Growth Imperative: Demands on an Explanation

Accordingly, an appropriate definition of the term ‘growth imperative’ demands the clarification of four aspects:

- The relation between macro and micro level (section 3.1). In the end, we will provide different definitions for both.
- The significance of social pressure (section 3.2), or put it another way: In which sense is something like ‘Keeping up with the Joneses’ *imperative*? This is the question of the general meaning of ‘coercion’, ‘imper-

ative’ or ‘unacceptable consequences’ for individuals in relation to society.<sup>3</sup>

- The meaning of ‘growth’ on the micro level (section 3.3). The manifestations of a growth imperative for individuals are not restricted to monetary aspects, and we try to find more general a term describing the measures taken by individuals to ‘follow a growth path’.
- The relation of the domains affected (section 3.4), i. e., the interplay of cultural norms (‘Growth for growth’s sake’), social pressure (‘Keeping up with the Joneses’) and economic pressure affecting the material existence (‘Grow or die’).

When searching for growth *imperatives*, free will obviously need not be considered, but when asking ‘Why can’t we stop clinging to growth?’ it may not suffice to search for growth imperatives alone – there may be something like “an offer he can’t refuse” (Puzo, 1969), possibly combined with ‘anticipatory obedience’ long before pressure has been built up.

#### 3.1 The Micro Level: Methodological Individualism

Basically we go along with Deutschmann (2014) that any growth imperative has to be *explained* on the micro level. According to the concept of *methodological individualism*, causal explanations cannot be derived on the macro level. Sociology understood this way has an analytical primacy of society, but a theoretical (or explanatory) primacy of the individual (Wippler and Lindenberg, 1987). While the role of methodological individualism for the social sciences is still debated, neither the “caricature of the homo oeconomicus” (Kirchgässner, 2008, pp. 21–6) as self-interested, rationally optimizing agent, interacting with society solely via price relations, nor the study of an individually chosen ‘conduct of life’ with little social relationships are appropriate interpretations. Economic models based on Homo economicus do not leave any room for social interaction and do not *explain* anything in a sociological sense. Modeling the economy with fixed parameters while ruling out other forms of interaction was criticized as “model Platonism” by Albert (1965), and Esser (1999, p. 102) emphasized that any ‘comprehension’ of societal processes is not possible without a deepening on the micro level of the agents and of social action. A ‘moderate’ methodological individualism is fully consistent with the social nature of humans, their relations to others and their interactions with them. It only rejects the notion of ‘collectives’ as independent sociological units (Hodgson, 2007), such as ‘society’. In this ‘moderate’ sense, methodological individualism merely requires every macro phenomenon or collective effect to be explained with *decisions* of individuals: A macroscopic situation determines their social situation

<sup>3</sup> ‘Coercion’ is usually discussed as a relation between two individual agents, coercer and coeree. Here, the coercer is ‘society’. Cf. Anderson (2015) for an introduction to concepts of coercion.

logic which is *framing* their decisions (Esser, 1999), leaving sometimes more, sometimes less room for maneuver.

### 3.2 Social Coercions on the Micro Level

An ‘imperative’ is stronger than mere ‘pressure’ – it is more *coercive*. Regarding ‘society’ as a coercer, the term ‘social coercion’ (or ‘societal coercion’) appears with a wide range of meanings in literature, ranging from institutionalized force (e. g., laws, compulsory education, referral to psychiatry) over social approval and disapproval (e. g., peer pressure, public opinion) to internalized social norms (e. g., role expectations and ‘duties’, decency, bad conscience). For increasing the analytical potency of the term ‘social coercion’ (and for distinguishing it from ‘social pressure’), we will try to specify a narrower meaning. The word ‘coercion’ suggests the lack of an alternative. But social coercions rarely leave people without alternatives, and we have to distinguish different levels. There are indeed cases with no alternative in any sense, which can be termed an “inherent necessity” (Ulrich, 2008, p. 385) or “the power of circumstances” (Teusch, 1993, p. 501) or what we would term a ‘top-level constraint’. Such things as basic (physiological or social) human needs, natural laws and material constraints are *objective*.<sup>4</sup> They cannot be ignored or even altered, or as Teusch (ibid., p. 501) put it for a “Sachzwang”<sup>5</sup>: One may ignore or elude it temporarily, but this does not invalidate it, sooner or later leading to avoidable efforts or sacrifices. It restricts the agent’s “room for manoeuvre” (Ulrich, 2008, p. 385) and their spectrum of possibilities (Teusch, 1993, p. 500). Some social behavior can create objective top-level constraints as such. Automobiles may serve as an example. Already their mere use, their sheer quantity, speed and emissions literally restrict the room for maneuver for others. The dense traffic of a busy road forces residents *physically* to use the pedestrian traffic lights and to teach their children to stay off, independently of social norms. But usually the mechanisms of social coercions are not working directly on the top level.

Generally, social norms try to limit individual decisions to a socially accepted range of alternatives in a socially accepted way. They can be *explicit* like civil or canon legislation, or *implicit* like good manners or decency. Legal norms can be “enforced by specialists”, while social norms are “enforced by members of the general community” (Elster, 1989, p. 100). They are *legitimate* since some kind of consensus obviously exists: “For norms to be *social*, they must be shared by other people and partly sustained by their approval and disapproval” (ibid., p. 99). Also, they are *im-personal*, otherwise they would not be called social: Society is not a ‘macro agent’, but many individuals make small contributions to the enforcement of social norms, as part of a

common practice. “To accept social norms as a motivational mechanism is not to violate methodological individualism . . . [or] to deny the importance of a rational choice”, because “rationality acts as a constraint on social norms . . . [and] social norms can act as a constraint on rationality” (ibid., p. 102). Decisions within social norms are still possible, but have to be made on a “slippery slope” (Rosa, 2013) that limits leeway of decision-making. Certain alternatives are (far) more obvious, and *not* to choose them becomes increasingly difficult or even ‘absurd’ (especially when many other agents already have chosen them), while others cease to be ‘realistic’.

Many forms of social norms are restricted to certain contexts. They can be ignored or escaped by leaving the context, ultimately in subcultures with different norms, such as “subcultures of consumption” defined by “a unique ethos, or set of shared beliefs and values; and unique jargons, rituals, and modes of symbolic expression” (Schouten and McAlexander, 1995, p. 43).

How then can social *norms* become a social *coercion*? The most relevant top-level constraint with regard to social norms is basic needs (compared to natural laws and material constraints). Basic needs translate into the social necessity to achieve an income, at least in modern societies: There is “a social norm against living off other people and a corresponding normative pressure to earn one’s income from work” (Elster, 1988; 1989, p. 101). But taken this as given, there are ‘second-level alternatives’: How to achieve an income is open to *decisions*. There may be no alternative to an income, but there are different ways for achieving it, and this may be the highest form of individual freedom available. But when social norms substantially bias the second-level alternatives of a top-level constraint for which literally no alternative exists, they become coercive. The need for marriage may serve as an example. Until 1969, marriage was de facto mandatory for a couple in Germany to rent a flat (Brüggemann, 2012, pp. 155–67). A dwelling and sexual relations are basic needs. Couples not being married experienced severe difficulties in satisfying these basic needs, so the urge to marry was a social coercion. There may have been exceptions, but they have been exceptions proving the general rule. Today, things have changed. Even highest political positions in Germany do no longer require marriage, and so doesn’t the search for flats. Marriage may still be advantageous or demanded by certain social circles, but generally, compliance is not necessary anymore.

To summarize, we would define a social coercion as a massive and systematic *lopsidedness* of social norms that substantially biases the individual decisions for the second-level alternatives of an objective top-level constraint. A social coercion affects the situation logic of individuals such that the overwhelming majority of agents is biased in the same direction. Many agents simply accept this. Those who do not are not coerced to make certain decisions, but not doing so increases their difficulties. The notion of ‘unacceptable’ is individually variable, but not arbitrary. At some

<sup>4</sup> This ‘elementary’ level is even above the different levels of social malleability discussed by Teusch (1993, p. 502).

<sup>5</sup> “Sachzwang” refers to material or practical constraints (Schmitz, 2011).

(individual) ‘point of surrender’ also these agents cannot and do not want to (!) resist anymore, because they cannot escape the top-level constraint.

A social coercion strongly affects the use of arguments. The *objective* lack of an alternative on the top level can be ‘transferred’ to the situation logic of the second level, and then man-made constraints like legislation, technical infrastructure or the factual behavior of the crowd may be used as an ‘objective’ (legitimate and impersonal) reason for selecting a biased alternative: Free markets make automation ‘inescapable’, the new job abroad ‘forces’ to buy a car, the frequent traffic congestion ‘requires’ wider roads. Accordingly, Teusch (1993, p. 500, own translation, emphasis added) defined “Sachzwänge” as “*technically* caused restrictions of political room for maneuver”. The biased choice on the second level may be perceived as without ‘realistic’ alternative, but of course this perception is open to argument. The “rhetorical figure” (Kettner, 2001) of an ‘inherent necessity’ has been criticized as ‘killer argument’ (Koller, 2008, p. 4) or ‘excuse’, e. g., for the clouding of economic interests (Rittel, 2013, p. 243). We would like to emphasize that this rhetoric cannot be used arbitrarily but only when an objective top-level constraint exists. Anything related to achieving an adequate income is a nearly perfect ‘objective’ reason. For example, extravagant consumption decisions backed up by occupational reasons are far more easily accepted by others than they would be ‘only’ for private life or leisure.

### 3.3 Economic Growth on the Micro Level

Economic growth is usually measured as GDP growth on the macro level, while on the micro level indicators such as income, revenues, or changes in assets (balance sheet) are used. The existential economic condition for individuals is cost-covering income.<sup>6</sup> Therefore on the micro level, a growth imperative means some kind of force to (net) invest<sup>7</sup> as a necessary condition for keeping revenues and costs in balance. Binswanger (2013, p. 116) proposed micro level definitions for firms, and his distinction of a growth imperative (‘necessity of growth’, with shrinking as the inevitable consequence of not growing) and a growth impetus (‘constant incentive for growth’) is especially important, since to differentiate main causes from side effects or entailed causes (‘symptoms’) is of particular political relevance.

All those definitions are only applicable for agents whose ‘size’ is quantifiable, but a growth imperative does not manifest itself only in easily quantifiable values. Ultimately, on the aggregate level we may observe material growth, but

<sup>6</sup> For firms it is profit-making revenues, or more precisely: accounting profit high enough to provide an income for the owners, and for states and their institutions it is cost-covering taxes, contributions, fees and dues. Cf. Richters and Siemoneit (2017) discussing the situation of firms and states as economic agents.

<sup>7</sup> We use this term for all agents, be they consumers or producers. Cf. also Siemoneit (2017).

this need not hold true for all agents at all times. Often material investments are postponed, using at first other forms of ‘working harder’: Increased work times, more complex organization, longer commuting, further education, learning languages, accepting more compromises in private life. All these ‘investments’ may not (yet) lead to growth but nevertheless deteriorate the ‘returns-to-effort ratio’ (and build up pressure to net invest later). Therefore the term *economic efforts* appears to us to be more generally applicable to all economic agents and their measures to ensure their balance of revenues and costs. It describes generalized costs, similar to the non-monetary “shadow prices” of Gary S. Becker’s economic approach to human behavior (Becker, 2008, p. 6).

### 3.4 Socio-cultural Coercions on the Micro Level

In section 2 we have presented many opinions that clinging to growth is ‘only’ culturally shaped, mediated by social norms. Can’t the majority create a social coercion for individuals, even without a top-level constraint in the background? Doesn’t living in a culture that constantly emphasizes the importance of economic growth inevitably lead to an inescapable uniformity of belief and agency? Generally we would not object, except for terms like ‘coercion’, ‘inevitably’ and ‘inescapable’. This is indeed a crucial point of the whole debate.

Regarding ‘culture’<sup>8</sup>, the quest for economic growth is not a phenomenon restricted to westerly industrialized countries, and even there individuals show inconsistent behavior. In polls on pro or contra economic growth cited by Rogall (2012, pp. 176–7), participants are revealing a discrepancy between personal preferences (growth not important) and societal necessities (growth very important), pointing to not-intended side effects of individual behavior which can look like a social coercion (Deutschmann, 2014, p. 515). This does not reject a ‘paradigm or mind-set’, but makes it unlikely as the *primary* cause of clinging to growth.

Regarding ‘social’, in our view only ‘social exclusion’ would refer to a social coercion (compared to ‘milder’ forms, like ‘social pressure’ or ‘social expectations’). The concept of social exclusion is “essentially contested” (Silver, 1995, pp. 60–70). It is strongly linked to poverty (Robila, 2006), but any narrow definition in terms of income poverty is subject to critique (Atkinson, 1998). The British Government (Social Exclusion Unit, 2001, p. 10) defines social exclusion multidimensionally as a “shorthand term for what can happen when people or areas suffer from a combination of linked problems such as unemployment, poor skills, low incomes, poor housing, high crime, bad health and family breakdown”. Sen (1990, p. 126) formulates that people are lacking “functionings and capabilities: what he or she is able

<sup>8</sup> We use colloquial meanings as stated by Hornby (2005): *cultural*: ‘the way of life, especially the general customs and beliefs’. *social*: ‘meet and spend time with other people’, ‘position in society’. *economic*: ‘the use of money’, ‘trade, industry and development of wealth’.

to do or be (e. g. the ability to be well-nourished, to avoid escapable morbidity or mortality, to read and write and communicate, to take part in the life of the community, to appear in public without shame)". Jackson (2009) and Wilkinson and Pickett (2009) also emphasize that the driving force is mainly 'shame'. According to Goodban (1985), exclusion can lead to depression, anxiety, low self-esteem, isolation, thus is certainly opposed to basic needs such as health and communication. In extreme circumstances, exclusion can lead to "social death": "a loss of social identity, a loss of social connectedness" (Králová, 2015, p. 235). Accordingly, the need for social inclusion would provide a non-economic top-level constraint as stated in section 3.2, but note already here how many references to the *economic* condition of individuals have been made when discussing *social* exclusion.

### 3.5 Our Definition of a Growth Imperative

On the macro level, we adapt the definition of Beltrani (1999, p. 123) and define a **growth imperative** as a system immanent mechanism that the economy has to grow to maintain social or economic stability, independent of the will of the agents. On the micro level, we define a growth imperative as exterior conditions that make it necessary for an agent to increase her *economic efforts* to avoid *existential consequences*, i. e., unacceptable difficulties to achieve a cost-covering income or experiences of social exclusion. In a purely economic formulation, a growth imperative causes a *systematic* preference for investments over consumption (resp. work over leisure) to avoid existential consequences, thereby leading to net investment.

As a **growth driver** (or impetus) we define mechanisms that aggravate existing growth imperatives – or impose an independent pressure, but not an existential one.

### 3.6 Why this Definition?

A thorough distinction between growth imperatives and growth drivers is not commonly made in actual language use (e. g., in political or activist contexts), and critique may also point to a perceived reductionism in distinguishing a single mechanism as 'decisive' for a complex social phenomenon. We defend both the distinction and the reductionist view, for practical and theoretical reasons.

If too many mechanisms are discussed as relevant, one may end up with vague moral appeals for moderation or radical claims 'to overcome the system', while too broad a definition will not help to solve a "sociological riddle" (Esser, 1999) like the quest for economic growth. In section 2 we have presented two basic views on economic growth, desire for more and fear of less, associating free will with the first and a possible growth imperative with the second. Probably both 'sides' are correct in their view, and it is rather a question of their interplay. Thus the search for growth imperatives is more like an ordering of mechanisms according to their forcefulness and therefore their importance. It

is not about proving other explanatory approaches wrong, but about investigating them – following our definition – whether they have a 'coercive' character (which in fact often is not even claimed by their authors). Or put it another way: The identification of decisive factors might provide viable policy options *and* a better understanding of other growth drivers.

This is also important because of another caveat: Instead of some culturally imposed belief, the desire for accumulation and increased individual consumption could turn out to be based on individual *rationality* (whether we approve it or not). Then, a willful cultural transformation towards individual sufficiency could prove to be *not* a viable policy option.

In Richters and Siemoneit (2016, 2017) we discussed in detail alleged *economic* growth imperatives (according to the definition derived here), dividing the debate into five categories. We concluded that indeed one single mechanism seems to be most qualified for explaining a growth imperative in a market economy: Technological progress. When technological innovations are introduced, market forces lead to a systematic necessity for suppliers to invest, due to the interplay of creative destruction, profit maximization, and the need to limit losses. Competitors replace relatively expensive labor by cheaper machines and their resource consumption (esp. fossile fuels), and this is a decisive cost or quality advantage that "strikes not at the margins of the profits and the outputs of the existing firms but at their foundations and their very lives" (Schumpeter, 1942, p. 84). This would not only shed light on the dynamics of capitalism, but could also explain the 'desperate' growth policies of states that feel obliged to maintain a high level of employment for social and economic stability. In the light of this mechanism, and together with a suitable definition of a growth imperative, we will now examine some socio-cultural explanations of economic growth.

## 4 Consumption, Work, and Social Status: Growth Dynamics from Socio-Cultural Interaction

Neglecting social norms and influences, neoclassical theory holds a view of 'strict' individualism. Every household determines consumption and production (hours worked and capital invested) by an individual 'calculus of pleasure and pain' (Jeremy Bentham). Households try to maximize consumption as long as it is rational for them, given the income and thus working hours needed to finance it. They may decide not to consume but to invest into capital to increase consumption in the future, which is regarded to be a matter of taste. It is assumed that consumption in excess of basic needs is based on "eccentric", voluntary decisions based on *personal* desires (Lancaster, 1971, p. 23).

At the opposite end, consumption is treated as a social phenomenon through and through, sign of a "consumer society – a society in which life is consuming" (Bauman, 2001,



p. 28). Jackson (2009), referring to Weber (1920), speaks of “the iron cage of consumerism”. Galbraith (1969) assumed that any increase in production leads to an increase in consumer wants, because producers actively ‘create’ new wants through advertising and salesmanship. Those authors argue that socio-cultural influences or even coercions would generate a systematic bias on individual decisions regarding their work intensity, their extent of consumption and their choice of specific consumer goods. An example is the famous-infamous catchphrase of ‘Keeping up with the Joneses’ (Matt, 2003).

Between these poles, countless works are devoted to the dialectical social nature of consumption. Some argue that at least in industrialized countries consumption to a large extent has lost its existential function, is more kind of a choice and has expressive character (cf. Goodwin et al., 1997; Rosenkranz and Schneider, 2000). Microeconomic textbooks are drawing a sharp line between the business logic of firms and the consumption logic of households. Exemplary for many, Fehl and Oberender (2002, p. 305) argue that the principle of profit maximization results from a ‘market coercion’ due to competition, while utility maximization of households does not result from a comparable economic pressure. Thus the attempt of New Household Economics to parallelize the economic behavior of firms and households (Becker, 1981) has been perceived as not convincing by consumption sociologists (Hedtke, 1999).

To discuss the different mechanisms, we divided the debate on socio-cultural growth imperatives and drivers into three subgroups. On the demand side, we distinguish two main motives of consumption seemingly ‘beyond’ basic needs, to compare with others for social and cultural reasons (section 4.1) or to increase opportunities (4.2). On the supply side, we study why people work more than needed given their consumption plans (4.3). Thereby, we span another dimension of how to distinguish types of individuals: (a) Pioneers (or ‘the Joneses’) setting new standards, (b) the ‘mainstream’ complying with them, (c) passive losers falling behind and active LOSERS<sup>9</sup> trying to escape this race. After introducing the existing arguments, we will discuss them jointly in section 5.

#### 4.1 ‘Keeping up with the Joneses’: Consumption, Social Comparison and Social Exclusion

Several authors reject the idea of an individual assessment of consumption decisions, but argue that people compare their consumption level to their peers to evaluate the utility it provides. The most widely discussed function of consumption with regard to growth imperatives is related to one’s own position in the social hierarchies, i. e., how consumption influences and expresses *social status*.

<sup>9</sup> our suggestion for the acronym LOSER based on three key points of the transition movement (Hopkins, 2010): Lifestyle of Self-Sufficiency, Energy Descent, and Resilience.

Generally, the social environment serves as a reference point for the “conventional” living standard (Rabin, 1998): Our “perceptual apparatus is attuned to the evaluation of changes or differences rather than to the evaluation of absolute magnitudes” (Kahneman and Tversky, 1979, p. 277). This was formalized as “relative consumption hypothesis” (Dutt, 2009; Stiglitz, 2008): The “craving for distinction” (Marshall, 1998, p. 73) is not restricted to consumption, but can be applied to different forms of cultural behaviour (Bourdieu, 1986).

The term positional or conspicuous consumption refers to buying goods and services to publicly display income, wealth or status of the buyer (Hirsch, 1976; Veblen, 1899). Kallis (2014) argued that “positional consumption is not a personal vice. It is a structural social phenomenon to which the individuals conform in order to remain part of the mainstream”. At the same time, the ‘Joneses’ frequently change consumption patterns to differentiate from each other and from the mainstream (Heath, 2005).

This phenomenon is argued to be one reason for the observation that Americans (and others) prefer “excess consumerism” (Stiglitz, 2008, p. 45) over leisure (Maume and Bellas, 2001; Schor, 2004). Schor (1991, 1999) described how “competitive consumption”, made possible by increased working hours and financial credit, results in “overspent” people, “overworked” to finance consumption. One reason is that the economic and political power of business enables employers to transform productivity gains into more income instead of more leisure (even though there is workers’ demand for the latter), initiating consumption cycles and letting workers become accustomed to higher living standards. Additionally, since wages of many people (in the US) have not in fact increased (Stiglitz, 2008, pp. 47–8), for the “harried working class” (Linder, 1970) increasing leisure is not even an option. Also Wilkinson and Pickett (2009) discussed correlations between inequality and obsessive consumption, working hours, and debt. Paech (2012, pp. 102–3) stated that an “ever higher consumption expenditure is required to maintain or regain a particular and unsurpassable level of happiness”, because “[g]rowth creates differences the removal of which – regardless of at which level – makes further growth necessary.” So some people are trapped in a “rat race at the social level” (Hirsch, 1976, p. 76) or zero-sum contest (Frank, 2000) of increasing their consumption expenditure and the income required to finance it.

Scarcity of time and acceleration of life are often mentioned as restrictions on free choice, as are a lack of opportunities to reduce worktime or some biases of markets. But generally the authors do not mention unsurmountable obstacles. While occasionally the state is called upon for supporting cultural changes by policies, all in all it should be possible to individually reduce worktime, income and consumption, at least for those not living in poverty.

While consumption and status are widely discussed, only some authors bring consumption and social exclusion into a direct relation. Consumption critic Bauman (2007, p. 2)



regarded certain modern technologies as without any alternative to avoid social exclusion:

“But in South Korea, for instance, where most social life is already routinely electronically mediated . . . , it is obvious to the young that they don’t have even so much as a sniff of choice; where they live, living social life electronically is no longer a choice, but a ‘take it or leave it’ necessity. ‘Social death’ awaits those few who have as yet failed to link up into Cyworld, South Korea’s cyber market leader in the ‘show-and-tell culture’.”

As another example, Croghan et al. (2006) described how consumption is central to the construction of adolescent identities. Style is important for defining group boundaries, and ‘style failures’ can result in status loss or social exclusion, but the authors also emphasized the relation between ‘style failures’ and limited economic resources, since ‘cheap substitutes’ are not accepted by the peers.

During the last years, the evolutionary base of consumption has gained considerable scientific interest (Saad, 2007). Conspicuous consumption clearly resembles what is discussed as ‘costly-signaling-theory’ in sociobiology, where lavish bodily characteristics of animals and humans provide difficult-to-fake (‘honest’) signals to potential mates about superior genetic qualities (cf. Voland, 2013). This concept has been applied to human social behavior, mainly with two variations: Reproductive success of humans is not only dependent on genetic qualities, but also on economic resources. These can be made ‘conspicuous’ in several ways, and there is plenty of evidence on how men and women use property and consumer goods to inform about their mating qualities or to deter sexual competitors (Collins et al., 2015; De Fraja, 2009; Griskevicius et al., 2007; Sundie et al., 2011; Wang and Griskevicius, 2014). Also, certain ‘costly’ social practices (e. g., religion or donations) provide honest signals regarding one’s abilities and social reliability, and group members expect and accept those signals exactly for their costliness (Volland, 2013, p. 228). Both indicates individual rationality (and not ‘only’ habitualization) behind certain forms of consumerism and ‘style’. We will take up again this topic in section 4.3.

#### 4.2 ‘Expansion of possibilities’: Consumption as Empowerment and Accelerator

Less discussed than social status is the role of consumption for an expansion of possibilities or even as investment. This means more options of satisfying needs and wants, but also opening new ways for economic success (thereby linking to the supply side).

Already Gossen (1854, p. 5) formulated that repeated pleasures lead to a satiation on the individual level. Gross (1994) and Schulze (2003) argued that the liberties of modernity were interpreted as a permanent dissolution of boundaries, a

steady expansion of possibilities of self-realization, where consumers wish to tap the full potential of ever diversifying ‘multiple options’. They see the whole society committed to this ‘logic of increase’, but do not discuss explicitly the impact on ‘losers’ and ‘LOSERS’.

Rosa (2013, pp. 160–74) emphasized that increased consumption, particularly of information and communication technology, plays an important role for keeping pace in social life. This contributes to a “circle of acceleration” in society (ibid., pp. 151–159) – and to economic growth, since both are inevitably intertwined. He explicitly declared that the economic imperative of “acceleration for the purpose of escalation” for firms is just *not* automatically adapted by the consumers. These strive *self-determined* and almost without resistance for their own acceleration, driven by the promise of more fullness of life, which in the face of even faster growing options is less and less feasible (2013, pp. 174–85). Unintendedly their common enthusiasm leads to new obligations: “Whoever individually refrains from using time-saving techniques pays the price of a partial desynchronization” (p. 157). Not keeping pace leads to loosing the connections that enable future options (p. 117), because standing still means falling behind, and the scope of what is absolutely necessary expands (p. 155).

The voluntariness of expanded consumption is challenged by *economic* considerations discussed by Siemoneit (2017). The purchase of certain technical products such as cars or computers and related services may increase the efficiency of households or provide access to opportunities for cutting costs or generating income, e. g., a computer being necessary for a successful job application. Time constraints are of particular relevance for people (Becker, 2008; Linder, 1970), thus consumption of so-called “conveniences” that can “generate pockets of calm elsewhere in the schedule” (Shove, 2012) may be driven less by convenience but by the quest for efficiently handling private life. Consuming certain products may not be time *demanding* as assumed by Linder (1970) and Paech (2010), but rather increasing personal productivity and therefore time *saving* (cf. also Rosa, 2013). For example, Stiglitz (2008, p. 45) argued that “changes in technology have improved the efficiency” of “home production” such as washing dishes or cleaning the house. The acquisition of goods may not only serve to *represent* economic performance and status (Frank, 1985; Wilkinson and Pickett, 2009, see section 4.1), but literally *increase* it, similar to investments by firms. The same is valid for ‘consumption’ of education, where some authors suggest that it should be treated as *investment* in human capital (Perrotta, 2004; Schultz, 1961).

This points to the mentioned structural similarity between households and firms (Becker, 1981). Resuming this idea, the arguments by Marx (1906) and Schumpeter (1942) that firms are forced by competition to increase their net investment (cf. Richters and Siemoneit, 2017) can be adopted: The “Arbeitskraftunternehmer” (workforce entrepreneur) (Voß and Pongratz, 1998) or “entrepreneurial self” (Bröckling,

2015) has to increase consumption expenditure to improve cost effectiveness and to remain capable of competing and to earn a living, while still being able to enjoy a private life. This “efficiency consumption” (Siemoneit, 2017) has not only not-intended side effects in terms of an acceleration of society (Rosa, 2013) and social pressures (Hirsch, 1976), but also creates an *economic* pressure for others to keep up and to increase their performance through consumption, too. Income not only guarantees a certain level of consumption today, but consumption also provides a basis for securing an income in the future. This could add to the various lock-in’s identified by Røpke (2010, p. 108) in the form of traffic infrastructures, manufacturing specifications or tax regulations that “bind consumers to resource-intensive life styles”. So again it is possible to explain certain forms of consumption with individually rational (economic) motives.

### 4.3 Striving for more Success and Wealth

Some people are actively ‘striving for more’, not in terms of consumption, but in terms of increased income, wealth, and status by working or investing more successful, as entrepreneurs or employees (‘career’). This striving is assumed to be driven by personal motives or class specific motives and ethos, influenced by social norms and economic pressure, and enabled by better education and qualification – or simply more capital.

The motivation of individuals to work, save, and invest was discussed as early as 1920 by Weber (2001) as “protestant ethic”, leading to a systematization of the (secular) conduct of life and consequently to the logic of continuous accumulation (Ingham, 2008, pp. 25–30). Later, Murray (1938, p. 164) formulated the “need for achievement”: “intense, prolonged and repeated efforts to accomplish something difficult. To work with singleness of purpose towards a high and distant goal. To have the determination to win”. McClelland (1961) further explored the micro level conditions of Weber’s macro level thesis, pointing to a change of children education in protestant households, and popularized Murray’s thesis as “n-Ach”.<sup>10</sup> Deutschmann (2014, pp. 514–7) viewed (on the macro level) the extension of markets beyond their traditional boundaries – making land, means of production and human labor force exchangeable commodities – as the starting point for the emergence of man being interested in his market value. Capitalist societies therefore open up a new way for social advancement by market success, but social inequality and competition also generate “Leistungsdruck” (pressure to perform) for individuals.

For entrepreneurs, this social dynamic has been described by Simon (2009) who investigated the strategies of “unknown world market leaders”. These “Hidden Champions” are highly specialized medium-sized companies that are

leading within their market (niche). Simon quotes a number of chief executives (usually also founder and owner) who all strive for being “market leader”, “No. 1”, “the best” and “leading”. Technical innovations play a dominant role for their top positions which they defend with extraordinary effort, aggressiveness and persistence. The targets of Hidden Champions are aimed at growth and market leadership. Already earlier, Schumpeter (1934, p. 93) described similar motives of these entrepreneurial ‘Joneses’: “First of all, there is the dream and the will to found a private kingdom, usually, though not necessarily, also a dynasty. . . . And again we are faced with a motivation characteristically different from that of ‘satisfaction of wants’ in the sense defined above. . . . Then there is the will to conquer: the impulse to fight, to prove oneself superior to others, to succeed for the sake, not of the fruits of success, but of success itself. . . . Finally, there is the joy of creating, of getting things done, or simply of exercising one’s energy and ingenuity.” These individual attempts of social advancement are a “motor” of (not only technical) innovations and in the end for growth (Deutschmann, 2014).

Market leadership clearly results in a higher Return on Investment (Simon, 2009). This is in accordance with the results of Wilkinson and Pickett (2009) and the summary of Jackson (2009), that for individuals a higher *social* status results in better health, higher life expectancy and higher income. Frank (2000, ch. 9) vividly described that status gain by conspicuous consumption is not an objective in itself, but functional: A means to achieve higher income, better health or more promising social relations (esp. in mating). Therefore, reaching ‘top positions’ generally seems to generate social and material advantages, so once more it is individually rational to ‘strive for more’.

## 5 Discussion

After carefully clarifying the demands for a valid explanation (including a formal definition of the term ‘social coercion’), we delivered a rather narrow, micro-level definition for ‘growth imperative’ and ‘growth driver’ that is equally usable for all agents of the economic process. Then we divided the debate on socio-cultural growth imperatives and drivers into three subgroups, separating demand and supply side and also distinguishing two main motives of consumption seemingly ‘beyond’ basic needs.

Neither consumption and social comparison, nor material advantages, work ethic and questions of identity, are qualifying as ‘growth imperatives’ according to our definition. These mechanisms are not explaining precisely enough any inescapability to ‘strive for more’ on the micro level, or – even more often – simply lack this inescapability. When authors point to material motives of individuals, we cannot see the coercion for themselves, their peers or other social groups. And indeed, authors promoting a cultural change towards “sufficiency” (Princen, 2005), “voluntary

<sup>10</sup> Note that Weber’s and McClelland’s work is not without critique regarding their explanatory power (Esser, 1999, pp. 99–101).

simplicity” (Alexander and Ussher, 2012) or “voluntary downshifting” (Schor, 1999) claim that those motives can be overcome. When authors point to ‘purely’ social pressure as ‘no choice’, we cannot see the existential threat and the need for economic growth.

Status and social distinction are relevant for economic growth, but their importance is to a great extent determined by existential uncertainty and occupational contingency. Economic inequality is a central theme in many arguments on growth imperatives, but does not as such lead to social exclusion. *Social* exclusion seems to be rather *economic* exclusion (often caused by unemployment). Accordingly, social exclusion of individuals well-off is not a problem relevant for the discussion of economic growth imperatives. On the other hand, accumulation of wealth and conspicuous consumption are functional for climbing up the social ladder, leading to material, social and mating advantages. There seems to be no good reason for social beings *not* to strive for more. This is surely no growth imperative, but an offer so attractive that it is hard to refuse, triggering off a social dynamic with consequences very similar to a growth imperative. Without supportive institutions, a ‘cultural transformation’ towards sufficiency targeted on individual behavior will prove ambitious.

Technical innovations play a crucial, yet subliminal role for many lines of socio-cultural argument, be it for professional advancement, reasons of unemployment, defense of entrepreneurial niches, acceleration of everyday life or social pressure by (Internet based) social networks. This is in line with the results of Richters and Siemoneit (2016, 2017) where technological progress is identified as decisive economic growth imperative. Bauman (2007) does not in fact describe social exclusion, because people are not personally ostracized but simply technically ignored, since communication with them does not fulfill certain efficiency requirements that have become ‘normal’. The phenomenon of ‘efficiency consumption’ seems to be relevant in two ways: It is an investment to remain capable of earning a living in the future, thus points to an economic necessity, and it is necessary to avoid ‘technical exclusion’ from social relations and communication, sometimes misnamed as social exclusion. Thus technical devices for increased social and economic efficiency are another offer for consumers that is hard to refuse, and ‘anticipatory obedience’ may be the rule rather than the exception, which could explain the puzzle Rosa (2013) faced when trying to explain the ‘self-determined’ acceleration of private life. In fact, on the supposition that an economic growth imperative for firms actually exists, economic growth might be driven rather by supply than by demand, with consumers rather taking a chance than actively striving for more.

Our analysis also challenges the notion that in industrialized countries consumption to a large extent has lost its existential function. Even those who are not interested in ‘ever more consumption’ (like the LOSERS) remain to be reliant upon an income, and when basic needs are not only

considered as physiological or elementary social needs, but as the minimum requirements to achieve and secure an income, basic needs for individuals have definitely expanded beyond the usual notion of ‘subsistence’. If mobility is necessary for getting to work, a car may become as basic a need as calories, as do other types of expenditure. That a car, once bought, can also be used on many other occasions, some of which may appear ‘eccentric’, should not obscure the fact that for many a car is part of their economic assets, as are their smartphones, computers, dishwashers and the like.

We conclude that, regarding a growth imperative, ‘the socio-cultural is economic’ – and technical as well. Following our definition, cultural patterns or social norms play a role for economic growth *imperatives* only insofar as basic needs are affected, and in most cases basic needs translate into the ‘need for basic income’. ‘Income’ therefore seems to be the key term of growth imperative analysis. Furthermore, an economic explanation via the need to achieve an income would be culturally and normatively parsimonious, thus in accordance with Occam’s razor to prefer simpler explanations to more demanding ones.

## 6 Outlook

Our definition of a growth imperative was helpful to discuss presumed socio-cultural growth imperatives and drivers and may provide a starting point for an extended interdisciplinary discussion. We see two main fields of further analysis.

First, our review indicates that the top-level constraint of ‘achieving an income’, where a growth imperative would affect the material existence of individuals, is most promising for searching for a growth imperative. This would also explain why the argument of politicians for the unbridled quest for growth is regularly *economic* reasoning, especially ‘fighting unemployment’ and ‘creating jobs’ (cf. Schmelzer, 2016, ch. 2). A much deeper *economic* debate, as sketched in Richters and Siemoneit (2016, 2017), is required about competition and technical change and their relation to social advancement, income, and income inequality. The results imply that *economic* changes are required to overcome a growth imperative.

Second, distribution obviously plays a role for clinging to growth, but many questions persist. When social and material growth drivers are fundamentally a problem of distribution, then a more equal distribution could make parting from growth easier. It remains open why distribution can become defective to such an extent, although critics of consumerism always emphasize that the advancement of modernity has made life and survival so tremendously simple and cheap. The question of what characterizes a ‘just’ distribution in a democratic market economy was target of recent research and led even liberal scholars to the conclusion that inequality is too high (Miller, 1999; Rawls, 1971). Alas, this did not have much effect on politics, and the reasons for this ‘clinging to injustice’ are worth further research, especially

with regard to inequality as an *economic* problem.

Individual motivation, social pressure and cultural patterns are important factors as growth drivers. They may lead to resistances for achieving a non-growing economy and pose practical obstacles for politics not to be underestimated. Socio-cultural change can increase the willingness to accept political measures tackling economic growth imperatives. Thus identifying decisive factors for clinging to economic growth is only a prerequisite for identifying easily accepted policy options, if they exist.

## Acknowledgements

We thank Scott Anderson, Jonathan Barth, Bartosz Bartkowski, Lukas Bunse, Louison Cahen-Fourrot, Christoph Deutschmann, Gerolf Hanke, Jeremy Heighway, Eva Lang, Gesa Maschkowski, Niko Paech, Ulrich Schachtschneider, Harry Schindler, Sebastian Strunz, and Ferdinand Wenzlaff for their helpful comments. Financial support from the German Society for Ecological Economics (VÖÖ), Sustainable Money Research Group, and Ev. Studienwerk Villigst is gratefully acknowledged.

## References

- Albert, Hans (1965). "Modell-Platonismus. Der neoklassische Stil des ökonomischen Denkens in kritischer Beleuchtung". In: *Logik der Sozialwissenschaften*. Ed. by Ernst Topitsch. Köln/Berlin: Kiepenheuer & Witsch, pp. 406–434.
- Alexander, Samuel and Simon Ussher (2012). "The Voluntary Simplicity Movement: A multi-national survey analysis in theoretical context". In: *Journal of Consumer Culture* 12.1, pp. 66–86.
- Anderson, Scott (2015). "Coercion". In: *The Stanford Encyclopedia of Philosophy*. Ed. by Edward N. Zalta. Summer 2015. Metaphysics Research Lab, Stanford University.
- Atkinson, Anthony Barnes (1998). "Social Exclusion, Poverty and Unemployment". In: *Exclusion, Employment and Opportunity*. Ed. by Anthony Barnes Atkinson and John Hills. CASEpaper 4. London: Centre for Analysis of Social Exclusion.
- Bauman, Zygmunt (2001). "Consuming Life". In: *Journal of Consumer Culture* 1.1, pp. 9–29.
- (2007). *Consuming life*. Cambridge, Mass.: Polity Press.
- Becker, Gary S. (1981). *A treatise on the family*. Cambridge, Mass.: Harvard University Press.
- (2008). *The economic approach to human behavior*. Chicago: Univ. of Chicago Press.
- Beltrani, Guido (1999). "Monetäre Aspekte des Wirtschaftswachstums". PhD thesis. St. Gallen: Universität St. Gallen.
- Binswanger, Hans Christoph (2013). *The growth spiral: money, energy, and imagination in the dynamics of the market process*. Berlin; New York: Springer.
- Bourdieu, Pierre (1986). *Distinction: a social critique of the judgement of taste*. London: Routledge & Kegan Paul.
- Bröckling, Ulrich (2015). *The entrepreneurial self: Fabricating a new type of subject*. London: Sage.
- Brüggemann, Johannes (2012). *Entwicklung und Wandel des Sexualstrafrechts in der Geschichte unseres StGB*. Baden-Baden: Nomos.
- Collins, Jason, Boris Baer, and Ernst Juerg Weber (2015). "Sexual selection, conspicuous consumption and economic growth". In: *Journal of Bioeconomics* 17.2, pp. 189–206.
- Croghan, Rosaleen et al. (2006). "Style Failure: Consumption, Identity and Social Exclusion". In: *Journal of Youth Studies* 9.4, pp. 463–478.
- Daly, Herman E. (1973). "The Steady-State Economy: Toward a Political Economy of Biophysical Equilibrium and Moral Growth". In: *Toward a steady-state economy*. Ed. by Herman E. Daly. San Francisco: W.H. Freeman, pp. 149–174.
- (1991). *Steady-state economics*. Washington, DC: Island Press.
- Daly, Herman E. and Joshua C. Farley (2011). *Ecological economics: principles and applications*. Washington: Island Press.
- De Fraja, Gianni (2009). "The origin of utility: Sexual selection and conspicuous consumption". In: *Journal of Economic Behavior & Organization* 72.1, pp. 51–69.
- Deutschmann, Christoph (2014). "Moderne Ökonomie ohne Wachstumszwang: ein Wunschtraum?" In: *WSI-Mitteilungen*, pp. 513–521.
- Dutt, Amitava Krishna (2009). "Happiness and the Relative Consumption Hypothesis". In: *Happiness, Economics and Politics*. Cheltenham, UK; Northampton, MA: Edward Elgar Publishing.
- Easterlin, Richard A. (1973). "Does money buy happiness?" In: *The Public Interest* 30, p. 3.
- Eichengreen, Barry J. (2007). *The European economy since 1945: co-ordinated capitalism and beyond*. Princeton: Princeton University Press.
- Elster, Jon (1988). "Is there (or should there be) a right to work?" In: *Democracy and the welfare state*. Ed. by Amy Gutmann. Princeton: Princeton University Press, pp. 53–78.
- (1989). "Social Norms and Economic Theory". In: *The Journal of Economic Perspectives* 3.4, pp. 99–117.
- Esser, Hartmut (1999). *Soziologie: allgemeine Grundlagen*. Frankfurt/Main; New York: Campus.
- Fehl, Ulrich and Peter Oberender (2002). *Grundlagen der Mikroökonomie*. 8th ed. München: Vahlen.
- Fournier, Valérie (2008). "Escaping from the economy: the politics of degrowth". In: *International Journal of Sociology and Social Policy* 28.11/12, pp. 528–545.
- Frank, Robert H. (1985). "The demand for unobservable and other non-positional goods". In: *The American Economic Review* 75.1, pp. 101–116.
- (2000). *Luxury fever: weighing the cost of excess*. Princeton, NJ: Princeton University Press.
- Galbraith, John Kenneth (1969). *The affluent society*. 2nd ed. Houghton Mifflin. Boston, Mass: Houghton Mifflin Co.
- Goodban, Nancy (1985). "The psychological impact of being on welfare". In: *The Social Service Review* 59, pp. 403–422.
- Goodwin, Neva R., Frank Ackerman, and David Kiron (1997). *The consumer society*. Washington, D.C.: Island Press.
- Gordon, Myron J. and Jeffrey S. Rosenthal (2003). "Capitalism's growth imperative". In: *Cambridge Journal of Economics* 27.1, pp. 25–48.
- Gossen, Hermann Heinrich (1854). *Entwicklung der Gesetze des menschlichen Verkehrs, und der daraus fließenden Regeln für menschliches Handeln*. F. Vieweg.
- Greve, Jens, Rainer Schützeichel, and Annette Schnabel (2009). *Das Mikro-Makro-Modell der soziologischen Erklärung: Zur Ontologie, Methodologie und Metatheorie eines Forschungsprogramms*. Wiesbaden: VS Verlag für Sozialwissenschaften / GWV Fachverlage GmbH, Wiesbaden.
- Griskevicius, Vladas et al. (2007). "Blatant benevolence and conspicuous consumption: When romantic motives elicit strategic costly signals." In: *Journal of Personality and Social Psychology* 93.1, pp. 85–102.
- Gross, Peter (1994). *Die Multioptionsgesellschaft*. Frankfurt am Main: Suhrkamp.
- Hamilton, Clive (2003). *Growth fetish*. Crows Nest, N.S.W.: Allen & Unwin.
- Heath, Joseph (2005). *The rebel sell: why the culture can't be jammed*. Chichester: Capstone.

- Hedtke, Reinhold (1999). *Konsum in der Standardökonomik: eine Kritik der theoretischen Grundlagen*. Weingarten: Pädagogische Hochschule.
- Heinsohn, Gunnar and Otto Steiger (2009). *Eigentum, Zins und Geld: ungelöste Rätsel der Wirtschaftswissenschaft*. 6th ed. Marburg: Metropolis.
- Hirsch, Fred (1976). *Social limits to growth*. Cambridge, Mass.: Harvard University Press.
- Hodgson, Geoffrey M. (2007). "Meanings of methodological individualism". In: *Journal of Economic Methodology* 14.2, pp. 211–226.
- Hopkins, Robert John (2010). "Localisation and resilience at the local level: the case of Transition Town Totnes (Devon, UK)". PhD thesis. University of Plymouth.
- Hornby, A. S. (2005). *Oxford advanced learner's dictionary of current English*. Ed. by Sally Wehmeier et al. 7th ed. Oxford: Oxford University Press.
- Ingham, Geoffrey K. (2008). *Capitalism*. Cambridge, UK; Malden, MA: Polity Press.
- Jackson, Tim (2009). *Prosperity without growth: economics for a finite planet*. London; New York: Earthscan.
- Kahneman, Daniel and Amos Tversky (1979). "Prospect theory: An analysis of decision under risk". In: *Econometrica: Journal of the econometric society*, pp. 263–291.
- Kallis, Giorgos (2011). "In defence of degrowth". In: *Ecological Economics* 70.5, pp. 873–880.
- (2014). "Social Limits to Growth". In: *Degrowth: a vocabulary for a new era*. Ed. by Giacomo D'Alisa, Federico Demaria, and Giorgos Kallis. Abingdon, Oxon ; New York, NY: Routledge, pp. 137–140.
- Kettner, Matthias (2001). "Sachzwang – Über einen kritischen Grundbegriff der Wirtschaftsethik". In: *Wirtschaftsethik – wo ist die Philosophie?* Ed. by Peter Koslowski. Ethische Ökonomie 5. Heidelberg: Physica-Verlag, pp. 117–144.
- Kirchgässner, Gebhard (2008). *Homo oeconomicus: the economic model of individual behavior and its applications in economics and other social sciences*. The European heritage in economics and the social sciences 6. New York: Springer.
- Koller, Edeltraud (2008). *Gutes Leben durch die Wirtschaft? eine theologisch-ethische Kritik der Dominanz der Ökonomie ; dargestellt am Einfluss der Rede vom "ökonomischen Sachzwang" auf die menschliche Orientierung und Sinnerfahrung*. 1st ed. Vol. 19. Wirtschafts- und Unternehmensethik. München: Hampp.
- Králová, Jana (2015). "What is social death?" In: *Contemporary Social Science* 10.3, pp. 235–248.
- Kubiszewski, Ida et al. (2013). "Beyond GDP: Measuring and achieving global genuine progress". In: *Ecological Economics* 93, pp. 57–68.
- Lancaster, Kelvin (1971). *Consumer demand: a new approach*. New York: Columbia University Press.
- Linder, Staffan Burenstam (1970). *The hurried leisure class*. New York: Columbia University Press.
- Maier, Charles S. (2010). "The world economy and the Cold War in the middle of the twentieth century". In: *The Cambridge History of the Cold War*. Ed. by Melvyn P. Leffler and Odd Arne Westad. Vol. 1. Cambridge: Cambridge University Press, pp. 44–66.
- Marshall, Alfred (1998). *Principles of economics*. 8th ed. Basingstoke: Macmillan.
- Marx, Karl (1906). *Capital: a critique of political economy*. Ed. by Friedrich Engels. New York: Modern Library.
- Matt, Susan J. (2003). *Keeping up with the Joneses: envy in American consumer society, 1890-1930*. Philadelphia: University of Pennsylvania Press.
- Maume, David J. and Marcia L. Bellas (2001). "The Overworked American or the Time Bind? Assessing Competing Explanations for Time Spent in Paid Labor". In: *American Behavioral Scientist* 44.7, pp. 1137–1156.
- McClelland, David C. (1961). *The achieving society*. Princeton: Van Nostrand.
- McNeill, John R. (2000). *Something New Under the Sun: An Environmental History of the Twentieth-Century World*. New York: W.W. Norton & Company.
- Miller, David (1999). *Principles of social justice*. Cambridge, Mass: Harvard University Press.
- Murray, Henry A (1938). *Explorations in personality; a clinical and experimental study of fifty men of college age*, New York; London: Oxford University Press.
- O'Donnell, Mike, ed. (2010). *Structure and agency*. Sage key debates in sociology. Los Angeles: SAGE.
- Paech, Niko (2010). "Nach dem Wachstumsrausch: Eine zeitökonomische Theorie der Suffizienz". In: *Zeitschrift für Sozialökonomie* 47.166/167, pp. 33–40.
- (2012). *Liberation from excess: the road to a post-growth economy*. München: Oekom.
- Perrotta, Cosimo (2004). *Consumption as an Investment*. London; New York: Routledge.
- Princen, Thomas (2005). *The logic of sufficiency*. Cambridge, MA: MIT Press.
- Puzo, Mario (1969). *The godfather*. New York: Putnam.
- Rabin, Matthew (1998). "Psychology and Economics". In: *Journal of Economic Literature* 36.1, pp. 11–46.
- Rawls, John (1971). *A theory of justice*. Cambridge, Mass: Belknap Press of Harvard University Press.
- Richters, Oliver and Andreas Siemoneit (2016). *Consistency and Stability Analysis of Models of a Monetary Growth Imperative*. VÖÖ Discussion Papers 1. Heidelberg: Vereinigung für Ökologische Ökonomie.
- (2017). *Fear of stagnation? A critical review on growth imperatives*. VÖÖ Discussion Papers forthcoming. Heidelberg: Vereinigung für Ökologische Ökonomie.
- Rittel, Horst (2013). "Sachzwänge – Ausreden für Entscheidungsmüde?" In: *Thinking Design: Transdisziplinäre Konzepte für Planer und Entwerfer*. Berlin, Boston: De Gruyter, pp. 240–250.
- Robila, Mihaela (2006). "Economic pressure and social exclusion in Europe". In: *The Social Science Journal* 43.1, pp. 85–97.
- Rogall, Holger (2012). *Nachhaltige Ökonomie: Ökonomische Theorie und Praxis einer Nachhaltigen Entwicklung*. Marburg: Metropolis.
- Röpke, Inge (2010). "Konsum – Der Kern des Wachstumsmotors". In: *Postwachstumsgesellschaft: Konzepte für die Zukunft*. Ed. by Irmi Seidl and Angelika Zahrt. Marburg: Metropolis, pp. 103–116.
- Rosa, Hartmut (2013). *Social acceleration: a new theory of modernity*. Trans. by Jonathan Trejo-Mathys. New directions for critical theory. New York: Columbia University Press.
- Rosenkranz, Doris and Norbert F. Schneider (2000). *Konsum: soziologische, ökonomische und psychologische Perspektiven*. Opladen: Leske + Budrich.
- Rubin, Jeff (2012). *The end of growth*. Toronto: Random House Canada.
- Saad, Gad (2007). *The evolutionary bases of consumption*. Marketing and consumer psychology series. Mahwah, NJ: Erlbaum.
- Schmelzer, Matthias (2015). "The growth paradigm: History, hegemony, and the contested making of economic growthmanship". In: *Ecological Economics* 118, pp. 262–271.
- (2016). *The Hegemony of Growth*. Cambridge, New York: Cambridge University Press.
- Schmitz, Marieluise, ed. (2011). *PONS Wörterbuch: Englisch-Deutsch, Deutsch-Englisch*. 1st ed. Stuttgart: PONS.
- Schor, Juliet (1991). *The overworked American: the unexpected decline of leisure*. New York, N.Y.: Basic Books.
- (1999). *The overspent American: why we want what we don't need*. New York: HarperPerennial.
- (2004). *Born to buy: the commercialized child and the new consumer culture*. New York: Scribner.
- Schouten, John W. and James H. McAlexander (1995). "Subcultures of Consumption: An Ethnography of the New Bikers". In: *Journal of Consumer Research* 22.1, pp. 43–61.

- Schultz, Theodore W. (1961). "Investment in human capital". In: *The American Economic Review* 51.1, pp. 1–17.
- Schulze, Gerhard (2003). *Die beste aller Welten: wohin bewegt sich die Gesellschaft im 21. Jahrhundert?* München: C. Hanser.
- Schumpeter, Joseph A. (1934). *The theory of economic development: An inquiry into profits, capital, credit, interest, and the business cycle*. Cambridge, Mass.: Harvard University Press.
- (1942). *Capitalism, socialism and democracy*. New York, NY: Harper.
- Seidl, Irmi and Angelika Zahrt, eds. (2010). *Postwachstumsgesellschaft: Konzepte für die Zukunft*. Marburg: Metropolis.
- Sen, Amartya (1990). "Gender and cooperative conflicts". In: *Persistent Inequalities*. Ed. by Irene Tinker. New York: Oxford University Press, pp. 123–149.
- Shove, Elizabeth (2012). "Comfort and convenience: temporality and practice". In: *The Oxford Handbook of the History of Consumption*. Oxford: Oxford University Press, pp. 289–306.
- Siemoneit, Andreas (2017). *Effizienzkonsum: Produktivitätssteigerung als Beschreibungsrahmen bestimmter Konsum-Entscheidungen*. VÖÖ Discussion Papers 3. Heidelberg: Vereinigung für Ökologische Ökonomie.
- Silver, Hilary (1995). "Reconceptualizing social disadvantage: Three paradigms of social exclusion". In: *Social exclusion: rhetoric, reality, responses*. Ed. by Gerry Rodgers, Charles Gore, and José B Figueiredo. Geneva: International Institute for Labour Studies, pp. 57–80.
- Simon, Hermann (2009). *Hidden champions of the twenty-first century: success strategies of unknown world market leaders*. Dordrecht; New York: Springer.
- Social Exclusion Unit (2001). *Preventing social exclusion*. London: Cabinet Office.
- Steffen, Will et al. (2015). "Planetary boundaries: Guiding human development on a changing planet". In: *Science* 347.6223, p. 1259855.
- Stiglitz, Joseph E. (2008). "Toward a general theory of consumerism: Reflections on Keynes's Economic possibilities for our grandchildren". In: *Revisiting Keynes: Economic possibilities for our grandchildren*. Ed. by Gustavo Piga and Lorenzo Pecchi, pp. 41–86.
- Stiglitz, Joseph E., Amartya Sen, and Jean-Paul Fitoussi (2010). *Report by the commission on the measurement of economic performance and social progress*. London: The New Press.
- Stoll, Steven (2008). "Fear of Fallowing: The specter of a no-growth world". In: *Harpers*, pp. 88–94.
- Sundie, Jill M. et al. (2011). "Peacocks, Porsches, and Thorstein Veblen: Conspicuous consumption as a sexual signaling system." In: *Journal of Personality and Social Psychology* 100.4, pp. 664–680.
- Teusch, Ulrich (1993). *Freiheit und Sachzwang : Untersuchungen zum Verhältnis von Technik, Gesellschaft und Politik*. 1st ed. Baden-Baden: Nomos.
- Ulrich, Peter (2008). *Integrative Economic Ethics: Foundations of a Civilized Market Economy*. Trans. by James Fearn. Cambridge: Cambridge University Press.
- Veblen, Thorstein (1899). *The theory of the leisure class*. New York: MacMillan.
- Voland, Eckart (2013). *Soziobiologie: die Evolution von Kooperation und Konkurrenz*. 4th ed. Berlin: Springer Spektrum.
- Voß, Gerd Günter and Hans J. Pongratz (1998). "Der Arbeitskraftunternehmer. Eine neue Grundform der Ware Arbeitskraft?" In: *Kolner Zeitschrift für Soziologie und Sozialpsychologie* 50, pp. 131–158.
- Wang, Yajin and Vladas Griskevicius (2014). "Conspicuous Consumption, Relationships, and Rivals: Women's Luxury Products as Signals to Other Women". In: *Journal of Consumer Research* 40.5, pp. 834–854.
- Weber, Max (1920). "Die protestantische Ethik und der Geist des Kapitalismus". In: *Gesammelte Aufsätze zur Religionssoziologie*. Vol. 1. Tübingen: Mohr, pp. 17–206.
- (2001). *The Protestant ethic and the spirit of capitalism*. London; New York: Routledge.
- Welzer, Harald (2011). *Mental Infrastructures: How Growth Entered the World and Our Souls*. Publication Series on Ecology 14. Berlin: Heinrich-Böll-Stiftung.
- Wibe, Sören and Ola Carlén (2006). "Is Post-War Economic Growth Exponential?" In: *Australian Economic Review* 39.2, pp. 147–156.
- Wilkinson, Richard G. and Kate Pickett (2009). *The spirit level: why more equal societies almost always do better*. London: Allen Lane.
- Wippler, Reinhard and Siegwart Lindenberg (1987). "Collective phenomena and rational choice". In: *The Micro-macro link*. Ed. by Jeffrey C. Alexander et al. Berkeley: University of California Press, pp. 135–152.