

Economic Growth: Help or Hinder for Sustainability?

- An investigation of perspectives on economic growth and sustainability within the Swedish environmental movement

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Abstract

There is a longstanding debate between environmentalists and economists regarding the possibility to combine economic growth and sustainability. So far, the neoliberal economists' argumentation for a capitalist economic system with everlasting economic growth has been the dominating paradigm. In Sweden, one group of environmentalists able to influence policymaking without being actual decision-makers is the environmental movement. Therefore, the aim of my thesis was to identify and contrast meanings and beliefs within the Swedish environmental movement regarding the role of economic growth in achieving sustainability. Additionally, I reviewed the environmental movement's perception of their interaction with the state, to explain possible implications of the identified perspectives on policymaking in Sweden. In my thesis, four environmental NGOs and three green think-tanks represent the Swedish environmental movement.

By conducting a Q-study based on five theoretical discourses on economics and sustainability (neoclassical growth theory, Green Growth, Sustainable Degrowth, Steady-state Economy and A-growth), I identified two perspectives on economic growth and sustainability among 16 representatives of the Swedish environmental movement. The majority of the participants identified with a growth critical perspective which represents a mixture between viewpoints from the Sustainable Degrowth and Steady-state Economy discourses. Following this, the environmental movement wishes for an alternative economic system where environmental values are prioritised over economic interests. The second perspective, which only two Q-participants identified with, is similar to the Green Growth discourse, and sees economic growth as a prerequisite for sustainability.

In Sweden, the environmental movement has a peculiar relation with the state, which allows them to influence policymaking in several ways. The most important opportunity for the environmental movement to have an impact is through personal meetings with policymakers. Through the interaction with the state, the environmental movement has the possibility to affect the formation of the guiding-principles of the meta-governance process in Sweden. The major perspective, that economic growth is a hinder for sustainability, is likely to form the values and norms that the movement will add to the meta-governance's ethical base for decision-making. However, regarding the specific question of economic growth, the environmental movement's possibilities to have an impact is limited. The environmental movement influence on policymaking is restricted to environmental issues, since they mainly have access to policymakers at the Ministry of Energy and Environment and the Environmental Protection Agency, and not the Ministry of Finance. To increase the environmental movement's influence on questions regarding economic growth relations with economic policymakers needs to be established.

Keywords: Q-methodology, meta-governance, environmental NGOs, green think-tanks, ecological economics, environmental economics

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Abbreviations

ENGO	Environmental Non-Governmental Organisation
GG	Green growth
GTT	Green think-tank
SD	Sustainable Development
SEM	Swedish environmental movement
SSE	Steady-state economy
SSNC	Swedish Society for Nature Conservation

1. Introduction

1.1 Problem definition

Current human life challenges the Earth's ability to provide the resources and services we want and need (Steffen et al., 2015). The dominance of the capitalistic economic system has negative implications on the environment, such as overexploitation of natural resources, anthropogenic climate change as well as environmental pollution (Jackson, 2009). On the other hand, economic growth is seen by many as a necessity to maintain current social and economic systems (Dryzek, 2013). When it comes to strategies for how the world will become a better place there is a great divide between economists and environmentalists. The complex question regarding the possibility to combine economic growth and sustainability has been actively debated within academia and in the general public since the beginning of the 1970's (Haapanen & Tapio, 2016). With the rise of global sustainability challenges, such as climate change, this debate has again been intensified in the last decades (Drews & van den Bergh, 2016).

The economy is influenced by numerous actors, and some have argued that policymakers are one of the most essential ones as they determine "the rules of the game" (Urhammer & Røpke, 2013, p. 69). In Sweden, another important actor in the debate on economics and sustainability is the environmental movement (Boström, 2001). They play an important role in problematizing and informing the public about sustainability issues as well as influencing environmental policy (Thörn & Svenberg, 2016). The Swedish environmental movement (SEM) and the Swedish state have a cooperative relationship, where the movement is both invited to take part in debate and act as a knowledge base for sustainability issues (Garsten, Rothstein, & Svallfors, 2015; Thörn & Svenberg, 2016).

1.2 Justification of the study

Previous studies regarding opinions on sustainability and economic growth are few. I have identified one study on public views on economic growth, the environment and prosperity (Drews & van den Bergh, 2016) and a comparative study on the differences between ecological and environmental economist's perspectives on economics and sustainability (Illge & Schwarze, 2008). Generally, little research seems to be done on perspectives within the SEM (Boström, 2001; Peterson, 2016; Thörn & Svenberg, 2016; Uhrwing, 2001). The only previous research on specifically the SEM and opinions on economic growth I found is a bachelor thesis, which partly covered different environmental NGOs views on economic growth and environmental issues (Lundmark, 2015). However, this was only a small

part of her thesis, which focused on NGOs general view on environmental issues and politics, and therefore there is a need to further investigate such opinions.

I assume that the SEM can influence politics (Garsten et al., 2015; Thörn & Svenberg, 2016) and argue that it is important to know about the discourses regarding economic growth and sustainability present within the SEM to better understand the implications of their influence on politics. Besides the peculiar relationship between the SEM and the state, Sweden is an especially interesting case since it has been ranked highly on sustainability indexes and is globally seen as a role model for sustainability (Dryzek, 2013). Additionally, the current Swedish Social Democrat Party government has expressed its scepticism towards infinite economic growth and a political will to explore alternative economic approaches (Swedish Government, 2015).

Following this, the aim of my thesis is to identify and contrast meanings and beliefs within the SEM regarding the role of economic growth in achieving sustainability. Additionally, I review the SEM's perception of their interaction with the state, to explain possible implications of the identified perspectives on policymaking in Sweden. To achieve this aim I am guided by the following research questions:

- What perspectives on economic growth in relation to sustainability can be identified among representatives of the SEM?
- How is the relationship with the Swedish state and possibilities to influence policymaking perceived within the SEM?
- What are potential implications of the identified perspectives on policymaking in Sweden?

The SEM refers to four small and large Swedish environmental NGOs (ENGOS), in total representing 425,000 members, and three green think tanks (GTTs) with different ideological background.

With sustainability I refer to the Brundtland definition of *Sustainable Development* (World Commission On Environment And Development, 1987), even though it is in parts outdated, and additionally much criticised, concept. The reason for this is two-fold. First, it is the most commonly used definition of sustainability (Dryzek, 2013). But more importantly, as part of my aim is to look into implications on policymaking in Sweden, the Brundtland definition (although somewhat altered) is the version of sustainability that is used in the Swedish constitutional law (Swedish Government, 2009).

1.3 Underlying assumptions

Many scholars (Daly, 1972; Kallis, Kerschner, & Martinez-Alier, 2012; Meadows, Meadows, Randers, & Behrens, 1972) have argued that everlasting economic growth is not compatible environmental sustainability, as there are physical resource limits to how much the economy can grow. The growth rate of today is not compatible with sustainability, and I strongly believe the economic system needs to be fundamentally changed to achieve sustainability. However, I do acknowledge that economic growth will likely follow with development of solutions needed for a transition into a world without overexploitation of natural resources, pollution and environmental degradation, i.e. my interpretation of sustainability.

I am aware that my normative standpoint on this issue possibly influenced my research, probably biasing it towards a more growth-critical perspective. I strived for an objective assessment of others' opinions throughout the interviews and avoiding bias by not revealing my own perspective, as well as to present the results with as little normative bias as possible.

1.4 Contribution to Sustainability Science

Sustainability science sets out to find solutions for complex sustainability issues through interdisciplinary research (Jerneck et al., 2011). The conflict between economic and sustainability interests is one such complex issue of human-environment interaction, which so far often resulted in environmental degradation (Jackson, 2009). Therefore, I argue that there is a need to investigate the perspectives present among representatives of one important actor in the debate, the SEM. Improving knowledge about one side of the dispute is important to provide solutions for the conflict. Since my research on the SEM adds to the understanding of existing environmentalist perspectives on economic growth and sustainability it can serve as a foundation for future research on the conflict between environmentalists and economists. Additionally, increased knowledge about perspectives within the SEM facilitates the understanding of possible implications of these perspectives on policymaking in Sweden.

2. Background

2.1 History of the Swedish environmental movement

Sweden has a long history of civil interest in environmental protection. Along with the global green wave the SEM grew in the 1960-80's (Boström, 2001). Topics of interest have varied from nature conservation in the 60's, nuclear power resistance in the 70-80's to a more diversified environmental agenda since the 90's as well as the current climate change centred movement (Thörn & Svenberg, 2016). During the early years of The Swedish Green Party (ca. 1980-95) the SEM were closely linked to the party (Peterson, 2016). However, according to Boström (2000), this changed in the later years of the 1990's and lately, ENGOs have focused their attention on the government and parties in close cooperation with the government, to be able to have the most direct influence on current politics.

2.2 Influence on policymaking

The relationship between the Swedish state and the SEM also has a long history (Boström, 2001), ever since environmental issues emerged on the political agenda in the 1960's (Peterson, 2016). The Swedish Environmental Protection Agency (SEPA) was founded in 1967 (SEPA, 2017), at least partially due to pressure from the SEM to put environmental issues on the national political agenda (Thörn & Svenberg, 2016). Nowadays, there are several opportunities for the SEM to influence policymaking. The relationship between the state and the ENGOs is twofold. Besides the ENGO's role in putting pressures on the politicians to act, they are also invited by the state to inform and take part in political debates (Boström, 2001; Thörn & Svenberg, 2016). The GTTs have the same opportunity to participate in the political debate, but see it as their role to function as a knowledge-bridge between research and politics, and to inform decision-makers about research rather than exerting pressure (Garsten et al., 2015).

The official possibility for NGO's as well as GTTs to directly influence political decisions is during the open referral (*remiss*) process, where anyone can have their say on proposed policies and plans (Bäck, Erlingsson, & Larsson, 2015). Uhrwing (2001) concludes that this process is mostly symbolic and rarely result in great influence for the ENGOs. According to her research there are better chances of influencing the policymaking through participation in governmental commissions, or during informal contacts with decision-makers. By such invitations, NGOs have been able to present their policy suggestions through summarising research on the topic (Boström, 2000). The GTTs restrain from policy recommendations, but compile available research on the topic (Garsten et al., 2015). Invitations to take part in governmental commissions appears to become more common for the ENGO's (Thörn &

Svenberg, 2016). For example, the Swedish Society for Nature Conservation (SSNC), WWF Sweden and Friends of the Earth Sweden were all invited by SEPA to take part in the deepened evaluation of the Swedish environmental objectives in 2012 and 2015 (SEPA, 2012, 2015).

Both ENGOs and GTTs are invited to governmental meetings and are consulted on specific issues (Garsten et al., 2015; Thörn & Svenberg, 2016). Thus, the ENGOs and GTTs act as a knowledge base, and help clarifying complex issues that can influence policymaking (Boström, 2000). In the years 2006-2014 SSNC and WWF Sweden were invited to the Ministry of Environment three to four times a year (Thörn & Svenberg, 2016). Furthermore, representatives of ENGOs and GTTs have repeatedly been invited to meetings or asked to hold lectures on certain environmental issues by most of the political parties, including the opposition (Boström, 2000; Garsten et al., 2015). Naturally, ENGOs with large resources (both financial and human) have better possibilities to achieve advocacy and gain influence (Uhrwing, 2001). Yet another interaction is that many ENGOs receive funding from the state (Friends of the Earth Sweden, 2016; SSNC, 2016; WWF Sweden, 2016). Furthermore, both ENGOs and GTTs occasionally get assigned by the government to write reports on current issues for which they are monetary compensated (Garsten et al., 2015; Thörn & Svenberg, 2016).

Campaigning towards the state is another strategy for ENGOs to gain influence (Thörn & Svenberg, 2016). Boström (2000) describes a reflexivity for this among ENGOs in Sweden. They both adjust their argumentations in line with for example recommendations from the SEPA to gain credibility, as well as critically question and argue against other policies the NGOs do not find acceptable and try to convince the government to change the policy. The latter is primarily done through intense campaigning towards decision-makers, both through direct meetings with them and activist demonstrations (Boström, 2000, Thörn & Svenberg, 2016). One example of a successful campaign is SSNC's work against phosphate pollution in the Baltic sea, which resulted in a national and later on also EU-legislation against phosphates in detergents (SSNC, 2012).

3. Theoretical background

3.1 Economic growth

Economic growth is defined as an increase of the gross domestic product (GDP) within a nation or region (Malmaeus, 2011). GDP itself is a measure of the economic value of goods and favours that are sold on the market, meaning the total economic activity, and is calculated by adding together consumers' expenditures, public expenditures, capital investments and net exports (Weil, 2004). Economic growth has been seen as the motor for much development opportunities since the industrial revolution in the middle of the 18th century (Malmaeus, 2011). Measuring economic growth in GDP became popular among governments in the 1940s, and in the 1950s specific policy goals concerning increasing GDP emerged (Victor, 2010). Criticism has been directed towards GDP for not including activities outside of the market (for example house and voluntary work) and negative externalities, such as pollution and environmental degradation (Jackson, 2009).

3.1.1 Neoclassical growth theory and sustainability

According to neoclassical economics, economic growth is built-in in the capitalist economic system, and continued growth is a necessity for economic stability. A long-time decline of economic growth leads to recession and ultimately financial crisis, which is argued to have negative consequences for institutions, businesses and individuals as well as the environment (Smulders, Toman, & Withagen, 2014). At the same time, the negative implications of environmental policy on economic growth is one of the main arguments from policymakers unwilling to prioritise environmental values (Jackson, 2009). Spangenberg (2010) argues that this is the catch 22 of neoclassical economics, "without growth, no sustainability, but for the sake of growth, no sustainability policy." (p. 562).

One ground pillar of neoclassical economic reasoning about sustainability is the notion of substitution of natural capital, which implies that all resources are replaceable by something else and that proper resource allocation is regulated by the market (Smulders et al., 2014). Furthermore, neoclassical economists believe that humans have every possibility to battle any environmental problem with the help of increasing financial resources and development of technology (Dryzek, 2013). Therefore, they claim that continued economic growth is essential for sustainability. With maintained economic growth future generations will have more financial resources and therefore it will be relatively cheaper for them to handle environmental issues than it would be to make such investments now (Chertow, 2000). Therefore, to minimise the negative impact on present economic growth, investing into sustainability is put off until the future.

3.2 Sustainable Development

According to the Brundtland definition sustainable development (SD) is “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (World Commission On Environment And Development, 1987, p. 43). The framework is divided into three pillars: economic, ecological and social sustainability, and SD cannot be achieved if not all three pillars are sustainable (World Commission On Environment And Development, 1987). However, the report has been criticised for contradicting itself regarding the possibility to combine economic growth with SD (Dryzek, 2013), which leaves room for interpretation of the future of economic growth in the SD discourse.

3.2.1 Strong and weak sustainability

SD is interpreted differently by environmentalists and economists. This divide has become known as strong and weak sustainability (Neumayer, 2003). The main differences are the acceptance or the disregard of two assumptions: 1. Natural, human and manufactured capital are substitutable among each other and 2. Economic progress is necessary for sustainability (Ayres, van den Bergh, & Gowdy, 2001). The notion of weak sustainability accepts both these assumptions, and argues that sustainability is possible within the current economic system (Ayres et al., 2001). On the contrary, strong sustainability, with its roots in ecology, does not assume that natural capital is substitutable by human or manufactured capital (Daly, 1992). Most advocates for strong sustainability argue that economic growth is the cause of environmental problems and therefore there is a need for a system change (Neumayer, 2003).

3.2.2 From Sustainable Development to Sustainable Growth

Lately, SD has increasingly been referred to as “sustainable growth” in policy documents, and current development policies are no longer as growth critical as before (Haapanen & Tapio, 2016). For example, one of the new Sustainable Development Goals from 2015 is to “Promote inclusive and sustainable economic growth, employment and decent work for all” (United Nations, 2017). The title leaves no doubt about the belief among international policymakers that continued economic growth is the future.

3.3 History of growth critique

Within the environmental sphere economic growth is a contested concept, and the key question is whether it is possible to combine economic growth with sustainability (Haapanen & Tapio, 2016). Following increasing environmental concern in the 1960’s two new economic schools of thought emerged: environmental and ecological economics (Røpke, 2005; Wiesmeth, 2012). Recent growth critique has its roots in these two approaches and took off rapidly after the *Limits to Growth*-report

was published 1972 (Meadows et al., 1972). With climate change and the global environmental crisis, the debate on sustainability and growth has intensified again (Drews & van den Bergh, 2016), and there are several ideas and theories about alternatives to the current economic system.

3.3.1 Environmental economics

Environmental economics originates from neoclassical economics, aims to apply economic principles for managing the environment and natural resources, and assumes that the environment is an integrated part of the economic system (van den Bergh, 2000). The causes of environmental problems are due to negative externalities, i.e. costs of an economic transaction that affects a third party, for example pollution, waste and CO₂-emissions (Stern, 2006). Such externalities enable a skewed allocation of natural resources, as these resources are not valued correctly on the market and prices do not reveal the “real” monetary cost that includes externalities (Crocker & Tschirhart, 1992).

One of the major cornerstones of environmental economics is the notion that externalities must be internalised into the economic system, represented as natural capital, in order to avoid market failure (Stern, 2006). This is done through pricing mechanisms for natural resources, such as Cost-Benefit Analysis and hedonic pricing (Wiesmeth, 2012). Natural capital is seen as substitutable with technological advancement (Smulders et al., 2014), and it is argued that this together with inclusion of externalities will enable decoupling of environmental impacts from economic growth (Wiesmeth, 2012). There are two levels of decoupling: absolute and relative. The latter implies a decrease of natural resource use compared to production units, which allows GDP to increase while the environmental impact and natural resource use decreases per unit (if the production rate does not increase). For absolute decoupling to be achieved it is necessary that the absolute environmental impact decreases and stays within the ecological limits (Stern, 2006). If absolute decoupling is achieved there are no limits to economic growth (Wiesmeth, 2012).

The researchers active within the field of environmental economics are most often originally economists who have an interest in sustainability (van den Bergh, 2000). They believe that economic growth should and can continue, but in a more sustainable way (Stern, 2006). SD is often defined as “sustainable growth”, and thereby environmental economics operates within the discourse of weak sustainability (van den Bergh, 2000).

3.3.2 Ecological economics

Ecological economics shares some values with environmental economics but also differs in many ways (see Table 1). It takes a significant step away from the neoclassical ideas, criticising mainstream

economics for its inability to include environmental impacts and design sound environmental policies (Shmelev, 2012). The interaction between humans and the environment is the main interest, and the economic system is seen as a subsystem of the ecosystem (Costanza, Cumberland, Daly, Goodland, & Norgaard, 1997). Environmental values are put first and the economic system is limited by the biophysical boundaries of the earth (Røpke, 2005). SD is a central concept within ecological economics, and since sustainability and environmental values are prioritised it implies that ecological economics is based on the notion of strong sustainability (van den Bergh, 2000).

Ecological economics’ researchers have diverse backgrounds, both in ecology and economics (van den Bergh, 2000). To assess and consider both long- and short-term environmental impacts and take caution is one of the corner stones of ecological economics, which is manifested by the precautionary principle and a pluralism in approaches for assessment and valuation (Røpke, 2004; Shmelev, 2012). Within ecological economics nature has its own intrinsic value, and it is believed that natural capital is only very limitedly substitutable by other forms of capital (Costanza et al., 2014). There is also scepticism towards the potential of technological development and that economic growth always improves the welfare in rich countries (Røpke, 2005).

Table 1: Main differences between environmental and ecological economics

Environmental economics	Ecological economics
The environment is integrated in the economic system	The economy is a subsystem of the ecosystem
Priority to efficiency: weak sustainability	Priority to sustainability: strong sustainability
Natural capital can be substituted by human-made capital, enables continued growth	Environmental limits to economic growth
Economic valuation of natural resources to internalise externalities	Systems analysis and multi-criteria methods
Efficiency and profit maximisation	Uncertainty principles (ex. precautionary principle)
State intervened market regulation	Governmental regulation

3.4 Alternatives to mainstream economics

The sustainability and growth-discourses I cover have their origin in either environmental economics (Green Growth) or ecological economics (Degrowth, Steady-state Economy and A-growth). In the following sections these discourses will be presented, for a short summary see Table 2.

3.4.1 Green Growth

Green Growth (GG) is the environmental economists’ answer for achieving SD. Originally an academic concept it is today mostly promoted by global economic and development organisations, such as the

World Bank and the United Nations (Jacobs, 2013). GG is seen as the replacement of SD, as the concept has been adopted by many organisations and nations since it was introduced on the policy scene in 2008 (Jacobs, 2013). The major assumptions of both the academic and policy version is that economic growth is needed for development, prosperity and sustainability (Jakob & Edenhofer, 2014), and that economic growth is combinable with “significant environmental protection” (Jacobs, 2013, p. 4). However, the GG ideas differ from neoclassical economics since economic growth is not automatically considered good. There are certain requirements for making growth sustainable (Smulders et al., 2014).

Within the GG discourse, it is recognised that certain activities within the capitalist economy put pressure on the environment. These activities are based on excessive natural resource use and fossil fuels, and cause environmental pollution, but are simultaneously major drivers of economic growth (Antal & van den Bergh, 2014). To protect natural resources and make the economy sustainable, a shift from a resource based to a service based economy is necessary, implying that economic growth could increase decoupled from negative environmental impact due to economic activity created by a market of services (Jacobs, 2013). Furthermore, increasing the environmental quality to a sustainable level does not necessarily harm economic growth, rather the opposite - if environmental measures are not implemented decreased environmental quality will have larger negative effects on economic growth in the future (Jacobs, 2013). Environmental measures are even believed to benefit economic growth because of technological advancement and improved efficiency (Jakob & Edenhofer, 2014).

GG has been criticized for being a false win-win concept that cannot keep its promises (Jakob & Edenhofer, 2014). One of the major criticisms is that it is very unlikely to achieve such high efficiency and decoupling rates that has been calculated as necessary for not exceeding 2°C global warming, which implies that global economic growth and environmental sustainability are not combinable (Antal & van den Bergh, 2014). Furthermore, the expected increase in energy and resource efficiency will lead to changes that decrease, cancel or outweigh the environmental benefits through rebound effects (Victor, 2010).

3.4.2 Sustainable Degrowth

The concept of *Sustainable Degrowth* (hereafter: Degrowth), drawing from early growth critique by especially Nicholas Georgescu-Roegen in the 1970's, is an academic concept within ecological economics and a grassroots movement (Martínez-Alier, Pascual, Vivien, & Zaccai, 2010). There are several existing definitions of Degrowth, one that captures most elements of the concept is that it is

“an equitable downscaling of production and consumption that increases human well-being and enhances ecological conditions at the local and global level, in the short and long term.” (Schneider, Kallis, & Martinez-Alier, 2010, p. 512). There is a clear distinction between Degrowth and economic regression. Degrowth is planned for and argued to be a necessary action to avoid a systematic collapse, while regression within a capitalist economic system result in economic crisis (Kallis, 2011). The idea is not to maintain economic degrowth endlessly, only to downscale the economy until it reaches an ecologically sustainable level (Martínez-Alier et al., 2010). However, strategies for downscaling and how much degrowth is needed is still debated (Kallis, 2011; Martínez-Alier et al., 2010).

Critique towards the Degrowth movement concerns the uncertainty regarding how Degrowth should be accomplished (van den Bergh, 2011). The main critique comes from neoclassical economists, who argue that even planned economic degrowth will inevitably lead to regression and economic crisis, and eventually collapse (Tokic, 2012). Even other Ecological Economics scholars critique Degrowth, by arguing that downscaling the economy could worsen environmental quality, since degrowth slows down efficiency and increase the environmental impact (van den Bergh, 2011). Daly (2008) believes that degrowth is not enough to attain a sustainable economy and Kerschner (2009) argues that degrowth should only be seen and used as a pathway towards a steady-state economy, a concept which is presented in the next section.

3.4.3 Steady-state economy

The idea of a steady-state economy (SSE) has been argued for by several theorists, such as Adam Smith and John Stuart Mill, throughout the years but got its breakthrough by the recent work of Herman Daly (1972, 1992, 2008). His idea of the SSE is grounded on the growth critique and flow-fund model by Daly’s mentor Georgescu-Roegen, but departs from the Degrowth movement (Kerschner, 2009). SSE assumes that there are physical limits to global economic growth and that the environment no longer can provide enough resources or handle the pollution from an expanding economy (Daly, 2008). Furthermore, he calls economic growth uneconomic and believes the current economic system is failing, since economic growth results in larger environmental and social costs than economic benefits. Therefore, the economy must adjust to the “physical behaviour mode of the Earth” (Daly, 2008, p. 1). The aim of the SSE is development within environmental boundaries, and that the economy and population should stabilise on an optimal level (Daly, 2008). The SSE is defined as “a constant flow of throughput at a sustainable (low) level, with population and capital stock free to adjust to whatever size can be maintained by the constant throughput beginning with depletion and ending with pollution” (Daly, 2008, p. 3), with throughput referring to resource and energy use (Daly, 1972). This

implies zero economic growth within the system, but Daly points out that there is no restriction towards shifting the level of the SSE and therefore economic growth (or negative growth) is allowed when transitioning between different levels (Daly, 1972).

Overall, Daly fails to describe exactly how a SSE looks like, and especially the implicitness of what optimal level of stabilisation should be strived for has been critiqued (O'Neill, 2015). Other critique concerns the SSE's relationship with thermodynamics and especially the entropy law (Kerschner, 2009). Ironically enough, the strongest critique came from Daly's mentor himself. According to Georgescu-Roegen's (1971) *fourth law of thermodynamics*, which implies that "complete recycling is impossible" (p. 60), a SSE is impossible due to the non-existence of closed-loop resource use. Furthermore, Pirgmaier (2017) argues that despite SSE belonging to the ecological economic paradigm it is to a large extent based on neoclassical economic theory, especially as SSE promotes competitive markets to regulate resource use. This has severe practical impacts as continued economic growth is a requisite in neoclassical growth theory.

3.4.4 A-growth

In contrast to previously described discourses, A-growth proposes being indifferent about economic growth. The ground pillar of this theory is that it is GDP as an indicator for well-being and progress that is problematic, not GDP growth itself (van den Bergh & Kallis, 2012). A-growth is promoted by Jeroen van den Bergh, and he argues that since the imperfectness of GDP as an indicator for welfare and progress is well-known, we should simply ignore GDP statistics and instead focus on implementing environmental and social policies without considering their economic impact (van den Bergh, 2011). A-growth is claimed to be neutral about economic growth, however, it is not ignorant about growth issues. It recognises that "*GDP growth is good in some periods or for some countries, but unconditional growth is not a wise aim*" (van den Bergh, 2011, p. 885), and that the current growth paradigm is a hinder for sustainability. Therefore, being indifferent about growth in rich countries removes this hinder since the implementation of environmental policies no longer have to consider their impact on GDP growth which improves the socio-political acceptance (van den Bergh & Kallis, 2012).

A-growth is a small branch of Ecological Economics, and seems to be ignored by economists within other economic schools. The main critique from Ecological economists is that focusing on the indicator rather than the whole growth problematic is foolish, as the environmental issues that are due to economic growth will not resolve themselves by ignoring the indicator for growth (Kallis, 2011).

Furthermore, Kallis argues that the A-growth view and governmental ignorance of GDP statistics keeps the public uninformed, which is a threat to democracy.

Table 2: Overview on discourses on economic growth and sustainability

Discourse	Governance model	Economic school	Promoters/scholars	Key ideas
Neoclassical growth theory	Capitalist market economy	Neoclassical economics	A. Smith F. Hayek ...and others	<ul style="list-style-type: none"> * Sustainability + economic growth = ☺ * Economic interests should be prioritized over social and ecological aspects * Future generations will have more financial resources than we do today, therefore it is possible to wait with environmental measures
Green growth	Ecological modernization	Environmental economics	OECD UNDP World Bank	<ul style="list-style-type: none"> * Sustainability + economic growth = ☺ * Economic growth necessary for development * Possible to combine economic growth and environmental protection * We should act before it gets worse * Resource based -> service based economy
Sustainable Degrowth	Government regulation	Ecological economics	N. Georgescu-Roegen G. Kallis J.Martinez-Alier F. Schneider	<ul style="list-style-type: none"> * Sustainability + economic growth = ☹ * Physical limits to growth * Human progress without economic growth is possible * Social change: Bottom-up approach
Steady-state economy	Competitive market with a pre-defined scale for efficient allocation of scarce resources	Ecological economics	H. Daly	<ul style="list-style-type: none"> * Sustainability + economic growth = ☹ * Physical limits to growth. * Both human population and the economy should be stabilized at an optimal level. * Growth or decline should be temporary and only occur when changing between two steady states
A-growth	Current capitalist market economy	Ecological economics	J. van den Bergh	<ul style="list-style-type: none"> * Sustainability + economic growth = ☺ * Indifferent about economic growth * Top-down change * Social change: top-down approach

4. Theoretical framework

4.1 Governance

The economy is to a large extent influenced by political decisions (Urhammer & Røpke, 2013). In the past decades, there has been a general global shift from dominant government power to the dissolution of state power, giving rise to new constellations of actors and stakeholders that are involved in decision-making at multiple levels (Evans, 2012). There are vast definitions of governance, however most of them refer to “the purposeful effort to steer, control or manage sectors or facets of society” (Kooiman, 1993, p. 2). Governance differs from traditional governing as it aims to “coordinate collective action between actors” (Evans, 2012, p. 34) rather than top-down management (Heinelt, 2007). Evans (2012) sees this shift to governance both as a possibility to include the civil society and businesses in policymaking and as a necessity to do exactly this since the shift implied a weakening of the state’s ability to carry out its responsibilities.

In addition to different types of governance there are also three orders of governance. First-order governance deals with detailed hands-on strategies for solving societal problems, meaning the actual implementation of policy or other concrete actions (Evans, 2012). Second-order governance is concerned with the context, the institutions and working processes, where the first-order decision-making takes place. The governance institutions are where the ones governing and those being governed meet and interact (Kooiman & Jentoft, 2009). Third-order governance, or meta-governance, describes the “governance of governance” (Evans, 2012, p. 40) – meaning how contextual circumstances influence the organisation of institutions and the framing of problems (Jessop, 2003).

4.1.1 Meta-governance

Governance on the meta level is to a large extent based on ethics and norms that are formed within networks connected to the governance area (Qvist, 2017), and result in what is called *Leitbilder*, or guiding principles, for the design of governance (Evans, 2012). Kooiman and Jentoft (2009) define meta-governance as “the governance order where values, norms and principles are advanced according to which governance practices can be formed and evaluated” (p. 823). The guidelines are there to help inform decisions about institutional design as well as actual policy implementation (Kooiman & Jentoft, 2009). But as seen in Figure 1 below, the different governance levels also interact with each other, with meta-governance influencing the two other governance orders and on the other hand them influencing the ethical guiding principles that shape the governance of governance (Evans, 2012).

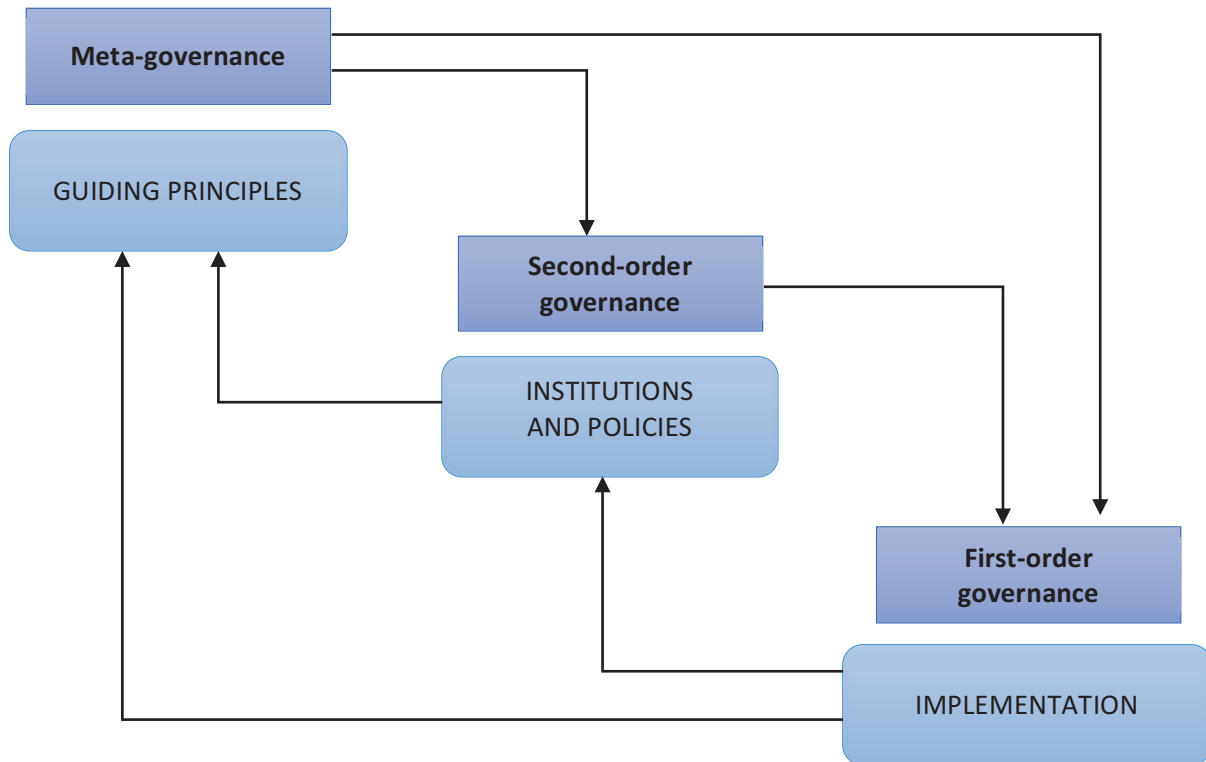


Figure 1: The three orders of governance. Source: adapted from Evans (2012) and Heinelt (2007).

The creation of guiding principles takes place through debates about ethics, norms and framing of problems among the actors concerned with the specific governance area (Evans, 2012). It is not necessarily limited to be done by the state, also the public sphere, media, and NGOs are often allowed a role in this (Kooiman & Jentoft, 2009; Qvist, 2017). The guiding principles constitutes of values, norms, principles and choices. Values are the major corner stone of meta-governance, it is the base for how norms, principles and choices are shaped. Values and norms set the frame for what specific principles should be implemented, and following that which choices are right or wrong (Kooiman & Jentoft, 2009). This process is described in Figure 2 below.

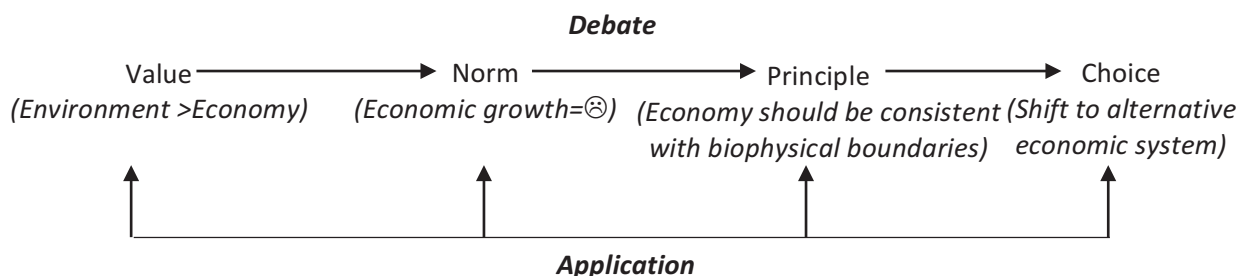


Figure 2: Meta-governance process. Source: adapted from (Kooiman & Jentoft, 2009).

4.1.2 The Swedish context

In Sweden, meta-governance is applied to a large extent (Jacobsson, Pierre, & Sundström, 2015). Some argue that meta-governance implies opening up the governance floor to other actors, transitioning into network governance (Torfing & Sørensen, 2014). However, Jacobsson et al (2015) argue that in the Swedish case, meta-governance takes place as a top-down type of governance where mainly the government is in charge of organising institutions and rules for policy implementation as well as shaping the governance guidelines. Unlike the majority of other European countries, Sweden is still more centrally than regionally governed (Fotel & Sandkjaer Hanssen, 2009). The governance system is constructed to relieve pressure from the government through assigning most decision-making to the public administration, called “governing by organising” (Jacobsson et al., 2015, p. 133). This is possible due to the strong trust relationship between the government and its administration (Jacobsson et al., 2015).

5. Methodology

5.1 Epistemology

My research is grounded in the critical realist approach, which emphasises that the world exists separately from our knowledge of it, but at the same time recognises that we can only understand the world through our beliefs and descriptions of it (Sayer, 2000). These beliefs and descriptions are socially constructed, however this does not imply that they are not real as individual beliefs determines behaviour and choices (Alvesson & Sköldbberg, 2009). By aiming to reveal perspectives on economic growth and sustainability within the SEM, I am looking for such descriptions of the world to be able to understand their consequences on policymaking.

5.2 Scope of the Study

The role of economics for sustainability has always been mysterious to me. It is obvious that there are deep conflicts between economic interests and environmental protection (Jackson, 2009). Therefore, I was curious to explore other opinions about the clash between economic growth and sustainability. The SEM, with its radical opinions and influence on policymaking in a nation seen as a role model for sustainability (Dryzek, 2013; Garsten et al., 2015; Thörn & Svenberg, 2016), makes an interesting population to investigate.

5.3 Research strategy

To fulfil the aim of my thesis I have used a mixed methods approach, combining qualitative and quantitative elements (see Table 3). The identification of perspectives on economic growth and sustainability within the SEM was carried out using Q-methodology (Stephenson, 1993). Literature review and qualitative interviews informed my investigation of the relationship between the Swedish state and SEM, and the implications of the identified perspectives on policymaking.

Table 3: Overview of research questions and methods

What perspectives on economic growth in relation to sustainability can be identified among representatives of the SEM?	Q-methodology
How is the relationship with the Swedish state and possibilities to influence policymaking perceived within the SEM?	Literature review and qualitative interviews
What are potential implications of the identified perspectives on policymaking in Sweden?	Literature review and qualitative interviews

5.3.1 Literature review

Background information on the SME and its relationship with the state, as well as the different discourses regarding economic growth and sustainability were collected from academic and grey literature found through a non-systematic literature review using online research data bases and snowball sampling.

5.3.2 Q-methodology

To reveal existing perspectives on growth and sustainability within the SEM, I chose to use Q-methodology. The method combines a qualitative discourse analysis with statistical elements (factor analysis) and is designed to identify social perspectives (Watts & Stenner, 2012). Q-methodology is recommended to use for structuring of wicked problems as it allows the researcher to reveal structures of individual perspectives on complex issues, and thereby unravel some of the mystery (Nijnik, Nijnik, Bergsma, & Matthews, 2014). The interviewees (called Q-participants) are seen as self-referent, which implies that it is the participants rather than the researcher that define what is interesting to analyse (Swedeen, 2006). However, this only accounts for the initial division of identified perspectives through factor analysis, further interpretation and characterisation is subjectively done by the researcher. There are no claims made of the method being objective, rather is the researcher's own subjectivity acknowledged and appreciated since the construction, execution and interpretation of the Q-study requires much researcher involvement (Brown, 1980). I chose Q-methodology over deep interviews due to its unique ability to identify shared viewpoints among the respondents through statistical analysis while allowing for extensive quantitative interpretation (Watts & Stenner, 2012).

5.3.2.1 Collection of Q-statements

A Q-investigation takes its starting point from the existing debate on the identified topic, which in Q-terminology is called the *concourse* (Watts & Stenner, 2012). The literature on growth, its relationship with sustainability and critique against it is very extensive, and reading all of it is not within the scope of a master thesis. Therefore, I chose to focus on the five following discourses: neoclassical growth theory, GG, Degrowth, SSE and A-growth, since they currently are among the most prevalent debates (Drews & van den Bergh, 2016; Haapanen & Tapio, 2016). Other economic theories were excluded due to time limitations. In total 319 statements were collected for the concourse from the same academic literature on economic growth and sustainability that were used as resources for the background chapter, though only from the ones concerning the five discourses in focus.

The concourse thereafter needs to be reduced and the aim of the final selection of statements for the Q-sort, the Q-sample, is to cover all main themes identified (Webler, Danielson, & Tuler, 2009). make the selection I started with categorising the statements according to which of the five selected discourses they belonged to, and then grouped together statements that were similar to each other. Statements that were similar between the different discourses were ruled out to identify the differences between the growth debates. The main characteristics within each discourse were identified partly through looking at the number of statements grouped together, but also the specific importance of the statements' meaning and which statements were most different from each other.

To have all statements at an appropriate length some of them were shortened and too complex sentences were simplified. As all participants in the study were Swedish speaking, I translated the statements into Swedish to minimise the risk for misinterpretations and misunderstandings. A preliminary Q-sort consisting of 45 statements was then tested by four persons, to identify statements that were too complex, non-understandable or too generic. When the pilot study was completed the statements were revised and five of them removed, resulting in 40 Q-statements (see Table 6 in section 6.2).

5.3.2.2 Q-participants

Q-methodology is designed to allow a small sample, which will result in a study representing a conceptual and contextual interpretation of the debate rather than a generalizable one (Gruszka, 2016). A larger sample usually give a more trustable choice, but for Q-method it is more important to interview the right rather than many people (Watts & Stenner, 2012). Appropriate people are considered to be those who are "knowledgeable about the issue and have well-formed opinions" (Webler et al., 2009, p. 21). Therefore, I tried to identify potential respondents within the ENGOs and GTTs that were likely to be interested in and well-informed about economic growth and sustainability. I did this through browsing websites for titles and working responsibilities for employees and contacting the NGOs asking for representatives interested in such questions.

The final Q-population of 16 participants consists of four employees and two board-members of GTTs as well as four employees and six volunteers representing the ENGOs. A few examples of the Q-participants' connection to the topic are the authors of a "green economy"-report, chairperson and member of the committee for an "environmentally friendly economic system" within one of the ENGOs as well as the head of the program for economic reform and entrepreneurship at one of the GTTs. The participants were promised anonymity, and were therefore coded according to their type of

organisation and position, see explanations in Table 4 below. The organisations representing the SEM in my study are not announced, to be able to further analyse reasons for individual differences in perspectives without revealing the participant’s identities. Furthermore, since the aim of my study is to identify personal perspectives among representatives of the SEM, and not official standpoints of the organisations, information about the organisations is not of great relevance.

Table 4: Participant coding

TTBX	GTT board-member X	EOEX	ENGO employee X
TTEX	GTT employee X	EOVX	ENGO volunteer X

5.3.2.3 Conducting the study

As many Q-sorts as possible were conducted through personal meetings, in total nine interviews in Stockholm, Helsingborg, Lund and Malmö. Due to lack of time and budget to travel around more of Sweden the remaining seven were done with the help of an online Q-sort software (Q-sortware) in combination with Skype interviews. Previous research on Q-studies have shown no significant discrepancy between face-to-face and online sorts (Reber, Kaufman, & Cropp, 2000).

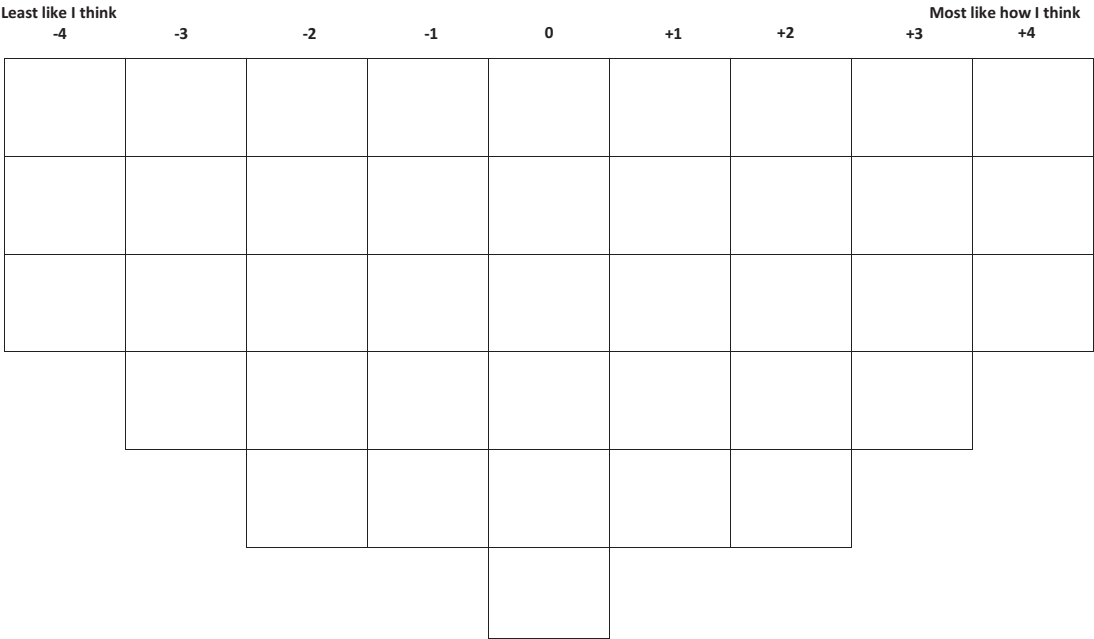


Figure 3: Near-normal distributed sort distribution for 40 statements to be sorted from “most like how I think” to “least like how I think”.

For the personal meetings, the participants were handed 40 cards, each with one statement printed on them, and a sheet showing the sorting distribution (see Figure 3 above). The statements were presented in a random order, and the participants were initially asked to pre-sort the statements in three categories: agree with, do not agree with and neutral. Once this was completed, the sorting moved on to the sorting distribution sheet. There is no individual ranking of the statements within each column.

5.3.2.4 Follow-up interviews

During the sorting exercise the participants were encouraged to think out loud about their thoughts on the statements. When the sorting was finished, they were asked to explain their reasoning about the placing of the most extreme statements (-4, -3, +3, +4), and if there was any statement they had additional comments to. Furthermore, they were asked if they missed any theme (or specific statement) from the general debate on growth and sustainability. To complete the literature review and further investigate the relationship between the SME and the state semi-structured interviews were conducted in connection to the Q-sorts. Additionally, demographic questions about educational background, identification with SME, etc. were asked (see Appendix 1 for the full interview guide). All interviews were recorded and partly transcribed.

5.3.2.5 Factor analysis and interpretation

Q-methodology is mainly a qualitative method, however, the Q-sorts are first analysed quantitatively through factor analysis to statistically reveal the shared perspectives (Watts & Stenner, 2012). The factor analysis was done using the free computer software PQMethod through a Principle Component Analysis (Brown, 1980). The first step was deciding the number of factors to extract. I used the Kaiser-Guttman criterion, which only allows for factors with an eigenvalue >1 (Watts & Stenner, 2012). Additional advice is to only accept factors that have two or more individual Q-sorts significantly loading on the factor (Brown, 1980). Following these criteria two factors, each representing the Q-sorts most similar to each other, were extracted. The last step of a Q-study is to interpret the meaning of the factors (Watts & Stenner, 2012). For each factor an ideal example Q-sort was created to represent the factor. These were then analysed through scrutinising the order of the statements as well as quotes from the participants, constructing a description of each factor.

5.4 Limitations

The initial limitation of the participant sample to ENGO employees was not successful, as too few representatives agreed to take part in my study. Therefore, the participant sample is not ideal since I had to expand it to persons not actively working with economic questions, volunteers as well as GTT

representatives. An optimal sample might have revealed other perspectives, however, this sample is perhaps a truer representative of the SEM and still an interesting scope.

Originally, my intention was to include further debates on economic growth and sustainability, such as post-growth and circular economy, in my study. Due to the previously described struggle to find SME representatives willing to participate this was unfortunately not possible, due to restricted time to prepare the Q-sort before the scheduled interviews. It is possible that inclusion of further debates would have resulted in different findings.

Within a Q-study, the participants' responses are limited to the fixed statements, which constrains the result of the investigation to the subjectively defined themes. However, these statements should be seen as representatives of the discourse meant to conceptualise the debate, not as absolute truth (Watts & Stenner, 2012). To tackle this issue the participants were asked if there was any theme or specific statement they thought lacking among the statements included in the Q-sort, and these are stated in the findings. Furthermore, they were encouraged to explain their reasoning when ranking the statements the way they did, and quotes from this reasoning were used to further explain the nature of the identified factors.

6. Findings

6.1 Demographics

All but two (GTT employees) of the 16 participants identified themselves as part of the SEM (see Table 5 below). One who did not consider themselves to be part of the SEM said that they rather identified with a sustainability movement, and the other motivated their answer with not being very engaged in environmental questions. The participants had rather different educational backgrounds, however, a majority have a background in subjects connected to sustainability issues. Furthermore, the participant's positions and working areas span over a range of topics.

Table 5: Demographic overview of Q-participants

Participant	Organisation	Position/working area	Part of SEM?	How long? (years)	Educational background
TTB1	GTT1	Board-member	Yes	40	Biology & Natural Science Teacher
TTB2	GTT1	Board-member	Yes	10	Environmental Analysis
TTE1	GTT2	Sustainable city planning	No	-	Political Science
TTE2	GTT2	CEO	Yes	10	National Economics & Political Science
TTE3	GTT3	Climate and environment	Yes	20	Environmental Economics
TTE4	GTT3	Economic reform and entrepreneurship	No	-	Journalism & Molecular Biology
EOV1	ENGO1	Volunteer	Yes	27	Business Economics
EOV2	ENGO1	Author of report on green economy	Yes	11	Environmental Engineering
EOV3	ENGO1	Author of report on green economy	Yes	11	Physiotherapy
EOV4	ENGO2	Volunteer	Yes	8	Environmental Science & Psychology
EOV5	ENGO3	Committee for an environmentally friendly economic system	Yes	41	Biology Teacher
EOV6	ENGO3	Committee for an environmentally friendly economic system	Yes	5	High school
EOE1	ENGO4	Sustainable city planning	Yes	26	Human Ecology
EOE2	ENGO2	Chair person	Yes	8	Environmental Science
EOE3	ENGO1	Climate policy	Yes	9	Environmental Science & Political Science
EOE4	ENGO1	Pollution and agriculture	Yes	7	Biology

6.2 Perspectives on economic growth and sustainability

The factor analysis identified two separate perspectives on economic growth and sustainability within the participant group. The first factor includes eleven of the participants, and shows a general scepticism towards continued economic growth as the dominant paradigm and a desire for another economic system. Factor 2 (F2) includes two of the participants and indicates a need for economic growth for sustainability and at the same time expected increase in growth because of a transition to sustainability. Three of the participants (TTE1, EOv4, EOE4) loaded on both factors and were therefore excluded from further analysis. The factor loadings for each participant can be seen in table 6 below.

Table 6: Factor loadings for each Q-sort on the respective factors, * indicates significant loading.

Q-sort	F1	F2
TTB1	0.8819*	0.1463
TTB2	0.9004*	0.0021
TTE1	0.6366	0.5297
TTE2	0.3896	0.7722*
TTE3	0.6665*	0.3939
TTE4	-0.3772	0.7261*
EOV1	0.8826*	0.0841
EOV2	0.8061*	0.0947
EOV3	0.7941*	0.2750
EOV4	0.6790	0.5386
EOV5	0.8516*	0.2172
EOV6	0.7252*	0.1709
EOE1	0.9024*	0.0868
EOE2	0.6622*	0.0843
EOE3	0.8418*	0.1180
EOE4	0.5888	0.6970

The two identified factors share some beliefs, as four of the statements scored identically for both factors. It is strongly condemned that economic growth should be prioritised over social and environmental perspectives during decision-making (25:-4). Neither is it believed that the economy always should be stimulated to maintain economic growth and thereby stability (21:-3). They agree that price policies and effective emission ceilings should be implemented to avoid rebound effects (33:+2). It is also believed that economic growth should not proceed if the environmental costs are larger than the economic benefits (9:+1). Other than that, as can be seen in table 7 below, the two factors are quite different.

Table 7: Statement positions for the respective factors

No.	Statement	Discourse	F1	F2
1	Environmental protection will positively promote economic growth.	GG	-2	4
2	Shifting to a service based economy is the best way to achieve sustainable development.	GG	-1	1
3	The largest hinder for implementation of environmental measures are their negative impact on economic growth.	SSE	0	-2
4	Ignoring environmental issues and climate change now will in the long run harm the economic growth.	GG	0	4
5	The optimal growth rate is maximal growth	Neo-classical	-4	-1
6	Both the population and the economy should be stabilised at an optimal level to achieve a steady-state economy.	SSE	1	-4
7	Future generations will be richer than we are today, therefore will the cost of environmental measures be less in the future.	Neo-classical	-3	0
8	The transition to a sustainable economy requires innovations that will increase economic growth.	GG	0	3
9	Economic growth should be stopped when the costs of environmental degradation are larger than the economic benefits.	SSE	1	1
10	Implementing early, strict environmental policies is the growth promoting strategy in the long run.	GG	-1	1
11	Technological development and changes within the economic system will enable decoupling between economic growth and environmental degradation.	GG	-2	3
12	We need economic growth within certain sectors to enable a transition to sustainability.	Degrowth	1	2
13	The overarching political goals should be to promote economic growth.	Neo-classical	-4	-2
14	We need a transition to another economic system, where economic growth no longer is a necessity that dominates all other goals.	Degrowth	4	1
15	Local currencies are a good addition to the global economic system.	SSE	1	-1
16	It is better to make a planned transition to an alternative economic system now, than risking an unplanned transition later on.	Degrowth	3	0
17	We should ignore GDP statistics as a measure for welfare.	A-growth	0	-2
18	Poor countries need economic growth to develop sustainably.	GG	0	4
19	The market should control the natural resource use, since resource scarcity on the market will speed up innovation and transition to other resources.	SSE	-3	-1
20	Sustainability measures will eliminate current inefficiencies, which will release money to spend on services that creates economic growth.	GG	-1	-2
21	Society is dependent on economic growth and the economy should always be stimulated to maintain economic growth and by that stability.	Neo-classical	-3	-3
22	Economic growth should be stopped before we reach the environmental limit for natural resource use.	Degrowth	2	-3
23	It is GDP as a measure, rather than GDP growth, that is problematic.	A-growth	-1	0

24	Economic growth creates the resources that are required to invest in a transition that eventually decreases the economy's environmental impact.	Neo-classical	-2	2
25	Economic growth should be prioritised during decision-making. Social and environmental perspectives are secondary.	Neo-classical	-4	-4
26	Through changing the economy to be more based on services rather than physical resources economic growth can continue at the same time as natural resources are preserved.	GG	-1	0
27	Rich countries have already passed the environmental limit for a sustainable economy.	Degrowth	4	3
28	A decreased growth rate is necessary.	Degrowth	2	-1
29	Once good environmental policies are in place, we can be agnostic about what will happen to the economy.	A-growth	-2	-4
30	We should identify limits to resource use and emissions as well as set up goals for how to decrease it within these limits.	SSE	3	2
31	We should implement environmental measures now, as they are beneficial for both present and coming generations.	GG	4	3
32	Increased welfare and improved environment is possible without economic growth.	Degrowth	2	1
33	To avoid rebound effects price policies and effective emission ceilings should be implemented.	Degrowth	2	2
34	We should downscale the economy to make it consistent with biophysical boundaries.	Degrowth	3	-1
35	Economic growth should only be a temporary passage from one steady-state to another.	SSE	0	-3
36	It is possible to combine economic growth and environmental protection.	GG	-2	2
37	Economic growth promotes and creates welfare in the whole world.	Neo-classical	-3	0
38	The positive impact of efficiency will be cancelled out by increase in production and consumption, which will lead to negative environmental impact.	Degrowth	1	-2
39	The profits of technological development and efficiency should result in more leisure time rather than increased production.	SSE	2	0
40	Economic growth is not possible in all eternity.	SSE	3	-3

6.2.1 Factor 1: System change, not climate change

Factor 1 (F1) explains 55% of the study variance. Eleven Q-participants are significantly associated with this factor, see Figure 4 below for the individual factor loadings. Eight of them are affiliated with the ENGOs, three as employees and five as volunteers. The remaining three persons are two board-members and one employee representing GTTs.

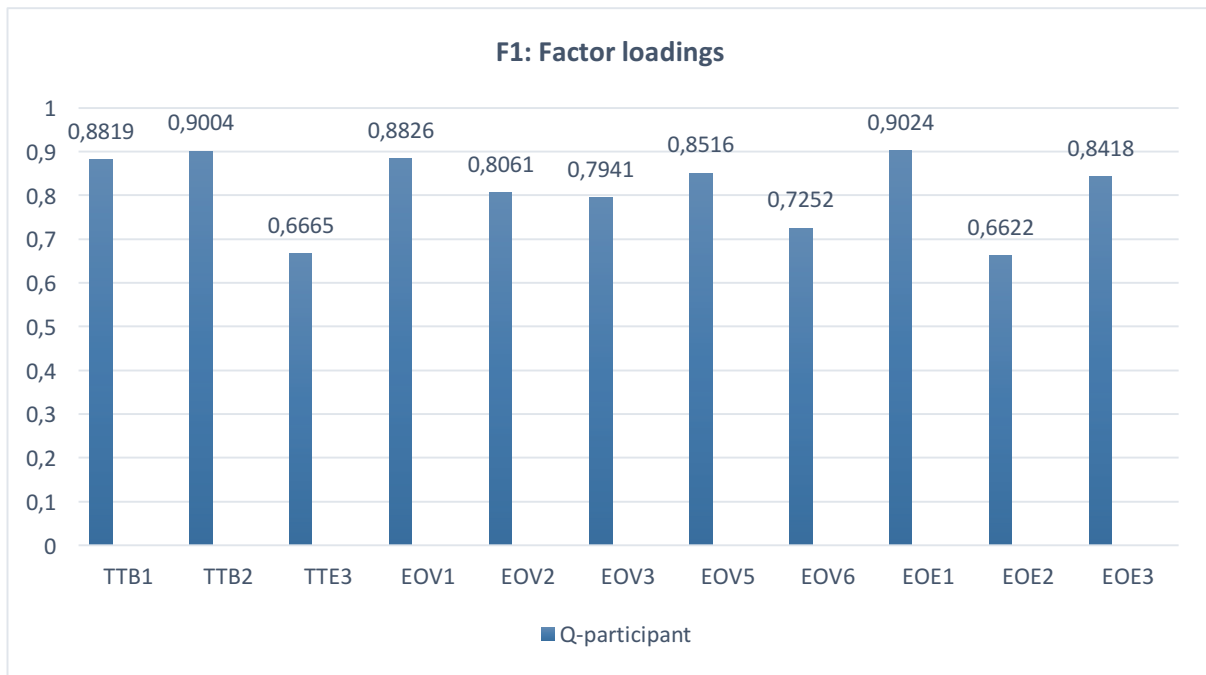


Figure 4: Factor loadings for each Q-participant identifying with F1

All participants identified themselves as part of the SEM. A majority of the participants had educational backgrounds in subjects related to sustainability issues.

Table 8: Characteristic statements for F1

Top-ranked Q-statements (+4)
14. We need a transition to another economic system, where economic growth no longer is a necessity that dominates all other goals.
27. Rich countries have already passed the environmental limit for a sustainable economy.
31. We should implement environmental measures now, as they are beneficial for both present and coming generations.
Last-ranked Q-statements (-4)
5. The optimal growth rate is maximal growth
13. The overarching political goals should be to promote economic growth.
25. Economic growth should be prioritised during decision-making. Social and environmental perspectives are secondary.
Other characteristic statements
16. It is better to make a planned transition to an alternative economic system now, than risking an unplanned transition later on. +3
34. We should downscale the economy to make it consistent with biophysical boundaries. +3
40. Economic growth is not possible in all eternity. +3
7. Future generations will be richer than we are today, therefore will the cost of environmental measures be less in the future. -3
37. Economic growth promotes and creates welfare in the whole world. -3

Among the F1 participants, as seen in Table 8, there is a general scepticism towards everlasting economic growth and the current economic system (5:-4, 13:-4), as well as the possibilities to combine further economic growth and sustainability (36:-2). The participants identifying with F1 are not very concerned about GDP as a measure for welfare and economic growth (17:0, 23:-1), but rather about the faults of the current economic system as a whole (34:+3, 40:+3). *"It is only idiots and national economists that believe in unrestricted, everlasting economic growth in a limited world."*, said TTB1. Especially continued prioritisation of economic growth over environmental and social values as the norm is condemned (25:-4). Furthermore, it is strongly believed that there is a need for an alternative economic system (14:+4) as well as a decreased growth rate (28:+2). *"We need to change to economy at the system level, we must be able to handle that economic growth will not continue as previously."* TTB2 explained his reasoning. The shift to this other system should be done sooner rather than later, since it is better to plan and make a conscious transition than risking an uncontrolled economic collapse forcing a change later (16:+3). *"Economic growth is not possible forever. It is better to start a system change now, it will only get worse if we wait."* said TTB1.

Globally, the respondents do not see any general link between increase of GDP and better welfare (37:-3), and they see a possibility to increase both welfare and environmental protection without economic growth (32:+2). There are environmental limits that constrain the economic system and the possibilities for economic growth, and rich countries already have passed these limits (27:+4, 34:+3). Economic growth should generally be stopped before the environmental limits for natural resource use are reached (22:+2), and environmental measures and policies are therefore urgently needed (31:+4). *"Every day it becomes more difficult and more expensive to implement environmental measures, so the sooner the better."* EOV1 argued. To accomplish this, the limits to natural resource use must be identified, and policies for decreasing the resource use to stay within those limits should be implemented (30:+3). *"This is very urgent, and I believe this is one of the corner stones for building a new economic system."* said EOE1.

The fact that we will have more financial resources available for environmental measures in the future is considered a myth, as well as that the costs of battling pollution and environmental degradation therefore will be less later on (7:-3). *"If we do not fix environmental issues there is no chance of being richer tomorrow."* said TTB2. Neither is economic growth considered necessary to create the financial resources that is needed to make a sustainability transition happen (24:-2), but it is recognised that economic growth within certain sectors is needed to achieve sustainability (12:+1). *"Yes, but it is also*

the other way around. Many green solutions will result in economic growth regardless if we want it or not.” said EOE3. However, there are different opinions regarding if economic growth is necessary for poor countries to be able to develop in a sustainable fashion (18:0). TTB1 claimed *“It is true that economic growth promotes material welfare in many poor countries, so growth is needed there.”*. EOE3 on the other hand argued: *“The relationship is reversed, poor countries need to make investments that will enhance economic growth, but it is not growth itself that will take them out of poverty.”*.

Increased efficiency due to technological advancements will happen, but this is not automatically seen as beneficial since some of the positive impact might be cancelled out by increased production and consumption (38:+1). It is favourable if the gains of technological advancement and efficiency would result in more leisure time rather than increase of production and consumption (39:+2). *“To me, this is the basics of sustainability. It is absurd that we work so much we burn ourselves out, to make a lot of money so that we can destroy the planet.”* said EOE3. The participants identifying with F1 holds no hope for decoupling between economic growth and environmental degradation (11:-2). Neither is an economy based more on services rather than natural resources seen as a solution for sustainability (2:-1), *“There are services that are based on fossil fuels, taxis for example. I believe all economic growth implies wearing on the environment.”* TTB1 claimed. Therefore, it is better to downscale the economy to be consistent with the biophysical boundaries (34:+3). *“The economy must adapt to the environment and not the other way around, as many decision-makers thinks. It seems like they think it would be worse if the economic system fails than if Earth collapses.”* said EOV5.

6.2.2 Factor 2: Green business as usual

F2 explains 16% of the study variance. Two Q-participants are significantly associated with this factor (see Figure 5 for the factor loadings), both employees at GTTs. One participant identified himself as part of the SEM but also a social, growth critical movement. The other participant did not identify himself as part of the SEM.

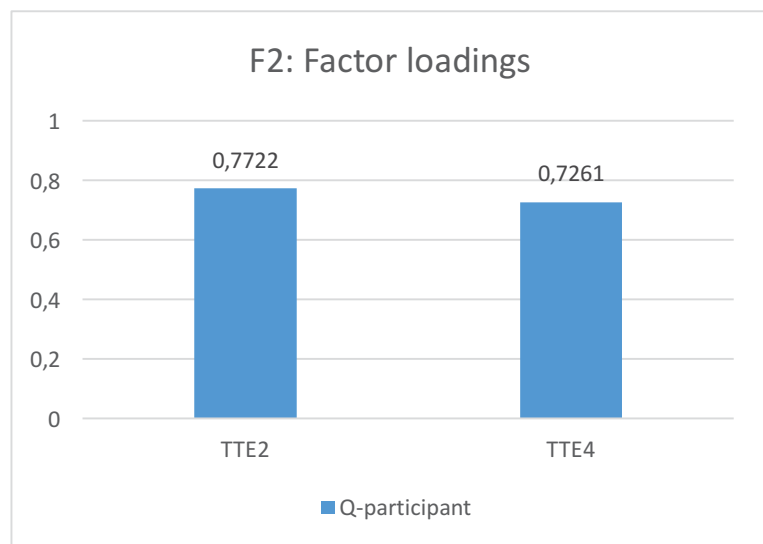


Figure 5: Factor loadings for each Q-participant identifying with F2

Table 9: Characteristic statements for F2

Top-ranked Q-statements (+4)
1. Environmental protection will positively promote economic growth. 4. Ignoring environmental issues and climate change now will in the long run harm the economic growth. 18. Poor countries need economic growth to develop sustainably.
Last-ranked Q-statements (-4)
6. Both the population and the economy should be stabilised at an optimal level to achieve a steady-state economy. 25. Economic growth should be prioritised during decision-making. Social and environmental perspectives are secondary. 29. Once good environmental policies are in place, we can be agnostic about what will happen to the economy.
Other characteristic statements
8. The transition to a sustainable economy requires innovations that will increase economic growth. +3 11. Technological development and changes within the economic system will enable decoupling between economic growth and environmental degradation. +3 27. Rich countries have already passed the environmental limit for a sustainable economy. +3 22. Economic growth should be stopped before we reach the environmental limit for natural resource use. -3 35. Economic growth should only be a temporary passage from one steady-state to another. -3 40. Economic growth is not possible in all eternity. -3

As seen in table 9, Economics and economic growth are considered important parts of society (29:-4) and a necessity to deal with sustainability issues. *“A healthy economy is a prerequisite to be able to invest in sustainability measures.”* said TTE4. But the participants identifying with F2 see no reason to prioritise economic growth over environmental and social values during decision-making (25:-4), rather the opposite: *“Economic growth at the expense of negative environmental impact should not happen.”* claimed TTE2. Furthermore, ignoring sustainability issues such as pollution and climate change now will eventually have a negative impact on future economic growth (4:+4). *“Ultimately, the costs for the negative environmental impact will result in that we must deal with them, and that will be very expensive.”* TTE2 explained. It is seen as possible to combine continued economic growth with environmental protection (36:+2), and proper environmental protection is beneficial for economic growth and will even enhance it (1:+4). Therefore, environmental measures should be introduced now rather than later (31:+3), since implementing early, strict environmental policies is the growth promoting strategy in the long run (10:+1).

The participants identifying with F2 see no hinder to continued, everlasting economic growth (40:-3, 28:-1) and cannot imagine a world without growth (6:-4, 35:-3). *“A high growth rate is necessary to*

afford the sustainability transition that is crucial.” TTE4 claimed. Even though rich countries have already passed the environmental limits for a sustainable economy (27:+3), there is no need to downscale the economy to make it consistent with biophysical boundaries (34:-1). Neither should economic growth be stopped before we reach the environmental limit for natural resource use (22:-3). Instead, the technological development and changes in the economic system will enable decoupling between economic growth and environmental degradation (11:+3). *“There are no hinders to future production of goods, if one produces them the right way through reusing material and with renewable energy.”* said TTE4. These changes of the economic system also implies shifting to an economy based more on services than natural resources (2:+1, 26:0). *“We need the economic activity. But if the economy continues to grow it cannot be because of consumption of goods, we need to shift to a more service based economy.”* TTE2 explained his reasoning. Furthermore, it is important to preserve economic growth as it creates the financial resources that enables investments for a sustainability transition which will decrease the economy’s environmental impact (24:+2). *“Economic growth is a ground stone for a sustainability transition.”* TTE4 claimed. This transition also requires a substantial amount of innovations which in turn will add to the creation of economic growth (8:+3). Since economic growth implies an increase of financial resources (24:+2) and poor countries need more money to develop, economic growth is an absolute necessity for SD in these countries (18:+4). *“We cannot create welfare in a decreasing economy.”* concluded TTE2.

6.2.3 Missing perspectives

During the interviews following completion of the Q-sort the participants were asked if there was any perspective on growth and sustainability lacking among the 40 statements. Participants belonging to F1 indicated that the distinguishment between which type of economic growth, for example within which sectors, was missing. Other lacking perspectives mentioned were the role of money, financial flows and profit interests, a non-anthropocentric perspective and how individual behaviour and perspectives shape the economic system. The participants identifying with F2 mentioned equality and redistribution of financial resources as well as circular economy as missing perspectives.

6.3 The relationship between the state and environmental movement

All participants confirmed the relationship between the SEM and the Swedish state as described in the literature. They mentioned several types of interactions: invitations to personal meetings, to participate in seminars, be part of a panel debate, writing reports and policy suggestions, referral responses, etc. The employees and board-members of the GTTs described their interaction with politics as *“a bridge between research and state agencies and politicians”* (TTE4), but had different opinions regarding whether they were lobbying towards certain aims or just informing about existing

research (TTE1, TTE2, TTE3, TTE4). On the contrary, all NGO representatives described their lobbying as straightforward and with a clear aim of environmental protection.

The majority of the participants described direct access to certain politicians due to personal connections. *“I’ve been active in the Liberal party, and of course I know people who are still active. It is easy to schedule a lunch to discuss current hot topics. I believe many lobbyists have similar connections and make use of them.”* said TTE4. This was confirmed by several other participants, who explained that they use their personal connections to get invitations to seminars and meetings (TTB2, EOE1, EOE2, EOE3, EOE4). A clear increase of the number of invitations from the state has been experienced by the participants since the government shift in 2014, when the Green party for the first time became part of a government. *“It’s a shame to say it, but absolutely, I perceive that we get more invitations now and additionally we have better access to the politicians directly. There are also many more informal meetings now.”* said EOE3. An employee at another ENGO confirmed this view: *“Since we now have a government party that is partly rooted in the environmental movement, there are many more personal connections between the government and employees at the environmental NGOs with this government, and I think that contributes to the increase of invitations.”* (EOE1). One ENGO employee claimed that they nowadays receives 20-30 personal invitations/year from the state (EOE4). Another employee at the same NGO said: *“We have people running to the government offices pretty much every day, for both official and unofficial meetings.”* (EOE3). The participants claimed that their main interaction with the state is with the Ministry of Energy and Environment and the SEPA, and occasionally Industry Ministry (EOE3, EOE1, TTE3). They had no interaction with the Finance Ministry.

6.4 Perceived influence on policymaking

All employees at both GTTs and ENGOs believe they are able to influence policymaking. They made comments like *“My whole professional role involves influencing politics when it comes to environmental issues”* (EOE4) and *“Yes, marginally, but for being one person I have quite large impact”* (TTE4). EOE5 said: *“I do not always feel very powerful, I cannot make any decisions, but I have the possibility to reach a lot of policy-makers. And as I perceive it they often listen to me, and when they do I feel a little more powerful.”*. Also the ENGO volunteers and the GTT board-members perceive that they have some influence on politics and decision-making. *“Very little, but of course it is what I strive for. I realise the impact opportunities are few, but if I thought it was impossible I would not continue.”* said EOV5.

However, they all expressed uncertainty regarding how much impact they have. *“How does one evaluate that? Of course, we can measure how much media coverage we get, but it does not tell us anything about our actual influence on policymaking. In the end, it is up to the politicians how much they listen.”*, said TTE4. Similarly, an employee at one of the ENGOs said *“The questions that we really push for, they often reach the political debate. Of course, it does not always result in what we want, unfortunately, but I would still say that we have a lot of influence.”* (EOE4). TTE2 claimed that: *“I perceive that we have influence, and we know that some things we write are taken into consideration during decision-making. But I cannot look through a policy suggestion and say with 100% certainty that these formulations here, this is because of what we said.”*

When asked if the debate on economic growth and sustainability ever came up during meetings with the state, the participants had different answers. *“It is often more concrete issues that are discussed during the meetings I attend, but yes, economic growth is discussed indirectly.”* said EOE3. A colleague at the same organisation said: *“Quite little. I perceive it like there is a dominating discourse within which you do not question economic growth, it is almost like a taboo.”* (EOE3). On the contrary, the person responsible for economic questions at one of the GTTs experienced that economic growth and sustainability is something that is discussed frequently (TTE4). Another of the think tank employees described also indirect discussions about economic growth and sustainability, and claimed that the most usual position is that economic growth is something positive (TTE3).

7. Discussion

7.1 Perspectives on economic growth and sustainability

There is a large consensus within the SEM on scepticism towards continued economic growth, and the need for an alternative economic system, since eleven of the 16 participants identified with F1: *System change, not climate change*. Compared to the theoretical discourses F1 represents a mixture of Degrowth and SSE, with a majority of Degrowth-statements ranked highest. Six of the seven statements ranked lowest belong to the neoclassical economics category. This implies that the SEM rejects the ground pillars of the current economic system. This is not a surprising result, since the SEM is known for emphasising environmental values over economic ones (Boström, 2001). Being sceptical of the dominating growth paradigm could therefore be seen as a natural consequence.

Since the two participants identifying with F2, *Green business as usual*, were both employed at GTTs a possible difference in perspectives between ENGOs and GTTs was detected. However, in contrast, two board-members of another GTT scored second and third highest for F1. Of the remaining GTT representatives one scored second lowest (0.67) of the participants identifying with F1 and the other loaded on both factors. At first sight, this seems contradicting and questionable, but there are possible explanations. One of the GTT employees identifying with F2 studied national economics, and the other was the head of economic questions at a GTT that identifies themselves as liberal. The neoliberal influence from their education and work place is likely to have shaped their norms towards the GG perspective of F2. Additionally, TTE4 did not see themselves as part of the SEM, which could further explain the less environmentally focused perspective.

7.2 Perceived relationship with the state and influence on policymaking

Even though governance in Sweden takes place through a hierarchical top-down process, the government and other political parties are no longer the only main agents within policymaking. Additional stakeholders, such as the SEM, have gained increased influence in the past decades (Thörn & Svenberg, 2016). My findings confirm the close relationship between the state and SEM as described in the literature, with several possibilities for the movement to influence policymaking. All participants perceived that they have an impact on politics, also the ones operating on the local level. However, the participants expressed difficulties in knowing to what extent they can influence policymaking, since they cannot know what parts of final policies and decisions that is a consequence of their suggestions.

Access to policymakers depend on the representative's position within the SEM, and employees generally have better access than volunteers. Since the government is informed by civil servants and much decision-making is made by the latter (Jacobsson et al., 2015), the SEM must not necessarily have access to the actual decision-makers. Influencing people in the surrounding administration can also have an impact on policymaking. Access to policymakers increases with personal connections, and this is an important opportunity for the SEM to have an impact. Even though the individual perspectives found in my study might differ from the ENGO's and GTT's official standpoints on economic growth and sustainability, the individual's own perspective certainly has an impact on their work and the lobbying they do. The many personal relations between the Green Party and the SEM have strengthened the relationship between the current government and the movement. A change of government, excluding the Green Party, is likely to decrease the interaction between the SEM and the government and thereby their impact on policymaking.

The fact that most ENGOs receive funding from the state implies that the government has trust in these organisations. I believe this improves these organisations possibilities to access policy-makers, and following that their possibilities to promote their point of view. However, it can also have a biasing effect making the organisations more prone to adjust their opinions closer to the state's. The GTT representatives claimed they act as a bridge between research and politics, but the question is how much of their lobbying interests they add to the forwarded knowledge, since they also receive funding from external partners. Furthermore, it is my interpretation that the state has made itself dependent on ENGOs and GTTs as a knowledge base, since the organisations provide and even get assigned to write reports on current issues. This further proves the trust the Swedish state holds for these organisations. Though, in terms of governance and legitimacy the role of these organisations acting as a formal knowledge base might be problematic, since these have their own agenda which influences the type and framing of the information provided to the government.

7.3 Possible implications on policymaking

The shared values within the SEM shapes their norms about how society and the environment should be governed (Kooiman & Jentoft, 2009). For most participants representing the SEM, the shared notion of prioritisation of environmental values over economic interests have shaped a norm of scepticism towards the growth paradigm. In turn, these norms result in guiding principles which informs their preferred choices in decision-making. Several characteristic principles for the SEM were identified through the factor analysis, for example that increased efficiency should result in more leisure time

rather than increased production, and these principles inform the movement’s influence on policymaking (see Figure 5 below).

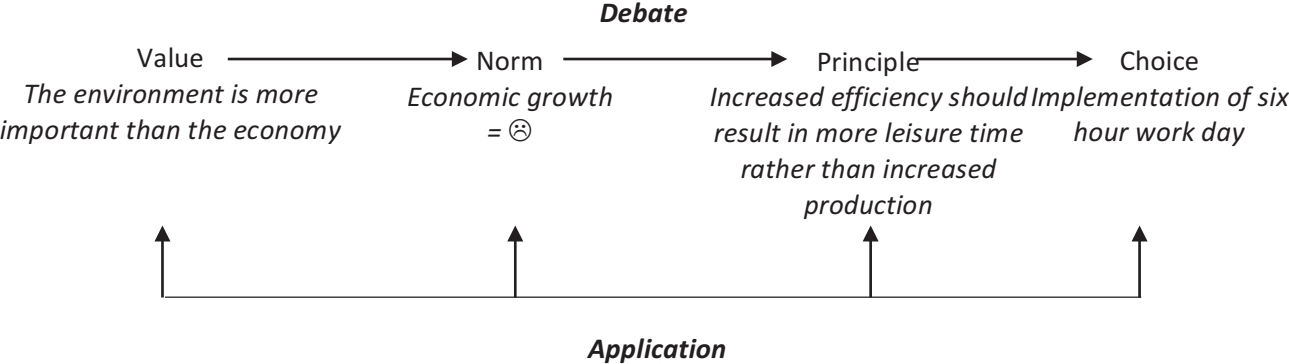


Figure 6: Example of value to choice chain for the SEM. Source: adapted from (Kooiman & Jentoft, 2009)

Returning to the three orders of governance, first-, second- and meta-governance, the SEM interacts with governance on two of the three levels (see Figure 6 below). Through the close relationship with the state described in my findings the SEM is part of the institutional framework around policymaking, the second-order governance. Since the SEM acts as a knowledge base for the state through providing information on current issues, they take part in the working processes that result in implementation of new policies (Kooiman & Jentoft, 2009). Additionally, since the SEM is lobbying towards the state (Thörn & Svenberg, 2016) their opinions and perspectives has an impact on the formulation of the guiding principles for the governance process, the meta-governance (Evans, 2012). This allows the SEM to take part in shaping the ethics around Swedish environmental governance. In turn, the SEM is also affected by these guiding principles, which define their role in the governance process and the social rules of the governance network. The SEM is not involved in the practical decision-making and they cannot directly influence the final content or implementation of policies. Therefore, they are not part of the first-order governance (Evans, 2012). The policy implementation is however still affected by the meta- and second-order governance, meaning that the influence the SEM has on those governance orders trickles down to the first-order governance.

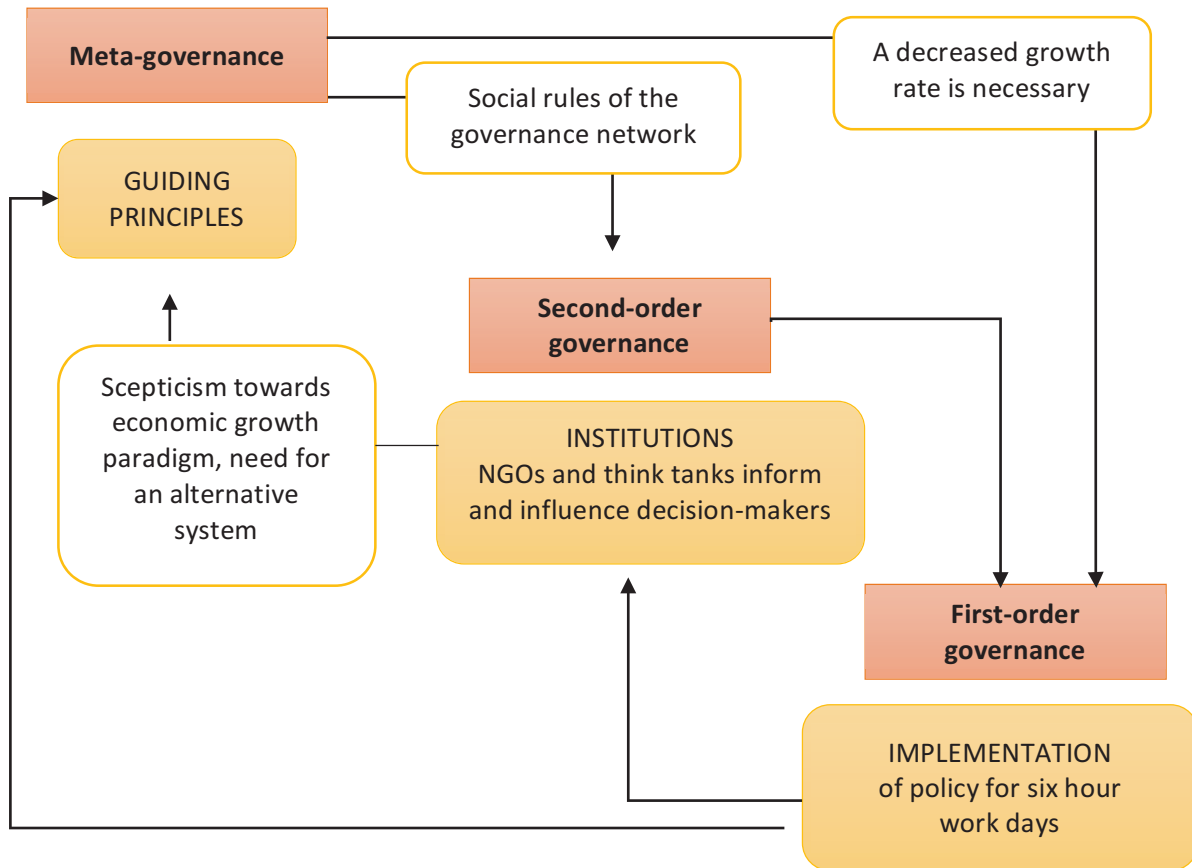


Figure 7: Applied example of the SEM’s interaction with the three orders of governance. Source: adopted from Evans (2012) and Heinelt (2007).

The possibilities to directly discuss economic growth during meetings with the state seem to depend on the SEM representative’s area of expertise and position within the organisation, as well as the context and topic of the meeting. The SEM’s interaction with the state appears to mainly concern specific issues. Since most participants stated that they do not directly discuss growth related questions with policymakers, but at the same time perceived that issues they want to bring to the agenda often reach the political debate, economic growth does not seem to be a prioritised issue for the SEM. Additionally, the SEM only have access to the Ministry of Energy and Environment and the SEPA, and not to the Ministry of Finance which are governing economic questions. Therefore, I believe it is difficult for the SEM to have a direct impact on policymaking concerning economic questions. Following this, the SEM’s possibility to influence policymaking is restricted to environmental issues as their access to policymakers is limited to representatives of the Ministry of Energy and Environment as well as the SEPA. Access to the Ministry of Finance is crucial for the SEM to gain influence on

policymaking concerning economic questions, however, to have an impact on specific issues related to economic growth this topic first needs to be increasingly prioritised within the movement.

7.3.1 Imaginable policy suggestions from the environmental movement

Following the perspective described for F1, I have identified possible, concrete policy suggestions to be expected from the SEM. One of the major points that are important to the SEM is that economic growth cannot continue forever, and therefore there is a need for another economic system. A planned transition to a new economic system should be done as soon as possible. This new economic system should prioritise environmental values over economic interests, and a way towards it could be through implementing measures such as:

- ❖ Allocating increased funding to research on alternative economic systems and their consequences
- ❖ In the meantime, downscaling the existing economy to be consistent with biophysical boundaries through:
 - Decreasing resource use, production and consumption by introducing:
 - Effective emission ceilings
 - Taxes and price regulations
 - Removing economic growth as a political goal for Sweden
 - Decreasing the current national growth rate, for example by implementing:
 - 6-hour workdays to avoid increased production due to technological efficiency and to improve social sustainability with increased leisure time

7.4 Limitations

My findings present a rather unified perspective within the SEM, however I believe that a larger participant sample could have detected more perspectives. Since the participants had limited time for the sorting exercise and varying knowledge about the topic, I had to keep the Q-statements simple and as few as possible. It is imaginable that more specialised statements as well as a larger number of them would have identified further, and more distinct perspectives.

7.5 Suggestions for further research

My results explain individual opinions of representatives of the SEM but says nothing about official perspectives of the ENGOs or GTTs. It would be interesting to compare the individual perspectives with the official stand-points of the organisations, to see how well the identified perspectives represents the SEM. Furthermore, upscaling a similar investigation to European Union or global level would also be intriguing.

8. Conclusion

My aim was to identify and contrast meanings and beliefs within the SEM regarding the role of economic growth in achieving sustainability. Additionally, I reviewed the SEM's perception of their interaction with the state, to explain possible implications of the identified perspectives on policymaking in Sweden.

I identified two different perspectives on economic growth and sustainability among the representatives of the SEM. The main perspective is a mixture of the Degrowth and SSE discourses, and expresses a general scepticism towards economic growth as the dominant paradigm, as well as a desire for an alternative economic system. This view is explained by a long history of environmental concern and prioritisation of sustainability over economic interests within the SEM. The second perspective was shared by only two participants and held a GG promoting view. These participants were both employed at GTTs which might indicate a difference between ENGOs and GTTs, however, the liberal backgrounds of those two participants pose a more likely explanation.

The SEM and the state interact in several ways, which results in many possibilities for the SEM to influence policymaking. All participants perceive that they have an impact on political decisions, and an important opportunity to influence is through personal meetings with decision-makers, since those meetings give opportunity to express ideas in more detail and directly discuss pressing issues. The direct access to policymakers has increased since the Green Party became part of the government, implying that a shift of government is likely to have negative consequences for the SEM's possibility to influence policymaking.

The future economy is in the hands of current policymaking. Even though it is difficult to measure to what extent the SEM is able to influence policymaking, I conclude that they do have an impact since they interact with second-order and meta-governance. According to the critical realist approach, the growth critical perspective I revealed determines the SME's policy suggestions and lobbying towards the state. This implies that campaigning for an alternative economic system which allows a decreased growth rate, and prioritises environmental values over economic interests is to be expected from the SEM. However, the SME's influence on policymaking is restricted to environmental issues as they do not have access to policymakers responsible for economic questions, resulting in little opportunity to have an impact on questions related to economic growth. To increase the environmental movement's

influence on questions regarding economic growth relations with economic policymakers needs to be established. But more importantly, a prerequisite for the SEM to have influence on such policymaking is an increased prioritisation of economic growth as a topic of interest within the movement.

Finally, a majority of the SEM see economic growth as a hinder for sustainability. My identification of this perspective increase knowledge of the SEM's opinions regarding economic growth and its role in achieving sustainability. This, I argue, could serve as start point for further Sustainability Science research on solutions for the conflict between environmental and economic interests.

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Appendix 1: Interview guide

What is your educational background?

Do you see yourself as part of the Swedish environmental movement? For how long have you done that?

Employees: How long have you worked in your current position?

Volunteers: How long have you been actively engaged within your organisation?

Can you describe your organisation's interaction with the state?

Do you personally interact with the state in any way? If yes:

- How?
- Have you been discussing issues related to economic growth during these interactions?
- Do you perceive that what you said made an impression on the policymaker you met?

Do you perceive that you can influence political decisions and policymaking? In what way? To what extent?