Legitimising and Delegitimising the Monetary System
Competing Portrayals of Fractional Reserve Banking in Knowledge Discourse

UPPSALA UNIVERSITET

Master’s thesis in Global Environmental History
Abstract

Lundkvist Fridh, Y. 2016. Legitimising and Delegitimising the Monetary System - Competing Portrayals of Monetary and Banking Policy in Knowledge Discourse. Uppsala, Dept of Archaeology and Ancient History.

This is a study of how knowledge producing actors, like professors of economics, ecological economics and investigators at public institutions, portray the monetary system in general and fractional reserve banking specifically. The methodology of Political Discourse Analysis, with focus on argumentation and legitimisation, is used to identify and compare how different actors portray the monetary system. The outcome shows that there exist competing knowledge discourses that are diametrically different in how they define keywords and describe the relation between the monetary system, societal power relations and environmental impact. Some important concepts under academic debate include the origin of money, which actor (the state or commercial banks) controls the money supply and seigniorage (money issuer’s revenue), if private banks really are intermediaries and multiply central bank money, and if interest-bearing money is a cause of socioecological unsustainability. By critically analysing the moral norms within knowledge discourses that otherwise might be naturalised as portraying ‘facts’ or ‘truth’, this thesis helps identify needs for further research – especially regarding how the financial system can be better adapted for socioecological sustainability.

Keywords: Fractional Reserve Banking, financial system, monetary system, monetary policy, banking policy, political legitimacy, strategic legitimisation, power relations, environmental impact, socioecological sustainability, knowledge discourse, hegemony.

Master’s thesis in Global Environmental History (60 credits), supervisor: Gabriel Söderberg (Dept of Economic History), mentor: Anneli Ekblom. Defended and approved spring term 2016.
© Ylva Lundkvist Fridh
Department of Archaeology and Ancient History, Uppsala University, Box 626, 75126 Uppsala, Sweden
## Contents

List of Abbreviations .................................................................................................................. 6

1. Introduction ............................................................................................................................... 7
   1.1 Aim ...................................................................................................................................... 9
   1.2. Research Question ............................................................................................................. 10
   1.3. Disposition ...................................................................................................................... 11

2. Theory and methods .................................................................................................................. 12
   2.1. Theory: Perspectives on Power: Legitimacy, Hegemony and Governmentality .......... 12
   2.2. Method ............................................................................................................................ 14
       2.2.1. Political Discourse Analysis: Argumentation and Legitimisation ....................... 15

3. Background ............................................................................................................................ 22
   3.1. Academic Debate – How to Define Money, Interest and Growth ............................. 22
       3.1.1. Money: Barter/Neutral, Credit, Debt or a Cultural Invention ................................. 22
       3.1.2. Interest ..................................................................................................................... 26
       3.1.3. Growth ..................................................................................................................... 27
   3.2. Fractional Reserve Banking and the Proposal for Full Reserve Banking .............. 29
       3.2.1. Ecologist Arguments for FRB ................................................................................. 31

4. Analyses: How Fractional Reserve Banking is Legitimised and Delegitimised by Knowledge Producing Actors ................................................................. 33
       4.1.1. A Succinct Reconstruction of the Argument .............................................................. 36
       4.1.2. Legitimisations in the Text ....................................................................................... 39
4.2.1. A Succinct Reconstruction of the Argument ....................................................45
4.2.2. Legitimisations in the Text .................................................................................47
4.3. Analysis of the Textbook *Ecological Economics* (Daly and Farley, 2011) ..........50
4.3.1. A Succinct Reconstruction of the Argument ....................................................50
4.3.2. Legitimisations in the Text .................................................................................53
4.4. Short Analyses of reports produced for IMF, Bank of England, Club of Rome and The Swedish Environmental Protection Agency ...........................................56
4.4.4. The Swedish Environmental Protection Agency’s Anthology: *About Possibilities, for the Human and Everything Living* (Chapter 3, Hornborg, 2011) ......65
5. Concluding Summary and Comparison ...................................................................69
5.1.1. Definitions of the Origin of Money .....................................................................70
5.1.2. How is Money and Growth Affecting Ecology? .............................................71
5.1.3. Conflicting Portrayals of Intermediation and Money Multiplication ..........72
5.1.4. Who has the Power to Create New Money? ...................................................73
5.1.5. How is the Money Supply (MS) Controlled/Influenced? ...............................74
5.1.6. Conflicting Legitimisations/Portrayals within the Arguments .......................75
5.1.7. Are Certain Claims for Action Inherently Connected to Certain Value Systems? ..76
5.1.8. Comparing Summary .......................................................................................78
6. Discussion ..................................................................................................................80
6.1.1. Legitimising Status Quo or Change? .................................................................80
6.1.2. A Power Relation between Knowledge Discourses: Shifting Hegemony? ........81
6.1.3. The Relation between Fractional Reserve Banking, Economy, Power and the Environment .................................................................83
6.2. Personal reflections ...............................................................................................83
6.3. Further research ...................................................................................................84
7. References ...............................................................................................................87
Appendix 1 .....................................................................................................................92
Definition of Economics: Classical, Neo-classical, Environmental and Ecological ....92
List of Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDA</td>
<td>Critical Discourse Analysis</td>
</tr>
<tr>
<td>FRB</td>
<td>Full Reserve Banking</td>
</tr>
<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
</tr>
<tr>
<td>MS</td>
<td>Money Supply</td>
</tr>
<tr>
<td>PDA</td>
<td>Political Discourse Analysis</td>
</tr>
</tbody>
</table>
1. Introduction

“The global ecological crisis is primarily the result of the debt-money system. The fact that the money, which is created out of thin air, bears an interest burden, applies pressure to the global economy to grow at a rate equivalent to the interest rate. More and more real wealth must be created upon which to base the necessary expansion of the money supply.” (Greco, 1990: 16)

“The irrelevance of money for real variables is called monetary neutrality. For many purposes – in particular, for studying long-run issues – monetary neutrality is approximately correct.” (Mankiw, 2008: 126)

How can we as a society can develop our economic systems in order to better adapt them to the environmental and social challenges we are facing, including climate change, loss of biodiversity and deforestation and social equity (just to mention a few)? One idea that has received increased attention is the critique of the monetary system, which has been discussed for some decades by ecological economists and growth critics, like Thomas H. Greco Jr. quoted above. A concrete suggestion to reform the monetary system, expressed by US professor Herman Daly among others, is the proposal of a full-reserve banking reform. The reform idea was retrieved from the 30s depression aftermath economic debate. In the view of these ecologist reformists, money creation needs to be disconnected from the charging of interest, because this connection is assumed to create an undesired “growth imperative” which leads the economy to overusing finite natural resources (see for example Binswanger, 2009, and Strunz et al, 2015).

---

1 See more research about planetary boundaries and which ones are currently exceeded here: http://www.stockholmresilience.org/21/research/research-programmes/planetary-boundaries/planetary-boundaries/about-the-research/the-nine-planetary-boundaries.html
However, these ideas and perspectives are very far from what I was taught during my years as an Economics undergraduate. I was fascinated by observing how apparently conflicting information could parallel be presented as unquestionable ‘facts’ in different university institutions. As the second quote above implies, conventional economists tend to see money as a quite uninteresting factor when it comes to what determines the economic development. As a result, during many decades the discussions about a full-reserve banking reform seemed very unrealistic. But then something happened, which put the reform proposal on the agenda of public and academic debate. It was after the 2008 financial crisis. In the aftermath of the crisis a critical debate opened up about how to improve the sustainability of the economic system. In 2012 the International Monetary Fund (IMF) published a working paper written by two investigators who recommended a full-reserve banking reform, but on very different grounds than the growth critics. According to the IMF researchers the reform would increase growth and by no means stop it (Beneš and Kumhof, 2012). In 2015 a report commissioned by the Prime Minister of Iceland suggested that Iceland – who suffered severely from the 2008 crisis – should move ahead with such a reform (Sigurjonsson, 2015).

This ongoing academic debate about reforming the monetary system demonstrated the need to understanding how exactly the system is legitimised. Legitimisation plays a crucial role in political strategies for maintaining or challenging current policy – and knowledge produced by influential researchers plays an important role in shaping what is considered a legitimate political decision. This thesis is about how monetary and banking policy – especially the requirements surrounding the fractional reserve banking system – is portrayed and legitimised by knowledge producing actors like professors and authors of reports from financial institutions. The debate surrounding the proposal for Full Reserve Banking (as opposed to the current fractional reserve banking system) – from now on abbreviated FRB – also known as “The Chicago Plan” or “100 % Money”, will be in focus of this study. FRB means that banks are required to keep as big reserves of fixed savings – not just transaction account money – as their quantity of lending, and not only a fraction or small part (if any at all) as it is regulated today. FRB is considered to be a way of establishing governmental monopoly on money creation, because the fractional reserve system is understood as opening a loophole for private banks to create new money. This specific reform idea is interesting because the suggestion have resulted in a scholar debate where the role of money, interest, growth, monetary policy, banking and the power over the money supply is scrutinised in detail. Therefore, in this thesis, the academic debate over FRB will be the main case study of how the monetary system is legitimised by knowledge producing actors.

Around the same historical moment as the break out of the 2008 financial crisis, knowledge about another crisis was spreading around the globe: climate change and the impacts of global warming. The UN Intergovernmental Panel on Climate Change reported in 2007 an overview of the state of research regarding human-induced climate change, with very concerning results. Since then, governments and researchers have done their best to find new development strategies to reduce carbon dioxide emissions and environmental impact. Ecological economists, like the mentioned Herman Daly, argue that the current monetary system is in fact an engine to unsustainable development, which is a very controversial and unorthodox perspective within Economics.

Focus is put not on any public debate, but on knowledge discourse because of the assumption that an argument that succeeds in getting the status of being ‘knowledge’ will have greater power over shaping political policy and forming what is perceived as ‘reality’. The actors whose
knowledge discourse will be analysed are; employees at the governmental institution the Swedish Central Bank, “Riksbanken”, who wrote an annual report describing the Swedish monetary system. Gregory Mankiw who is a Harvard professor of Macroeconomics and the author of the bestselling textbook Principles of Macroeconomics. Herman Daly who is a professor of Economics at University of Maryland working in the interdisciplinary field of Ecological Economics, co-founded the Journal of Ecological Economics and has written the textbook Ecological Economics together with Joshua Farley (who has a undergraduate degree in biology, a master’s degree in international affairs and a Ph.D. in Agricultural Economics). The two IMF researchers – German economist Michael Kumhof and Czech archaeologist Jaromír Beneš – who authored an investigation about FRB. Employees at the Bank of England who authored a Quarterly Bulletin about how money is created today. The two Swedish public debaters Anders Wijkman, Head of the Club of Rome and former politician, and Johan Rockström, professor of Environmental Science and Head of Stockholm Resilience Centre, who wrote the Club of Rome report Bankrupting Nature. And finally, Swedish professor of Human Ecology, Alf Hornborg, who has written a chapter about reforming the Monetary System in a book published by the Swedish Environmental Protection Agency.

To understand how these knowledge producing actors portray the monetary system a (Critical) Political Discourse Analysis will be conducted. The use of keywords like money, growth and interest within academia will be analysed. In the arguments presented by these actors the discursive act of legitimisation (or legitimation) plays a crucial role, as legitimisation is a strategy to maintain or challenge current structures. The arguments presented by these actors must appear as legitimate in order to gain acceptance as ‘knowledge’ and to influence policy making. If the argument is controversial, the actor giving the argument might also need to delegitimise opponent’s perspectives, as well as the whole system that he/she is aiming to change. So, while examining academic perspectives on the monetary system, the methodology of Political Discourse Analysis, with focus on arguments and legitimisations, will be used and hopefully developed. Ideas about political legitimacy and societal power relations will be further developed in the Theory chapter.

Previously, there has been research made about the effects of a Full Reserve Banking reform and also some research about how the monetary system affects social and ecological systems (see for example Dyson et al 2012, and Callon, 1998). There has also been research done about how knowledge, argumentation and legitimisation affect public opinion, policy making and politics (see van Leeuwen, 2007, Reyes, 2011, and Enns, 2015). The new contribution made by this thesis is the critical comparison between how different knowledge producers use different knowledges and arguments to shape worldviews regarding what sustainable and sound monetary policy consist of.

1.1 Aim

The main aim of this thesis is to gain a better understanding of how different knowledge producing actors, in present time, describe the monetary system in regards to how money is created, regulated and how this process affects ecological sustainability, how the power over the monetary system is exercised by the government or private banks, as well as how it affects the economy in general. I will analyse different arguments expressed within different economic disciplines, like mainstream economics and ecological economics (defined in Appendix 1),
which at first glance may seem to represent completely different worldviews when it comes to economic theories and definitions. The aim is not here to take sides or deconstruct these discourses but rather to provide a frame whereby these arguments can be allowed to converse or debate with each other. However, if either of the arguments analysed in fact holds a hegemonic position in knowledge discourse, the act of critically analysing and comparing can be seen as a sort of “dethroning” of that hegemony since it opens up for other possible realities (Robbins, 2011: 70).

Another aim is to develop how the important concepts legitimisation and argumentation can be seen as interrelated and not separated methodological tools in Political Discourse Analysis. The worldview or “portrayal of reality” expressed by different actors will be analysed through the methodology of Critical Discourse Analysis, outlined in the Method chapter, especially focusing on political arguments and legitimisations. From a methodological perspective, one of the aims of this thesis is to investigate how the concept of Political Discourse can be used when analysing academic texts that are meant to represent knowledge and not politics.

One overarching aim of this thesis is to better integrate Economics in the interdisciplinary field of Environmental History. Environmental History is the study of human interaction with the natural world over time. Considering that “economy” is sometimes defined as “thrift management of scarce resources” it is a bit surprising that Economics has so far been a neglected part of Environmental History. The Swedish professor of Human Ecology Alf Hornborg expresses this very point by saying: “It is remarkable that resilience theory has not proceeded from such central insights of systems ecology to critically scrutinise the operation of communicative mechanisms in the modern world, the most fundamental and pervasive of all of which is money.” (2013:123). This quote makes clear that research about money has yet not been sufficiently integrated in the theory building about for example resilience and systems ecology. To critically and thoroughly study the functions, practises and consequences of the monetary system could in the longer run be an important contribution to research fields like metabolic rift (see for example Foster, 1999) or socio-ecological systems (see for example Meadows, 2008). This thesis will be a first step, building up a base for further research suggested in the end.

1.2. Research Question

In the previous sections I have framed the research question in a broad socioecological, political and academic context, as well as introduced some underlying related questions. In this section I will present the very specific questions that will be used to guide the analysis of the texts that will serve as case studies in this thesis. As already described, this thesis sets out to critically analyse arguments regarding the monetary system – with focus on the debate about Full Reserve Banking – within knowledge discourse. To rephrase this research question into a three steps model recommended by Booth et al. (2008:47):

1. I am studying different knowledge discourses about the Monetary System in general and Full Reserve Banking specifically.
2. In order to analyse how they are different/similar, what economic realities they portray and how policy based on these realities will differ.
3. In order to help my readers understand the links between Fractional Reserve Banking, societal power relations, socioecological sustainability and the economy in general.
To be able to do this, seven textbooks and reports written by prominent knowledge producers will be thoroughly analysed. The methodology of the analysis will be described in the Theory and Method chapter. However, the methodological tools will be guided by certain questions that this thesis is trying to answer. The following questions will be posed to the texts in the case studies of this thesis: How is ‘the origin of money’ described? How is the relationships between money (or monetary policy) and the economy in general (inflation, growth, unemployment, resource management, etc.) described? How is current monetary policy legitimised or delegitimised? How do these arguments about the monetary system relate to policy and regulations (what policies are recommended)? Which actor is described as having the power over the monetary system (the government or private banks)? Is there a (implicit) moral evaluation/value premise in these portrayals of reality? Are the different knowledge producers giving conflicting or consistent portrayals of the monetary system and its functions?

By analysing how the knowledge producing actors answer these questions in their arguments, their portrayals of/discourses regarding the monetary system will appear and can be compared and discussed. How the questions stated above have been posed to the analysed texts will be explained more in the methods chapter.

As a background introduction to possibly contradictory knowledge discourses regarding the monetary system, I will also do a discourse analysis of how economic key concepts like money, growth, interest and fractional/full reserve banking are defined within different economic disciplines (a definition of these different disciplines is found in Appendix 1), before going ahead with the case studies of arguments.

1.3. Disposition

In chapter 2.1 the theoretical framework will be outlined and I will show how the analyses of this thesis are connected to questions about power, legitimacy and discourse.

In chapter 2.2 the methodological tool, consisting of a version of Political Discourse Analysis which focuses on argumentation and legitimisation, will be explained.

In chapter 3, Background, relevant concepts like money, growth, interest and Full Reserve Banking will be discussed.

In chapter 4 selected texts by prominent knowledge producers, especially within economics and ecological economics, will be analysed according to the methodological tool (chapter 2.2.) and the questions posed in 1.2 Research Question.

After the three in-depth analyses and four briefer analyses in chapter 4, the arguments and legitimisations by the different actors will be summarised and compared in chapter 5.

In chapter 6 there will be a concluding discussion about the findings, as well as the author’s personal reflections and suggested further research.
2. Theory and methods

In this chapter the theoretical framework for this thesis will be outlined and a methodological tool for conducting the analyses will be constructed.

2.1. Theory: Perspectives on Power: Legitimacy, Hegemony and Governmentality

This study of how monetary and banking policy is portrayed is related to ideas about political argumentations and legitimacy, and also to ideas about the power over the monetary system exercised by the state and by private institutions. By focusing on how political power is strategically created and maintained it becomes clear that the question of how monetary and banking policy is portrayed is not floating free in space but is concerned with a struggle over knowledge and power. Fairclough and Fairclough (2012) argue that power provides agents with reason for action, for reasons that are legitimate or not legitimate but perceived as legitimate as a consequence of systems power to naturalize values and beliefs that are not critically examined. Thus legitimisation can be seen be a strategy for achieving a form of ‘hegemony’ (a concept further discussed below). To critically analyse discourses that otherwise may naturalise values and beliefs can thus be seen as an act of challenging that power (Fairclough and Fairclough, 2012: 12).

A brief history of theories about power can be a useful background. In 1974 Lukes (referred to in Gunn, 2006) made a now classical proposal of a three-dimensional view on power: 1) decision-making in the political process and resulting interest conflicts; 2) the ability to control the political agenda; 3) socially structured and culturally patterned behaviour of groups and practices of institutions. These are three dimensions of how political power is executed. Another influential scholar is the Italian socialist Antonio Gramsci, who introduced the concept of ‘hegemony’. This concept is close to Luke’s third dimension of power as it focuses on how the world-view of the ruling class becomes understood as ‘common sense’ – a process where the existing political, economic and social structures become taken for granted by the mass of the people. To reach ‘cultural hegemony’ would be to achieve total mental and practical domination. Postmodernist’s (like Foucault and Dean) suggest that power in the liberal society should be understood not only as a top-down process, but at a micro level as the “conduct of conduct”, a sort of self-regulation, studied in the field of Governmentality. (Gunn, 2006)

The Foucauldian concept of governmentality is especially interesting for this study since it theorises about the role of knowledge production as a strategy for control and power over the masses. Knowledge produced, taught and practised at universities, schools as well as other institutions like hospitals, guide the behaviour of populations and provide a frame for what is seen as common sense or even ‘truth’. Hence, knowledge leads to a very efficient form of social
control since it enables individuals to govern themselves to act according to the dominant knowledge discourse. According to this theoretical approach, knowledge that is seen as legitimate – as information produced by professional researchers – is an expression of power shaping a worldview that makes people act in accordance with the aims of the ‘government’ (which does not have to be the state but any governing body). (Robbins, 2011: 70)

For Foucault, discourse was not only a conceptual generalization of conversation (which is often the everyday use of the word) but should rather be defined as “systems of thoughts composed of ideas, attitudes, courses of action, beliefs and practices that systematically construct the subjects and the worlds of which they speak.” (Lessa, 2006). Hook, analysing Foucault’s legacy, argues that the effect of discursive practices is to make it impossible to think outside the box and that those who do manage to think differently are by definition mad and beyond comprehension (Hook, 2001: 523). This perspective on discourse is very close to Gramsci’s concept of hegemony. If a dominant discourse is able to construct what we perceive as reality, discourse becomes very important to analyse in order to understand power relations.

An example of how the idea that knowledge discourse shape reality can be practically researched is found in ‘paradigm maintenance’ – a theoretical framework developed by Robert Wade (1996). Paradigm maintenance has been defined as “privileging knowledge and research that resonates with the dominant economic paradigm” (Enns, 2015: 63). In this research field it is studied how an institution (the International Monetary Fund is the main example in case studies) strategically can produce a knowledge discourse by supporting, promoting, funding and publishing research that support its ideological (neoliberal) worldview to inform policy recommendation and development programs. Enns (2015) observes that alternative, dissonant discourses can sometimes be allowed to make their voices heard within these institutions, but this should be understood as a public relations ploy to avoid criticism. Such alternative research will practically be marginalized and never integrated to the core activities of the institution.

The term “knowledge production” is used in many academic publications (like Starbuck, 2006, and Keim et al. 2014) but is seldom clearly defined. In this thesis, knowledge production refers to the production of research results by social scientists in their professional work as researchers at a university or another official institution conducting research. If certain results are shared by many researchers a sort of consensus can be reached about the correctness of the information. It is when such consensus in the scientific community is reached that certain knowledge can start to appear as ‘facts’ or ‘truth’. However, conflicting results – like the ones found in the texts analysed in this thesis – can be a breeding ground for academic debate that challenges such truth claims.

Because power, according to the approach used in this thesis, is executed via the discourses and knowledges that are seen as legitimate, it is important to study the discourses about monetary and banking policy expressed by knowledge producing actors like the Central Bank, the IMF and influential professors in Economics and Ecological Economics. I will refer to these knowledges as “portrayals of realities”. A hypothesis could be that if either of these knowledges is perceived as more legitimate then the others, it will gain power over which political policy is practised. In a sense, that knowledge could be argued to be ‘hegemonic’. Surely, some arguments are more recognised and hold a more dominant position than others. However, the existence of observed competing portrayals of realities – even within knowledge discourse – implies that no specific
discourse possess such an excluding power as a hegemony (or ‘discourse’ in the Foucauldian sense) over the mass of the people.

It is, however, clear that all these academic arguments have in common that they all discuss how to modify the existing monetary system – none of them question its existence in the first place. Graeber (2011), with his debt narrative, represents one of the most critical approaches to the monetary system – still he ends his book by stating that today we are not even able to imagine a society beyond debt. Graeber’s conclusion is much in line with Foucault’s discussion about madness/irrationality as the definition of thinking outside of dominant discourse.

A further question is of course how the dominant discourse and knowledge affect social practise on a micro level. Such a question could maybe be assessed by studying how monetary policy affects people’s willingness to take a loan, consumption-levels, etc. However, that would be another study than the present one. Here, we are going to focus on how political power over monetary and banking policy is legitimised and delegitimised.

So how can we define political legitimacy? Paletta (2011: 871) offers a clue: “While political legitimacy always concerns the coercive power of the state, the idea can be understood in two ways. Some theorists use the term political legitimacy to describe why a government has coercive authority. Others invoke political legitimacy to justify that coercive authority. The descriptive use of political legitimacy accounts for why people believe that a government has the right to impose sanctions on them. The justificatory use addresses a slightly different question. It attempts to account for why and whether governments actually are entitled to that right.” (Paletta, 2011:871)

Legitimisation as an act of argumentation obviously refers to the latter, justifying form of why an actor should be entitled to power. Here I am going to analyse arguments about why and whether the power structure within the monetary system is legitimate. This thesis is not concerned with the government in general, but with specific banking policies which delegates power to other institutions/businesses than the parliament. These policies may be seen as regulating some aspects of economic power relations between the government (or more specifically the Central bank), private banks and consumers/producers/citizens. These policies need to be seen as legitimate, if questioned they need to be legitimised. If legitimisation is not successful – the moral evaluation, authorisation, rationalisation and/or mythopoesis (which will be defined in the next section) used to justify the power does not gain consent, the policies at stake are questioned and demands for reform may be raised. It might be said that the act of delegitimising – at least if the de-legitimisation comes from an actor that is perceived as legitimate (like someone possessing the authority of a professor’s title) – moves political power from being naturalised as legitimate to a need for using legitimisation as a strategy to maintain power.

2.2. Method
A general method in History is Source Criticism. Jarrick & Söderberg (2003, p: 142-143) categorizes source criticism in terms of three criterions; the contemporary criterion (the description of what happened should be written close in time to the event described); the free from tendency criterion (the description should be written by someone who do not have a personal interest in making a biased description) and the free from dependency between sources criterion (a source should be primary and not be based on another source, preferably the researcher should find independent primary sources describing the same event). This could be seen as an important, even though sometimes difficult, basis for all research and even for all manner of debate.

Nevertheless, source criticism without a further method risks a short coming in terms of explaining what a text really discloses about social practise. Discourse Analysis is a broad approach in analysing language use/semiotics in social sciences. Discourse Analysis also provides an extra layer of Source Criticism by putting the text in its context, helping to understand the text as a linguistic representation and not simply as “lived reality”. With an even more critical definition of the word discourse, it could analogous be said that Critical Discourse Analysis helps the understanding of how a text can be a part of the shaping of what we perceive as lived reality.

In this thesis, the aim is not to explain the final truth about the monetary system and banking regulations, but rather to analyse how different actors portray reality in different (and similar) ways. There are many different methods within the field of Discourse Analysis, but for the topic chosen for this thesis, I have found Critical Discourse Analysis (CDA), and especially Political Discourse Analysis (PDA), to be the most useful. In the following section, PDA will be further discussed.

2.2.1. Political Discourse Analysis: Argumentation and Legitimisation

“Legitimization deserves special attention in political discourse because it is from this speech event that political leaders justify their political agenda to maintain or alter the direction of a whole nation […].” (Reyes, 2011: 783)

This thesis aims at understanding how different knowledge producing actors legitimise and de legitimise fractional reserve banking – and how they portray the power to create money and the relation between money and the economy. As Reyes expresses in the quote above, legitimisation is an important field of study since the act of legitimisation serves to create the public legitimacy which is the base for political change – or maintenance of status quo. I will continue the thesis by analysing how competing (and agreeing) knowledge discourses create arguments, narratives and definitions, and contrast them with each other to see how they legitimise or delegitimise the system they perceive. To be able to do this in a structured and logical way that leads to a comparison any researcher could duplicate, a methodological tool is needed to minimise the risk of making arbitrary judgements. In this thesis the method developed is thus used like a tool rather than just an approach. After reading into different methods to analyse text, I found a version of PDA to be especially useful. The version I will elaborate on
here is inspired by specific work by Fairclough and Fairclough (2012) and van Leeuwen (2007), further described below, but developed to fit the topic and aim for this thesis.

To better understand how different actors argue about the current banking system a method for identifying legitimation, presented by van Leeuwen (2007), is used. Van Leeuwen (referring to Berger and Luckmann, 1966) defines legitimation as something that explains and justifies the institutional tradition and order (van Leeuwen, 2007: 91). However, Fairclough and Fairclough (2012) criticises this view as being too broad, saying that not all language is legitimation and that legitimation point specifically to argument and not to explanation. This is because legitimation is only needed in relation to a controversial proposition whereas in an explanation, what is being explained is taken as a fact and thus do not need to be legitimised. Fairclough and Fairclough, therefore, instead suggest the following definition: “[…] legitimization is a type of argumentative justification, public justification, in which an action can be justified in terms of reasons and those reasons can themselves be justified as collectively accepted and recognized […]” (Ibid. : 112) This definition is in line with how legitimation is analysed in this thesis. In the argument analysis of this thesis I am going to look for how specific claims for action and perceived power relations are being legitimized by different actors.

Consequently, how can we recognize that legitimisation (and de-legitimisation) is taking place in an argument? Van Leeuwen (2007) identifies four categories (each with subcategories) of legitimation: authorization, moral evaluation, rationalisation and mythopoiesis. Modes of authorization can be referring to experts (like a professor of Economics), traditions, conformity, role models or custom and law. Moral evaluation is often done by referring to value systems (like a religion or ideology) and norms, but could also include use of value loaded words like “good” or “bad”. Moral evaluation can be very subtle, for instance through using an analogy where one activity is compared to another that gives a negative or positive association.

Rationalization can be done by referring to what would be the efficient way of reaching a goal, what works or what is successful. Rationalization can also be a generalisation that a certain action was performed as a means to a specific end. But rationalisation can also be done by simply referring to “how it is”, which is a way of simplifying and rationalising complex matters. To claim that something “is” in a certain way can in some contexts be done by referring to a natural law. However, the reference to a natural law has its own subcategory of legitimation, namely naturalisation. Naturalisation can be expressed as reference to unquestionable scientific facts (which also makes it close to authorisation) and by claiming that something is “natural”, “how it works in nature” – and hence consist of a body of unchanging moral principles regarded as a basis for all human conduct (this sort of naturalisation is close to moral evaluation). (Van Leeuwen, 2007)

Lack of deliberation, no consideration of possible options or presentation of other perspectives or definitions can be interpreted as a form of legitimation. I define this as a form of naturalisation. Silencing a debate is a powerful way of domination, so I will also try to analyse what is not being said. The unspoken is of course difficult to identify. But I will proceed, by contrasting what might be seen as “mainstream” and “alternative” discourses with each other and by asking critical questions to the texts.

Some forms of legitimisation can be argued to be close to manipulation, in cases where the legitimisation leads the reader to one-dimensional thinking or when it leaves out potentially
important information. This can in turn lead to suspicions that an actor is giving an argument not to express knowledge but to mislead the listeners or readers. But manipulation is intentional, and it is very difficult to prove psychological motives; it might as well be the question of an honest mistake (see a further discussion about manipulation in Fairclough and Fairclough, 2012: 94-97). Therefore – and also because the personal intentions of the actors whose texts are being analysed is not in focus of this study – the question of manipulation will not be further discussed in the analyses of this thesis.

The fourth category listed by van Leeuwen is called mythopoesis, defined as “legitimation conveyed through narratives whose outcomes reward legitimate actions and punish non-legitimate actions” (Van Leeuwen, 2007: 92). These are stories or references to history portraying how a certain development or action leads to progress/success or to negative consequences. The concept of Mythopoesis is especially interesting for a thesis in History, where the mode and form of the narrative itself play a crucial role. An example of mythopoesis is what Nyström (2015) calls “master narratives”. Nyström points out that with master narratives a well-known myth does not need to be totally pronounced to be recognized. As an example Nyström uses the phrase “She is your Juliette” as a way of saying that someone’s relationship does not seem to have a bright future. The quoted sentence is an expression that hints to a master narrative that common people are expected to be familiar with. This also applies to mythopoesis, which can be subtle. Many kinds of legitimations are not clearly outspoken but have to be searched for carefully in the construction and phrasing of arguments and text. This is true for mythopoesis as well as other forms of legitimisation. Legitimisations of different kinds can be created simply by using the word “is” instead of “could be/is often described as” etc., when for example defining money. In my analysis, I will look for if any reference of this kind is being made in the arguments. As I will argue in the analyses of selected texts from different knowledge producing actors, mythopoesis is frequently used in legitimisation of monetary policy.

In his paper Legitimation in Discourse and Communication, van Leeuwen uses the four categories to compare how compulsory schooling is legitimised and delegitimised in textbooks, information brochures and political arguments. By identifying how these four forms of legitimations occur in the texts he is able to observe and analyse how legitimisation is practised. The method is applicable to other argumentations as well, in this case to arguments about monetary and banking policy. But rather than just identifying the forms of legitimisations that are taking place, I would like to analyse what kind of perceived realities and wider arguments the legitimisations are a part of.

After several years of experimenting with different versions of Critical Discourse Analysis, Norman and Isabella Fairclough, in their book Political Discourse Analysis (2012), suggest a specific way of using CDA. Fairclough and Fairclough argue that political actions are based on deliberation that leads to decision: “Discourse provides reasons for action” (Fairclough and Fairclough, 2012: 95). The link to action is important for what will be discussed here, because texts motivate people to certain social practises. The proposition that texts should be understood as argumentative means that in a CDA representations in texts should not be questioned in isolation, but as part of an argument. What is interesting in Political Discourse Analysis is, in my view, not fore and most the linguistic style or the details of the legitimisations, but more so how the text as a whole shapes a portrayal of reality. If the argumentation and legitimation as a whole
is generally perceived as convincing, it becomes used as knowledge and hence becomes an expression of power that dominates which world view is seen as true.

Fairclough and Fairclough used the concept of arguments on political speeches and debates in the sense of discourse for action. The texts I will analyse here are not intended to be political but as textbooks and reports meant to be presentations of facts and as ‘objective’. But as I will show in the following chapters all these texts do use political argumentations – including mythopoesis and claims for political action. Since all the texts analysed in this thesis are descriptions of monetary policy and bank regulations – which are political fields that parliaments make decisions about – it is reasonable to see them as political arguments. These reports and textbooks influence and guide political decision-making. I will therefore use the method of Fairclough and Fairclough to summarize, analyse and compare the different texts according to the same principle.

On a practical level Fairclough and Fairclough (2012) suggest that the analysis can be accomplished in several steps. The first step would be to quote a relevant extract of the text, in order for the reader to see for herself/himself what has been said. In my case this would take up far too many pages from the thesis, so instead the reader is asked to read the referred sources if in doubt that the reconstruction is correctly done (of course reconstructing means interpreting and interpretation depends on the researcher and the ‘lenses’ through which the researcher sees the world). In the second step, the researcher makes a succinct reconstruction (including a figure and/or organisational map) of the argument into the following categories: circumstantial premises, goal premises, value premises and a claim for action (and if relevant also: means-goal premises, alternative options, addressing alternative options). I define these categories in the following way: The circumstantial premise is how the actor perceives the circumstances or conditions that create the basis for which alternative ways of actions are available. How the actor defines and uses the keywords (in this case growth, interest, money etc.) of the argumentation also creates a circumstantial premise on a deeper level. The goal premise is what the actor sees as the wanted outcome of an action – a good result. The value premise expresses which norms or morals the actor bases her/his argument on. The claim for action is a proposed measure/move/response that will lead to the goal. With the means-goal premises the actor explains how a certain action will lead to the goal. By taking up alternative options and addressing them, the actor is actively deliberating and using logical reasoning (often for the sake of rhetoric persuasion). I find this to be an efficient method to see what is going on in a text in a structured way, and to be able to treat and compare different texts according to the same standards.

After this categorization, Fairclough and Fairclough critically assess the argument by scrutinizing the rationality of the different parts (categories) by comparing them in relation to empirical evidence, other discourses and by asking critical questions. I see a potential problem with this part of their method since the researcher enters into the argumentation and take a stand. Fairclough and Fairclough argue, however, that critical analysts themselves also produce discourse and thus ask themselves in what way their discourse is better than the discourses they criticise. Their answer is that the researcher’s discourse has to be better in terms of quantity and quality of deliberation of the argument they make in order to claim superiority (Fairclough and Fairclough, 2012: 101). They argue that CDA cannot carry out a normative critique against the argument in the text, but can offer a principled way of evaluating if the argument does or does
not live up to the standard of a rational argument and ideal of communicative rationality (Ibid: 80). Nevertheless, I do not intend here like Fairclough and Fairclough (2012) to assess if the texts are rhetorically and rationally convincing or to make judgements about which of the arguments I analyse is more convincing, or more rational, than the other. Rather my aim is simply to identify if there are different discourses concerning monetary policy; and how they relate to each other, and to value systems of norms. I will analyse how different actors relate to specific questions like the relation between money, economy, and power over money creation and how the actors legitimise/delegitimise policies. But I will not determine and declare any one perspective as more convincing than the other.

How does van Leeuwen’s categories of legitimisations correspond to Fairclough and Fairclough’s categorisation of an argument? Can the categories fit together? Fairclough and Fairclough recognise van Leuween’s methodological contribution as important, but do not incorporate his categories into their own methodological toolbox. One of the aims of this thesis is to investigate how the concepts of argumentation and legitimisation in Political Discourse Analysis do fit together. Legitimation often enters into the circumstantial premise. Because the circumstantial premise partly answers the ‘why?’, which a legitimation also does. Legitimation can be done by telling the history or background of the situation in a way serving to create or engender “myths” (which might mean that it consists of lies). Legitimation can also enter into the circumstantial premise by authorization – for example ‘experts claim that this is the case (so therefore it is the case)’. The circumstantial premise, as well as a means-goal premise, can also be presented as a rationalization or naturalisation, claiming that the description is founded on some kind of truth, ‘the way things are’.

What Fairclough and Fairclough call the value premise also answers the ‘why?’ – by explaining why a certain action is morally justifiable. As in ‘we should do this because it would be cruel/against our religion/unfair/perverted not to do it’. The value premise connects well to what van Leeuwen categorises as moral evaluation in legitimisation. This is where the analysis can demonstrate something about the ideology behind the argument. The following Figure presents a map over how the different parts of the arguments and legitimisations are connected to each other – the questions of this thesis and how these parts create a portrayal of the monetary system:
Figure 1: Example – A Portrayal of the Monetary System Created Through an Argument and its Legitimisations.

The texts that will be analysed might express different value premises. This is interesting in itself, to observe in order to see how different discourses connect to different ideologies or schools of thought. In Fairclough and Fairclough’s method, the values and arguments expressed are evaluated in terms of if they contribute to a “good society” and to the well-being for its members (not in the sense of its factual result but in the sense of if the argument that it will create well-being is rationally convincing). I will try to avoid evaluating the moralities expressed in relation to my own personal norms, since it is to no interest for a wider audience. I assume that all moral evaluations in claims for actions aim at contributing to a better society. But weather a better society is reached through deregulating the market, increase workers power over the means of production or by protecting the eco-system is a question of political ideology. I do not think that this thesis is the right forum for discussing if any ideology is more correct than the other. By observing how a discourse connects to a certain value system the reader can judge for her-/himself if the discourse is in line with her/his personal moral norms.

A possible critique of this method is that it contains some of the elements of legitimisation in itself. First of all, the intervention of structuring an argument according to a pre-given template means that the researcher is rationalising a complex argument into something more simple and one-dimensional than it originally was. By exclusively focusing on certain parts of an argument
the researcher risks using the strategy of silencing (as discussed above). Rationalisation in this case unfortunately seems to be an unavoidable part of doing a succinct analysis and in comparing different arguments in a manner that treats all arguments equally within the given limited scale of this thesis. The use of a pre-given methodology can also be seen as a form of reference to authority – “I do this because a professor says it is how it should be done”. A comment to this objection is that forms of legitimisations are not just linguistic expressions to be criticised. It must also be understood that legitimisations in arguments are used exactly because they are publicly seen as just and righteous, often for good reasons. Research methods, to be accepted, must be perceived as legitimate as much or even more than political arguments. For example Critical Discourse Analysis carries a long tradition of academic review, revision and development. That is not to say that the method is perfect, but that it is valid enough to continue using and improving it – at least until the arguments have delegitimised the method enough to make it invalid.

A few words about how I did the selection of the seven texts used as case studies (this will be developed in the analyses chapter). The method can be described as a consequence of how I ever since I finished my bachelor thesis in 2009 have read as much as I have been able to find about how the monetary system works – from investigations and reports to documentaries, member magazines and discussions at all kinds of forums on the Internet (including Facebook groups and conspiracy sites). For this thesis I decided that my first criteria would be to select the texts produced within academia and research: focusing on knowledge production and not just public opinion. Secondly, I have tried to identify which of these knowledge producers are more influential and decided to pick texts that are used to guide official institutions like universities and authorities. Thirdly, I have put some effort into achieving a balance between selecting the texts produced by the most influential actors and texts that portray different realities and hence contradict each other – since it had intrigued me that different departments at the university teach very different models of the monetary system. Early in the writing process I decided to categorize the texts into what will be defined as mainstream economics and ecological economics and use samples from both these categories. Later on, by using the methodological tool just described, I realised that even within these two categories the portrayals of reality sometimes differ and occasionally have a lot in common with examples from the other category. It should also be mentioned that even if the knowledge producers chosen have different nationalities, the selection was done within a Swedish context of academic debate (which can maybe be noted by the – for Sweden typical – excess weight of Swedish and American cases). So, the seven texts chosen are assumed to have some power over shaping and/or challenging what is currently in Sweden seen as legitimate knowledge discourse about the monetary system.

In analysing the chosen texts, I will accordingly use my own version of Fairclough and Fairclough suggested method for CDA to summarize and structure how the actor is arguing about the questions asked in this thesis. Then I will analyse how legitimisation/de-legitimisation is used in the argument, using van Leeuwen’s categories. Finally, the argument and legitimation will be connected to represent the portrayal of reality as a whole in a figure/model. By doing this I will hopefully find out how the texts answer to the questions posed in the Research Question chapter.
3. Background

In this chapter I will describe the main academic debate within different fields of Economics, like Classical, Institutional and Ecological Economics, about how to define the economic key words like money, interest and growth that are analysed in this thesis. A brief definition of these academic disciplines is found in Appendix 1. To be able to follow the arguments made in the different analysed texts, a basic knowledge about the meaning of these words is a requisite. At first glance it might seem obvious what these words mean in an everyday use. However, as the analysis in this chapter will show, the meaning of these words is very complex and knowledge producers use them with meanings so different that the conflicting definitions becomes a key in shaping different knowledge discourses. To further put the analysis in its context and historical background, the academic debate about Full Reserve Banking will be described.

3.1. Academic Debate – How to Define Money, Interest and Growth

3.1.1. Money: Barter/Neutral, Credit, Debt or a Cultural Invention

Before describing the three theoretical approaches to money as barter, credit or debt as mentioned in the introduction, a few words should be said about the ‘nature’ of money. Strunz et al. (2015) (referring to Graeber, 2011, and Davies, 2002) argue that any theory of what money is will have troubles because money ‘is’ really ‘nothing’. Indeed, it seems more logical to speak of a ‘culture’ of money rather than a ‘nature’ – since money is a human made invention. The ‘culture’ of money becomes apparent when studying for instance local currency clubs. In my Bachelor thesis I studied about how local currency clubs experimented with different monetary designs that resulted in different practises (see Lundkvist, 2009). By analysing arguments regarding monetary policy it becomes clear that the arguments are about changing or maintaining how money is currently working. The definition of money chosen by an actor might be as much an interpretation of ‘reality’ as a sort of legitimisation for a wished future reality. That is to say, those different definitions of money can serve to legitimise and delegitimise different arguments.

It should also be mentioned that money is frequently not defined according to what it is but to what it does – it’s so called ‘functions’. The dominant description is to claim that money has the three functions of being a store of value, a medium of exchange and a measurer of value (used by Mankiw, 2015, as well as Daly and Farley, 2011, as so many others). However, this definition does not lack questioning. For example, Hornborg (2011: 64-65, referring to Gudeman, 2008) choses to define the three functions as ‘means’, ‘medium of exchange’ and ‘ends’. However, the following analysis will focus more on theories about what money is more than what it does.
A very frequently appearing idea in Economics (practically in any basic economics textbook, see for example Mankiw, 2015: 82, Samuelson, 1948, or Menger, 1892) is that money was invented to solve the so called ‘inconvenience of double demand’, which is assumed to have been present in ancient, pure barter economies. The expression ‘inconvenience of double demand’ refers to the idea that to be able to make an exchange two persons have to meet in a moment when they both simultaneously have something of an equal value that the other person needs and lacks something that the other person has in excess. If this did not happen, barter could not take place. According to this view, money was a logical invention introduced either by the market or by the state (depending on author) created to lubricate trade and to make the economy work smoother. Money is seen as a substitute for other commodities that could be used to settle payments, like stones, metals or seashells. The fact that there have occurred metal standards in history – when coins for example were made out of gold or coins could be exchanged to a fixed amount of gold – is often described as the logical path from barter to what is called a fiat money-based market. Fiat money is money which is only based on government decree and not on a resource value like that of a metal. Fiat money is represented as a logical step from commodity based currency to the modern monetary system where money is seen as neutral, since gold backing and other references to commodity have lost meaning in our current monetary system. Fiat money then is a perfect tool to achieve what is stated to be the ‘functions’ of money, defined as; a store of value, a medium of exchange and a measurer/yardstick of value.

According to classical economic theory money is neutral in the sense that the amount of money in circulation is not seen as affecting ‘real’ variables (like actual increased amount of production) but only nominal prices (see Mankiw, 2015: 131). If a bit too much money is created this creates some inflation, but this is mainly seen as affecting the number in which the price is stated but not so much more happens (hyper-inflation on the other hand is seen as costly and might in the short run erode a functioning market). The money supply is in other words not seen as very important in the long run.

The above ‘barter narrative’ is repeated in all kinds of texts about money, from government commission reports (see for example SOU 1998:14) to Central Bank reports (like the Riksbank report from 2015 that will be analysed in the Analyses chapter). The barter narrative is usually attributed to Adam Smith and his book The Wealth of Nations. Graeber (2011, Chapter 2) derives the barter narrative from a thought experience in the writings of Aristotle and argues that Adam Smith then picked up this idea in The Wealth of Nations. Beneš and Kumhof, on the other side, claims that Aristotle promoted an institutional state theory of money (2012: 14). Importantly, Graeber (2011), Aglietta (2002), Ingham (2002) and Beneš and Kumhof (2012), among others, criticises this theoretical narrative for just being a thought experiment but lacking empirical evidence. Graeber (2011) and Beneš and Kumhof (2012) refers to anthropological (like Humphrey, 1985) and historical research of societies with no money and claims that there was no ‘inconvenience of double demand’. Rather there were gift economies and the act of repaying was a social taboo since it indicated the wish to end the social relationship. Barter was only practised between strangers or enemies, or by people living in a monetary economy but lacking money (Graeber, 2011). Ingham emphasises that money can become a commodity, but only after it has first been constituted as an abstract account of value (Ingham, 2002: 126).
One example of how influential the barter narrative can be in policy making is found in the Swedish Governments Official Investigation 1998:14 “E-money – business law issues”\(^2\). The investigator was appointed to advice the government about possible needs to regulate the new phenomenon of e-money, which is not the same as a deposit which can be used via a debit/credit card or bank based Internet payments, but more like digital cash registered on a (sometimes anonymous) payment card or a hard disk without connection to a bank account. The investigator started the report by giving the conventional barter narrative (p. 24-26) and then argued that the evolvement of e-money can be seen a further development to increase the efficiency of the market. Therefore, according to the investigator, e-money should not be too heavily regulated, for example it should not be regulated which institutions should be allowed to issue e-money. The advice was that rules regarding minimum requirements, permits and inspections should be prepared in case the phenomenon of e-money would grow and create problems. This small case study is an example of how the barter narrative can be used to legitimize a deregulated monetary system where the issuance of traditional currency is strictly regulated, but other sorts of money lack the same sort of regulations.

A competing theoretical approach to money is the ‘credit’ school of thought. According to Aglietta (2002: 32-33), this view was supported by Keynes and most neo-Keynesians and is also more popular among historians and anthropologists. Advocates of the credit school claim that the separation between money and credit rests on a conceptual confusion. It is stressed that what money does is to create a possibility for later repayment by accepting money as a sort of contract. According to this view, the acceptance of stones, gold, banknotes or digital deposit transactions as ‘payment’ should not be interpreted as a form of barter but rather as a sort of contractual agreement – since you have given something away you now get the credit (money) to later ask someone for reimbursement. Money is seen as an ‘IOU’, that is; I Owe You. The credit narrative emphasises the role of the government who – if trusted and seen as legitimate – can take the role of the issuer of money. By doing this the government can be capable of substituting the interpersonal trust that is required in a truly local economy and hence create the very basis for a market since the users of money only need to trust the authority of the government to enforce contracts. Ingham (2002, p127-128) argues that, in fact, money was necessarily historically invented before the market, since it is the authorities who establish money who enables the impersonal exchange that we recognise as the market – as contrary to the barter narrative which claims that money was invented to make the already existing market work more efficiently.

Historical writings about governments inventing currencies in order to finance war and be able to collect tax more easily are referred to in the credit narrative. This is done to show that the function of a measure of value comes from a powerful authority and not from money having a commodity value. Legitimacy and trustworthiness of the issuer is seen as essential to whether or not people are going to use the currency, for example if a government cause hyper-inflation this might in turn cause the market to stop functioning. If people do not trust the authority of the issuer they might start substituting the governments’ currency for other kinds of money, a


24
phenomenon studied in the research field of currency substitution (see Guidotti & Rodríguez, 1992).

Graeber (2011) theorises on another theoretical explanation of money that can be called the ‘debt narrative’. Saiag, 2014, attributes an early debt perspective on money, which was intertwined with the credit theory, to Commons (2005 [1934]) and Graeber, 2011, attributes it to Mitchell-Innes (1913). Graeber’s debt narrative focuses on other history writings than the barter and credit narratives when explaining the origin of money. An argument by the advocates of the debt theory is that the first historical records observing the practise of measuring trade value appears in slave markets, ransoms for prisoners of war, soldiers labour markets, bride fees and other violent practises where the value of the controlled bodies was used as a standardised measurement of value (which again is often seen as a basic function of money). It is also argued that money today occurs when a private bank creates debt. It appears as a logical development that money, having this violent and oppressive origin, is today created when a bank “indebts a borrower” (and not simply “give a loan”) – because putting a person in debt is also seen as a way of dominating and valuing another human being. To use Saiag’s (2014) summary of Greaber’s theory; money “substitutes for physical violence” (Saiag, 2014: 570, referring to a book chapter by Graeber from 2009). The debt narrative with its reference to historical violence obviously delegitimises the monetary system.

So, what is really the difference between the credit and the debt definition of money? One intrinsic difference in the use of the words ‘credit’ and ‘debt’ is the different related connotations. Credit has a ‘positive’ connotation referring to someone trustworthy who has a high credibility. Credit also indicates that a person has some wealth which he/she can pledge to get a loan. The word debt on the contrary, is connected to indebtedness, and if one is not able to pay back – one will be in risk of ‘debt bondage’ (becoming a serf) in relation to the creditor. Debt also has synonyms like guilt, blame and culpability. So, there is obviously a semantic and moral difference between the two definitions. Whereas the credit narrative can be used to legitimise the monetary system – emphasising that it could not exists without the trust from the public – the debt narrative delegitimises the monetary system by pointing to authority not being achieved by trust but by violence or fear. But there is also a practical difference in that some credit theorists (like Ingham, 2002) assumes that the government still controls money whereas the debt perspective claims that private issuance dominates and that this private control over money leads to problems (Beneš and Kumhof, 2012).

Considering the core of these narratives, a hypothesis could be made that the different narratives will be found to be used to legitimise different arguments; that the debt narrative is used to delegitimise the monetary system in general and hence legitimise radical reform; that the barter narrative is used to naturalise and hence legitimise current monetary policy/status quo or deregulation; and that the credit narrative is used to legitimise governments power over money creation or to claim that whoever has the power to issue money has the power because that institution is seen as legitimate. Beneš and Kumhof (2012) claim that the barter narrative has

---

3 See Aglietta and also Ingham’s chapters in “The Future of Money”, 2002, as well as Graeber, 2011, for a fuller history and theory of the credit narrative of money.
ever since Smith been used to legitimise private issuance and control of money. But as the case studies of text books and reports soon will show, I have not been able to find a clear, strategic line between how knowledge producing actors use these definitions/narratives of money in their arguments. It could rather be said that most of them use a, sometimes confusing, mix of narratives and definitions.

To sum up, the barter narrative defines money as “a neutral/efficient”, the credit narrative defines money as “legitimate trust” and the debt narrative define money as “violent exercise of power”. The focus of this thesis lies on how monetary and banking policy is legitimised; this focus maybe more in line with the credit theories field of study than the other theories, since it is the credit narrative that emphasises the important role of legitimacy in shaping the monetary system. This can be interpreted as an inherent bias in the methodology. But to agree with the argument that legitimacy is important in policy making is not the same as saying that money is inherently credit. The theoretical focus on power, hegemony and governmentality is on the other hand in line with the debt narrative’s focus on the monetary system as a tool for domination. Again, focusing on power is not the same as agreeing that money is inherently debt. The analyses in this thesis do not aim at defining which money theory is correct, but rather to clarify the core of each theory to see how they are similar or contradict each other in different aspects of how they portray the monetary system and banking policy.

3.1.2. Interest

A similar moral dichotomy of defining interest in ‘positive’ or ‘negative’ terms can be found when comparing how (Neo-) Classical Economics and Ecological Economics use the word. Within Macroeconomics (see for example Mankiw and Taylor, 2008) interest is normally defined according to an equation showing that the cost of a loan minus inflation and minus the risk involved in the investment equals the interest. Interest is portrayed as a fair cost for the service provided to prematurely consume while the saver has to delay his or her consumption (this is what is referred to as time preference). Interest is also described as creating efficiency by transferring hoarded money to profitable investments in need of finance. Liberal values like market efficiency and the individual’s right to make contracts seem to be in focus of this definition.

Within Ecological Economics on the other hand, interest is not seen as much as ‘the rent of money’ but often as ‘usury’ – lending at fixed or excessive interest (see for example Rogers, 2000, and Visser & Macintosh, 1998). According to Visser and Macintosh the critique of usury was expressed by conventional economists like Smith and Keynes as well as more environmentally concerned scholars like Kennedy and Gesell. Visser and Macintosh further note that interest can be seen as something that moves money from being ‘neutral’ to becoming an end in itself, because it allows people to ‘make money on money’. Visser and Macintosh identify several arguments against charging interest, amongst other that it is a mechanism of inequitable redistribution of wealth. And also that interest violates what they call ‘intergenerational equity’ that having to pay for consuming today rather than tomorrow is a way of discounting the future, which is to say that future consumption is worth less than today’s consumption. Also, the critique of interest is, according to Visser and Macintosh, often based on a comparison between market economy and “natural economy”: It is claimed that the market economy has compound, exponential interest – growing over planetary boundaries. Whereas nature only has simple
interest – growing at a fixed rate until a steady state or death is reached. Reference to ecologist moral evaluation is present in the critique of interest that Visser and Maintosh examine.

Opposing views on the fairness of charging interest is also based on different conceptions of whether or not banks are intermediaries, which means that they intermediate (are the middlemen of) peoples savings to customers who want to take a loan. Intermediation is often taken for granted in Macroeconomic assumptions. However, recent academic debate is going on about whether or not this is really the case (See Dyson et al. (2010), Bank of England (2014), Daly (2013). An argument against the description of banks as intermediaries is that since banks can use transaction/current account money – that is money which is in circulation and not “saved” – and other financial innovations to finance loans they are in fact not transforming savings to investments but creating new money ‘out of nothing’. Seeing it in this way, interest is not compensation to the saver but rather a seigniorage (which can be defined as ‘money issuer’s tax’) privilege of banks. This question will be thoroughly discussed in the case studies.

3.1.3. Growth

“The Organization for Economic Co-operation and Development (OECD) has recently proclaimed that ‘[f]or a good portion of the 20th century there was an implicit assumption that economic growth was synonymous with progress: an assumption that a growing Gross Domestic Product (GDP) meant life must be getting better’ (OECD, 2008, cover text)[…] Environmental historian McNeill (2000: 236) has argued that the ‘overarching priority of economic growth was easily the most important idea of the twentieth century’.” (Schmelzer, 2015)

Even though, as the quoted quotes implicate, the growth paradigm has held an almost hegemonic position in the world in the 20th century, clashing definitions of growth is also apparent in academic debates. Within Macroeconomics growth is normally defined as the change in Gross Domestic Product (GDP, defined as “the standard measure of the value of final goods and services produced by a country during a period minus the value of imports” by the OECD4) from one time period to another.

Economic growth is usually associated with technological progress and innovation. For a society suffering from unemployment, poverty, hunger and a low standard of living an increased production level can help solving many of the mentioned problems. Growth can be a means to reach important political goals, like higher material welfare. Growth normally increases the tax revenues for a state, since production usually is taxed – often in the form of tax on labour wages. So, for most governments, a decreased growth level compels cuts in planned public spending and investments.

---

In 1972 Meadows et al. presented an influential critique of the growth paradigm in “The Limits to Growth”. It was a forecast where they simulated different scenarios of exponential industrial and population growth with finite resource supplies. Two of the scenarios predicted overshoot and collapse of the global system by the mid to latter part of the 21st century, while a third scenario resulted in a stabilized world. In 2007 Dennis L. Meadows concluded (in Constanza, 2007, chapter 20) that the forecasts are very close to the aggregated research summarised by the UN’s Intergovernmental Panel on Climate Change, IPCC. However, in 1972 the report was widely dismissed within Economics and critiqued for having a weak foundation of data, incorrect simulations and ignoring that technological development could fix the identified problems (for a review of the critique see Hall & Day, 2009).

The view of growth potentially leading socio-environmental collapse led Daly (See Daly, 1999) to coin the term “uneconomic growth”, referring to growth as an uneconomic management of scarce resources. Instead of growth Daly advocates that a sustainable economic scale is identified and that the economy enters into a steady state – this can be reached via de-growth/downsizing or growth depending on whether or not the economy overshoots’ planetary boundaries or not at the starting point. However, Daly’s position is still abnormal within mainstream economics and political debate.

Another critique of growth concerns the actual measurement of growth (the change in GDP as already explained). In the report “Mis-measuring Our Lives: Why GDP Doesn’t Add Up” (2010) Stiglitz et al. argue that the current use of GDP to monitor our economic performance and social progress is an inadequate yardstick of overall well-being and that the calculations that governments base their policies on must include measurements of quality of life, sustainable development and environment. Several other indexes have been proposed by different researchers to better measure development, for example; Human Development Index (HDI) which composite statistic of life expectancy, education, and income per capita; or Happy Planet Index (HPI) where different measurements of human well-being are weighted by the nation’s ecological footprint, to get an idea about the environmental efficiency of a countries efforts to support human welfare.

There has also been important academic debate about ‘green growth’. Environmental economists have argued that we should continue to have growth but make it ‘green’, which means that production becomes more resource-efficient and cleaner due to environmental policy (see Hallegatte, 2011). The idea is to decouple the link between growth and use of materials and energy (Wijkman and Rockström, 2011: 152). Ecological economists (like Paech, 2012) however, dismiss that argument, claiming that there will be so called rebound-effects: as long as we have any sort of growth we get more money to spend on environmentally harming goods. As material goods gets cheaper (for example due to increased efficiency in the production process) we might well produce more in physical weight and hence consume more natural resources – but as the value drops it is not counted as contributing to GDP growth

5 http://hdr.und.org/en/content/human-development-index-hdi
6 http://www.happyplanetindex.org/
3.2. Fractional Reserve Banking and the Proposal for Full Reserve Banking

For a fuller history of the FRB-proposal, see Phillips (1994). Beneš and Kumhof (2012) summarises the story saying that the proposal “was first formulated in the United Kingdom by the 1921 Nobel Prize winner in chemistry, Frederick Soddy, in Soddy (1926). Professor Frank Knight of the University of Chicago picked up the idea almost immediately, in Knight (1927).” (Beneš and Kumhof, 2012: 17). Many other Chicago economists (later also Milton Friedman), who formed the Chicago School of Economics, agreed with the FRB-proposal. So did Yale economist Irving Fisher who became a prominent advocate throughout his career and is maybe the one economist who made the plan most famous. Though they all were supporters of laissez-faire, they also believed that money should be a sort of basic infrastructure provided by the state. The Chicago plan was a way of establishing that monopoly. The reform would mean a major change in the structure of banking, but in the light of the then current 1930s economic depression, such a change was perceived as desirable. (Beneš and Kumhof, 2012)

The FRB-proposal claims that a Banking Policy that do not restrict banks from lending out deposits made by savers (currently this policy seems to be applied in most – at least Western or IMF-program affected – countries) allows banks to create new money – because the debt created circulates as money in its own right. This challenges the government’s monopoly on issuing currency. If a bank would keep 100 % of the savers deposits as reserves, they could not make any loans unless they founded the loans in another way than by using the deposit accounts.

There are two types of bank requirements that should not be confused; capital requirements and reserve requirements. Capital requirements usually refer to the amount of owner capital, usually equity shares, which a bank must hold. For example the new Basel III rules state (among other rules regarding capital requirement) that a single loan should not be bigger than 25 % of a bank’s own capital base, unless it has some kind of other guarantee, like a state guarantee – in that case capital requirements do not apply. The capital requirements apply to each loan individually, but also to all loans aggregated. This is a way to limit a bank’s ability to make too big and risky loans and it puts a certain restrain on the money creating ability of banks.  

A reserve requirement, on the other hand, regulates how much of the depositors money can be used to finance loans and how much must be held as reserves. Reserve requirements differ from country to country. In Sweden it is currently 0 %. This does not mean that banks in practise do not hold reserves, since banks wish to have money liquid when people make withdrawals. It does not either mean that reserves can be negative – meaning that banks would lend out more money than they have financed by deposits, bonds and other assets: on the contrary, such a practise is

---

7 Ilve Steiber, Compliance and Risk Manager, and Maria Flock-Åhlander, Economy Manager, at Ekobanken, 2016, Interview 22 April.
controlled and prohibited by accountancy legislation. However, some (like the Bank of England, 2014) argue, that since a new loan is both a debt to the bank, but also becomes a deposit in someone’s account – loans are self-financed.

It is often said that a fractional reserve banking system allows banks to become “intermediaries” – transforming savings to investments/debt. However, there is some debate about how important the role of savings really is in the current system. If banks can use complex, high-risk financial products and money on current accounts – for example created as a new loan to pay for a house – to finance new debt it seems questionable to describe banks as intermediaries in the classical sense. This doubt have led some (like Daly, 2013, previously mentioned and who will be analysed in detail in the Analyses Chapter) to argue that banks act more like “alchemists” than intermediaries.

There are slightly different FRB suggestions based on different ideas about how these rules/requirements influence banks possibilities to create new money. Hence, there are different proposals of how the rules should be changed in order to control/stop the money-creating power of private banks. The main FRB proposal is, however, that banks should be divided into pure savings banks and pure loaning banks and the loaning banks should only be financed by Central Bank issued money (Beneš and Kumhof, 2012). Or slightly different; that transaction/current account money should be separated from lending activities and not be allowed to be counted into what banks can use to finance loans, instead only fixed (for a pre-agreed period of time) savings at investment accounts could be intermediated by the banks to create loans (Dyson et al. 2012).

FRB-proponents have identified several possible advantages with the reform like; no more bank-runs (masses of people wishing to withdraw their deposits in fear of bankruptcy) or tax financed bank guarantees; greater macroeconomic stability; possibility to lower taxes; reduced debts levels; and increased growth or to enable planned de-growth without having an economic crisis.

In 2012, in light of the 2008 financial crisis, the International Monetary Fund (IMF) published a debate report by Beneš and Kumhof (which will be analysed in-depth in the Analyses Chapter). The report strongly criticised, on the grounds of archaeologist and economist studies, the way mainstream economists describe money creation and investigated the consequences of implementing the Chicago Plan (FRB). Their test results showed that all the positive advantages proposed by Fisher and others (mentioned above, except planned de-growth) seemed correct. Their conclusion was that FRB should be implemented. The publication provoked a lot of academic and public debate.

In 2014 the Bank of England published a report, in a quarterly bulletin, where they explained that money creation occurs pretty much as explained by Beneš and Kumhof and not as in most Macroeconomic textbooks, but they did not suggest a FRB reform. In 2015, a report

---

8 Sources are: Loan PM Template of Ekobanken, www.ekobanken.se, used during internship spring 2015. Ilve Steiber, Compliance and Risk Manager, and Maria Flock-Åhlander, Economy Manager at Ekobanken. 2015. Interview 07 April. For more sources see also en.wikipedia.org/wiki/Reserve_requirement and en.wikipedia.org/wiki/Capital_requirement , 2015-10-22
(Sigurjónsson, 2015) commissioned by the prime minister of Iceland suggested that Iceland should proceed with a FRB reform. The Think tanks New Economic Foundation and Positive Money currently campaign for such a reform in countries like England, the US and Sweden.

According to Beneš and Kumhof the main reason why FRB was never adopted by law was “due to strong resistance from the banking industry” (2012:19). However, there are other practical problems with FRB that have nothing to do with lobbying. Dittmer (2015) explains that the main reason why the reform was never implemented was because it is very difficult to regulate money creation – because what money is and how it is created quickly shifts. Indeed, the existence of different versions of FRB-proposals illustrates the great difficulty to identify the exact mechanisms that give private banks money creating power. ‘Near money’ – that is exchangeable assets of different kinds – can suddenly be used more and more just like ‘normal’ money (whatever that is). This can be illustrated by when, in the year 1904, the Swedish Riksbank got monopoly on printing and coining Swedish currency. Notes and coins were probably, at that time, what the legislators saw as money and private banks were prohibited from issuing their own currencies. But since then more and more of the money in circulation have become bank account deposits. If the parliament would decide to monopolise bank account deposits, it is not unlikely that private initiatives would invent other forms of e-money, local, crypto or virtual currencies and other un-heard of innovations, that soon would be used to store and measure value and to exchange goods and services.

3.2.1. Ecologist Arguments for FRB

Fractional reserve banking has been criticised on ecologist grounds and FRB has been embraced as an environmentalist proposal by some. Dobson (2007) explains that green ideology is the parliamentarian oriented version of the more decentralised bottom-up ecologist ideology. Hence, more ecologist oriented thinkers like Greco (2004) prefer local currencies over the centralised money suggested in the FRB proposal. Fractional reserve banking has been criticised on green grounds by Wijkman and Rockström (2012), Korten (2010), Mellor (2010) and Schlaug (2012), just to mention a few.

The most prominent, and according to Dittmer (2015: 10) the first in English speaking academia, to pick up the ideas of Frederick Soddy from an ecological/green perspective was professor Herman Daly in 1980. Daly’s perspective will be analysed in-depth in the Analysis chapter.

Dittmer (2015) meritoriously identifies three main green arguments in favour of FRB, and also problematizes the arguments. To understand the arguments, the background discussion on how basic economist words are defined by ecological economist can be used. The first argument is that to achieve a physically non-growing economy (because the current economy is said to have overshoot planetary boundaries), the money supply should also be held constant and that could be accomplished by FRB, because government controls the money supply. The second argument is

that the issuer of money decides what gets done in the economy. Because banks decide who gets a loan to which investment, they have the power to strongly influence the development in society in a way that favours short term return on investments over what would be beneficial for the general public, in long term. If the state would create new money they could spend it on a transition to a sustainable society (like train rails instead of motor ways). The third argument is that fractional reserve banking sets a growth imperative (enforces growth). This is said to be because debts have to be repaid with interest. Since new money is created as debt, debts + interest mean that more money than what have initially been created must be paid to the banks. Some green thinkers suggest that this means that to be able to pay back debt + interest the economy must grow, otherwise the system collapses. This also means that more and more money is redistributed from productive sectors to the owners of the banks.

To summarize Dittmer’s critique of these arguments: Today monetary policy is practised by controlling interest levels instead of money creation. If FRB would be introduced, interest rates would be set by the market and that would probably mean highly raised interest-levels which would burden the debtors. This increase is especially likely considering that FRB aims at moving the cost of the risks of bankruptcy from the state to the individual banks who defaults. So, the finance market might in fact turn very volatile. Ecological economists are, as mentioned, generally negative to interest and have according to Dittmer not explained how to deal with this problem. Secondly, the idea about how new money is invested is criticised with two arguments: whether or not a government decides to spend its money on motorways or railways is not a question of if the money comes from production taxes or money creation (sometimes called “inflation tax”), but on the ethical values of the government. Also, if the government would decide to aim for de-growth or steady state, as ecological economists propose, not much new money would be created – and so the state would not get any inflation tax to fund these sustainable investments. Regarding the question of the existence of a “growth imperative” in a debt and interest based monetary system, little and non-satisfactory research has been done. (Dittmer, 2015)

A similar (but shorter and less detailed) discussion about how and if fractional reserve banking has a negative environmental impact is also found in Huber and Robertson (2000). Jackson and Victor (2015) have developed a new method to analyse if credit money creates a growth imperative and finds no such evidence. They explain that interest payments turn out to be transfers between sectors and do not lie idle. Interest payments do not restrict nor enhance demand for consumption in themselves and interest-based debt money does not need to be prohibited to reach a non-growing resilient economy, according to these findings. However, Jackson and Victor (ibid) find other good arguments for a FRB reform, like decreased debt-levels and greater socioeconomic equality.

A defence to Dittmer’s critique of the environmentalist arguments in favour of FRB is still to be seen.
4. Analyses: How Fractional Reserve Banking is Legitimised and Delegitimised by Knowledge Producing Actors

There are many existing debates about money and fractional reserve banking expressed by actors. Debates can be found by analysing online forums, campaign websites like Positive Money (a movement proposing bank reform), and magazines produced by cooperative banks, community economists, etcetera. The scope of this thesis clearly needs delimitation. The selection of texts for analysis and rationale for this is explained in the method chapter.

Since the theoretical approach is focusing on power – how knowledge creates political legitimacy – it seems reasonable to analyse texts produced by some of the apparently most powerful knowledge producing institutions when it comes to economic policymaking. University departments of Economics play an important role here. They educate both researchers and professionals like bankers, as well as advisers and policymakers and set the basis for how economic terms are defined and understood. Central banks and other financial institutions also play an important role in creating knowledge and discourses about the monetary and banking system. Ecological Economics as well as Anthropology and Archaeology are other academic disciplines that occasionally challenge Economic ‘truths’ and these cases create an interesting point of comparison.

An intention has been to delimit the study to a Swedish context. However, that has proven to be very difficult since economic knowledge production is globalised. For example, Swedish Economy students mainly read American course literature. When it comes to actors in Sweden who express criticism against fractional reserve banking, it is obvious that they are very influenced by English reports – for example Wijkman and Rockström, who will be analysed in this thesis, clearly refer to Dyson et al. (2012) and the English Positive Money campaign. When it comes to Swedish education in Ecological Economics the Swedish professor Peter Söderbaum is an important name. However, Söderbaum does not discuss the role of money and monetary systems in his textbook nor his papers. However, US professor in Ecological Economics Herman Daly is internationally well-known for his work on the subject, and therefore I see no problem in using Daly’s text as a basis for analysis. So, even if a geographical delimitation of the source material has not been feasible there might still be some traces of a Swedish perspective in this thesis.

Due to space restrictions I have chosen to pursue three in-depth analyses and four briefer analyses:

The textbook Macroeconomics by N. Gregory Mankiw is a global bestseller, widely used in first year Economic courses at universities around the world. The knowledge expressed in this book is here used to represent the mainstream Economics discourse. In the Macroeconomics 2008
European Edition it is stated that the government – via the Central Bank, has the power over Monetary Policy and hence over money. Following this line, the modes and formulations of how a Central Bank describes monetary policy and money is probably important in the process of knowledge and legitimacy creation around the monetary system. However the problem remains, which Central Bank and which particular texts should be analysed? The author of this thesis is only familiar with two documents where a Central Bank explicitly discusses how money is created and the role of monetary and banking policy. It is a report by the Bank of England and another report by the Swedish Riksbank. Both reports will be analysed since they interestingly offer quite different portrayals of reality. Whereas the Bank of England report was a one-time statement, only discussing the question of how money is created, the Swedish report is an annual publication. The Swedish Riksbank report is meant to be used as textbook about the monetary and banking system in general and will be analysed more thoroughly than the Bank of England report. Some of the more controversial arguments in the report from the Bank of England will be used as a point of comparison when analysing arguments given by other actors.

The third text analysed is a text written by US professor of Ecological Economics Herman Daly. Although Ecological Economics is being taught at several universities, it is in no way an obligatory course for economists in general nor has its own department at most Universities. So, this text is not chosen because of an assumption of its great influence on forming discourse or political power. It is of interest for other reasons. One reason is that this is a thesis in Global Environmental History and the Ecological Economist arguments show why the debate about monetary policy is a relevant topic for Environmental Humanities. Another reason is that it offers perspectives on the question at stake that might challenge many of the assumptions/definitions made by the other actors. It might be seen as an alternative discourse that tries to de-legitimise a potentially hegemonic view. This is not to argue that the conventional Economics discourse does possess a hegemonic position or that Daly manages to deconstruct this conventional discourse. It is a mere claim that comparing a mainstream argument with an argument that represents another portrayal of reality opens up for more critical reflections and helps to avoid naturalisation and silencing (as defined in Methods chapter).

The forth text, that will be analysed in a more summarising manner, is a report from 2012 by the IMF-researchers archaeologist Jaromír Beneš and economist Michael Kumhof, titled “The Chicago Plan Revisited”. It is clearly stated in the report that “This Working Paper should not be reported as representing the views of the IMF.”(Beneš and Kumhof, 2012: 1), so the researchers should be understood as responsible for the conclusions. However, the fact that the report was written by employees of the International Monetary Fund and that the IMF agreed to print it, contributed to create legitimacy by authorisation of its content. As a consequence, the reform-proposal for a Full-Reserve Banking System that the authors advocated gained plenty public attention and inspired scholar debate. It should be mentioned that only after this IMF publication the Swedish and English Central Banks as well as the new edition of Mankiw’s Macroeconomics started to clearly explain – and legitimise – how fractional reserve banking works.10

10 I have compared all the three in-depth analysed texts with earlier editions to see if the actors have changed their arguments. The most radical change has taken place in the Riksbank report, where a discussion about what money really is and who creates and controls it was included in 2013. In Mankiw’s textbook there was a description of
After analysing the mentioned Bank of England report I will move on to analysing two quite different examples of how more environmentally focused Swedish knowledge producing actors depict the monetary system and surrounding policy. The report by Wijkman and Rockström was produced for the Club of Rome, who unlike the other examples is a think tank and not an official institution. The Club of Rome has the mission to “promote understanding of the global challenges facing humanity and to propose solutions through scientific analysis, communication and advocacy” (http://www.clubofrome.org/about-us/). However, Johan Rockström is a prominent and internationally recognised professor of environmental sciences and Head of Stockholm Resilience Centre. Since this is the only publication where he directly focuses on the monetary system I have decided to add this text to the selected cases.

The last text that will be analysed is an anthology chapter written by Hornborg, professor of Human ecology at the University of Lund, for the Swedish Environmental Protection Agency. This text has been chosen because it lives up to the stated criteria of representing academic knowledge production; produced for an official institution; and representing a version of ecological economic discourse about the monetary system. It is also interesting because Hornborg uses quite a different language, actively avoiding what he defines as economic discourse, and reaches quite different conclusions compared to the other six texts.

As with all case study research, this method is very limited in what conclusions can be drawn. The portrayals of reality expressed by these actors do not necessarily represent the worldview of all practitioners in the same field or discipline. Despite having attempted to find the most influential and prominent knowledge producers within this field they cannot be said to represent anyone other than themselves in that specific historical moment.

I will now proceed as explained in the Methods chapter.


“The Swedish Financial Market 2015” is a report published by the Swedish Riksbank (Central bank). According to Lisa Marklund, the editor, the report describes the different tasks and functions of the Swedish financial system and aims to “[…] contribute to an increased knowledge about the financial system and its functions.” (2015:5). It is also stated that the report fractional and full reserve banking in earlier editions but in resent editions the (unchanged) portrayal was given a more salient place (in an earlier chapter) in the textbook. In Daly and Farley’s case I can observe no change. None of the knowledge producers seem to have changed perspective, but it is obvious that the discussion about how the monetary system works have come up on the agenda of academic debate after Graeber (2011) and Benes and Kumhof’s (2012) arguments were published.

\(^{11}\) Translation from Swedish. Original title “Den svenska finansmarknaden 2015”.

35
is meant to be used as an encyclopedia and a textbook. The purpose of this report is not to give policy advice, even though it discusses politics (specifically monetary policy and banking legislation).

I will here focus on how the actor Riksbanken argues with regards to what the monetary system is and how it is legitimised or delegitimised. In the first section I will start by doing a succinct reconstruction of the argument. The reconstruction itself is an analysis which reveals the political argumentation taking place in the text. To reconstruct the text as an argument quotes are reorganised to answer the questions in this thesis. I have avoided making excessive comments on the arguments articulated by the Riksbank. Instead, my own analysis of how this argument legitimises and delegitimises current regulations and the power of certain actors will be separated to the section “Legitimations in the text”. This is done in order to make it clear what the Riksbank expresses in the report and what is my own analysis of the argument (according to the categories of legitimations defined in the Method Chapter).

4.1.1. A Succinct Reconstruction of the Argument

Claim for action – what regulations are proposed?
There is no outspoken claim for a need of new or changed regulations in this text. Rather, the text describes (legitimises) why current regulations, including Basel III, are needed and working well.12

Goal premise – what is the desired outcome, the goal for regulation?
According to their website, the goal for the Riksbank is a 2 % inflation target.13 This is meant to maintain price stability and predictability in order to “foster a safe and efficient payment system.” (Sveriges riksbank, 2015:10). It is said that Riksbanken’s monetary policy operational framework is crucial for Riksbanken, to reach its goal to maintain price stability. “Because of this, it is designed so that Riksbanken can control the interest rate and thereby influence growth and inflation.”. (Ibid: 24) I interpret the goal to maintain price stability as something like a means-goal for the Riksbank, to reach the higher, value based, goal of high growth and low unemployment rates (further discussion about this under the Section Value premise).

Value premise – moral evaluation/overarching goal
This is not supposed to be a value loaded document, so this question demands some analysis of what is said between the lines. Some values are quite clearly expressed, like that growth and efficiency is desirable whilst inflation and unemployment is undesirable. For example the text reads:

12 However, it is important to keep in mind that this specific Riksbank report does not aim at discussing policy change. If there would have been a report where the Riksbank’s had the task of giving advice to policymakers about how to reform the monetary system they might have made other claims for action.

13 http://www.riksbank.se/sv/Penningpolitik/Inflation/Inflationsmalet/
“The businesses in the financial sector provide services that are important for the economy to function and grow, and in this way support the basic functions of the financial system. If the financial businesses have problems, as during a financial crisis […] this can in turn lead to increased unemployment rates.” (Ibid: 11)

In order to clarify why I interpret this quote as an expression of moral evaluation I will now do a short analysis of the sentences. Note that the words chosen to describe the role of banks: “provide”/”support” and “important” have positive connotation in comparison to similar words with negative connotations like “impose” and “fatal”. Note also that the words “function and grow” are written in pair, which gives an impression that “function” goes hand in hand with “grow”. The quote as a whole implies that without banks who stimulate growth we get problems, crisis and unemployment.

Banks are in the report generally portrayed as helping people and business, and banks are said to provide opportunities. However, it is also stated in the text that it is important to maintain trust in banks and that therefore regulations are said to be needed. Banks are portrayed on the one hand as specialists/experts and as intermediaries who help households manage their savings in an efficient way (ibid: 8) and also as necessary to make the national economy function well (ibid: 71). But on the other hand banks are also portrayed as vulnerable to economic fluctuations and to be doing risky business (ibid: 71). The moral evaluation is that regulations are helpful, and because banks are necessary there are regulations that help banks continue their good work.

Means-goal premise – How does the regulation contribute to the goal?
It is clear in this report that regulations of private banks are seen as a way of reaching the goal to maintain price stability, and in turn growth. Regulations of the banking sector are motivated several times in the report. Clear rules and special regulations are said to contribute to a well working market with good price formation, to increase the trust of the general public in the banks, to increase banks access to finance, to create resilience against problems and to reduce the risk of financial crisis (ibid: 7 and 71-72). This focus on monetary trust created by the government relates to the credit theory of money explained in the Background chapter.

The Riksbank’s monetary policy operational framework is also described as efficient. The Riksbank is said to control the level of interest rates – which affects growth and inflation – by using tools like the overnight interest rate, intraday credit and central bank certificates (ibid: 24-25). It is also described in the text how a decrease in interest rate levels “increases businesses wish to invest at the same time as the households get increased incentives to consume” and this in turn is said to contribute to increased inflation (in order to avoid deflation presumably) (ibid: 26).

Circumstantial premise – how does the actor describe money, growth, interest, regulations, the relation between money and economy and power over money creation/fractional reserve banking?
In this report the Riksbank has a section with the title “To Create Money” where money is defined as an asset generally accepted as: payment method, store of value and measure of value (ibid: 64).

To answer the question of who controls money creation, it is first said that the Riksbank creates money by borrowing to commercial banks (ibid:65). It is emphasised that taking out notes or coins from a cash machine does not increase the money supply, only that the share of money held in cash increases (ibid: 66). Then, it is said that if people prefer to hold cash instead of deposits in bank accounts, this limits money creation because banks cannot use cash in people’s pockets to finance loans (ibid:68). Secondly, the Riksbank states that “In Sweden the money supply mainly increases because of private banks lending.” (ibid: 67). That is a way of describing fractional reserve banking, without using that specific term. With a figure it is visualised how this money creating process occurs. It shows that even though banks need savings—“finance”—to be able to make a loan/debt, the new loan is not the same money as the original savings money, but new money (which in turn can be used as finance to create another loan). On page 68, the limitations to the money creating power of banks is listed as; limitation of credit worthy borrowers; that if the commercial banks are seen as taking excessive credit risks they may lose their investors and finance; that the banks want to keep a part of people’s savings as liquid assets (reserves) so people can make withdrawals; and that banks are imposed capital reserve requirements (ibid: 68).

The Riksbank describes interest markets by saying that they help investors find interesting investment opportunities and that the money markets’ most important function is to facilitate investment of excess and mediate short-term finance. Another important role of the money market is to facilitate liquidity management for the actors in the economy (ibid: 16-18). As already mentioned, the text explains how interest rates affects people’s wish to save or consume (ibid: 26). This reasoning about the role of interest is in line with a Classical Economist view on interest.

Something which is never explicitly explained in the text, but which emerges as a fuzzy impression when all parts are put together, is the relation between interest and money creation. The most important monetary policy instrument for the Riksbank is to control the repo rate, in order to affect the average interest rate of commercial banks (ibid:24). It is said that this affects peoples incentive to save or borrow (ibid: 26). It is also said that banks create money by giving out loans/creating debt (ibid: 67). So, what emerges when we put the parts together is that the Riksbank influence the money supply by influencing the price of new money – since the interest on debt is the same as the price of new money. But for some reason this is not clearly stated when the Riksbank deals with how it affects the money supply.

Growth is not defined and only mentioned twice in this report. It is mentioned in the text that the goal for the Riksbank is to maintain price stability and that this affects growth and employment rates (ibid: 13 and 24). I interpret growth as the actual underlying aim of the goal of price stability. In other words, the aim of maintaining price stability is to achieve high growth and low unemployment rates. I make this assumption on the basis that these are the goals normally expressed in mainstream politics as well as in economics education in general (as discussed in the Background chapter).
The relation between money and the economy in general (management of resources) is not much discussed in the text. However, this question is indirectly answered in the goal premise, which expresses that the goal for the Riksbank is price stability, to maintain the most important function of money which is to be a store of value, in order to have a functioning market and in turn have growth. I interpret this as that the Riksbank arguing that there is an important relation between money and the economy in general and that money should be designed to help the economy grow.

On their website the Riksbank develops their view on the relation between price levels and the use of natural resources. There, they claim that the price helps to signal if a resource is scarce or if it is abound, but inflation complicates our understanding of this signalling role of money. Price stability is, in other words, important for a correct resource management.14

Regulations are mentioned in positive terms, as previously described under the question “Claim for action?”. Another example of how regulations are treated positively in the text is the following quote (This quote will be further discussed as a de-legitimisation of private banks with reference to moral evaluation, in the next section.):

“To prevent financial crises special regulations have been introduced for businesses that manage financial activities and provides financial infrastructure. The purpose of the regulations is to secure that the financial businesses have sufficient resilience to avoid bankruptcy and can handle the risks that arise in their activities. Another motive is to protect consumers’ assets and interests against the financial businesses.” (ibid: 11)

I interpret this quote as the Riksbank stating that the special regulations of the banking sector are described as beneficial for the banks, the customers and for the whole society which is depending on the financial infrastructure.

The report starts by stating that “The financial system has three main functions: to transform saving to financing, to handle risks and to make it possible to carry through payments in an efficient way” (ibid: 6). This description is the broad circumstantial premise explaining what the financial system is. The quote can also be seen as a naturalisation and moral evaluation, since the word “is” offers no other option, and the word “efficient” is used as an overarching goal which relates to a liberal system of norms (Färm, 2007). Legitimisations in the text will now be analysed in the next section.

4.1.2. Legitimisations in the Text

Authorization, moral evaluation, rationalisation and naturalisation

14 http://www.riksbank.se/sv/Penningpolitik/Inflation/Varfor-inflationsmal/
In the “The Swedish Financial Market 2015” report commercial banks are depicted as the main creators of money. Commercial banks are legitimised in their role as a powerful actor in the economy with reference to authority. For example Riksbanken claims that “credit giving institutes (like banks) are unlike business and households specialists in estimating credit risks” (Sveriges riksbank, 2015: 8). This could be seen as another way of saying that banks are experts and therefore their power over the monetary system is more legitimate than that of other non-experts.

Authorisation can also be done by reference to law. As an example, in one information box in the report, central rules within the financial sector are described in terms of what the purposes of the laws are; there are no hints about potential problems with the regulations or that there might be a disobedience to the rules. The information-square begins by stating that “The financial businesses provide services that have great importance for the society and for the customers of the businesses. Therefore there are many rules that they have to follow.”(ibid:92). This can be critically interpreted as an authorisation and also a rationalisation that the regulations are successful – a legitimisation of current regulations, the policy making institutions and the banks.

The role of commercial banks is also legitimised through what van Leeuwen defines as moral evaluation, by depicting banks with positively value-loaded words. For example they are frequently described as actors who “help” and “create possibilities”. For example as in the following sentences: “Fund companies are examples of intermediaries who help households manage their savings in an efficient way” (ibid: 8); “At the same time these markets [the interest and stock market] help investors find interesting investment opportunities.”(ibid: 16). Another example is the quote: “A financial intermediary is a specialised middleman that all parts can benefit from.” (ibid: 6). By describing the creators of money – private banks – in a positive manner, the Riksbank legitimises them as trustworthy. These sorts of legitimisations build up an argument that helps to explain why no reform is needed.

When describing current regulations of banks the report shifts to a more negatively value-loaded vocabulary when describing banks. In an earlier mentioned quote, regulations are described as necessary in order to stop banks from taking on risks that may lead them to bankruptcy and hence risk consumer’s savings (ibid: 11). By saying that banks need to be regulated in order to not go bankrupt, banks are delegitimised as experts. In other parts of the report a conflicting portrayal is given, where the Riksbank state that banks are experts at handling risk and that their activities result in benefits for all involved parties. In this discussion the message conveyed is that the positive description of banks is only true if banks are regulated through rules and special laws. As a result of these opposing descriptions, the Riksbank gives the impression that current regulations are necessary to maintain a well working system, but that no further regulations or radical changes are needed. In other words, the argument in whole can be seen as legitimising the status quo.

The use of the word ‘intermediaries’ will be analysed in all case studies because it is a word that is used very differently by different actors – and which creates different portrayals of what banks are. The term ‘intermediaries’ refer to the idea that banks are middlemen who transform savings capital into financial investments. In the “Swedish Financial Market 2015” report it is described how banks create new money when they create a debt/give out a loan. The money being lent out is described as new money and not the same money as the savings, which gives the impression
that the saved money is actually not transformed into investment. However at the same time the savings are described as a necessary requirement for the bank to be able to create the new loan. The actual, precise relation between savings and loans is not entirely clear in this description, which makes the concept of intermediation confusing in this report.

In 2014 the Bank of England released a similar report (analysed in a later section). In the Bank of England report, the description of the money creating process led the Bank of England to state that “One common misconception is that banks act simply as intermediaries, lending out the deposits that savers place with them.” (Bank of England, 2014: 2). The fact that the Swedish Riksbank describes the money creating process in a very similar way as the Bank of England, but still continues to refer to banks as “intermediaries” can be seen as an oxymoron. How can it be argued that banks transform savings into investments, when the investment is said to be new money and the saving is kept accessible to the saver? However, there is a difference in how the Swedish and the English central banks describe this process. While the Bank of England report gives the reader the impression that savings play no role in finance – debt is simply self-financed since the new debt immediately appears as a deposit and can then be used to balance a new loan and so on – the Riksbank explains that banks need to finance the loans they give out and that they usually finance mortgages by giving out bonds (Riksbanken, 2015: 78). Whether this discrepancy in explanations is simply a result of discourse or of actual different banking traditions in England compared to Sweden remains unanswered.

An important moral evaluation in the text is the links between the Riksbank’s ideas about growth, efficiency, unemployment and crisis, although these ideas are not expressed very clearly. The bank regulations and monetary policy discussed are motivated as important in order to avoid crisis and unemployment and achieve growth and efficiency. But why growth and efficiency is good and why unemployment is bad and what a “crisis” consist of is not explained (though bankruptcy and unemployment are mentioned). These moral values are guiding the whole argument but seem to be taken for granted as common sense. I argue that these moral evaluations are legitimised by naturalisation or silencing, because they are clearly very important but not discussed or justified.

The “Swedish Financial Market 2015” report does not clearly derive from any specific ideological set of norms (for a further discussion about the core values on political ideologies see for example Färm, 2007). The repeated advocacy for efficient markets is linked to liberal values. The concern with unemployment and emphasis on state regulations is linked to socialist values. The argumentation in favour of maintaining the status quo might, although somewhat far reached, be seen as conservative. No references to ecologist values are present in the text. If we consider the political and historical context of this report, it was written by a somewhat independent governmental institution in a year beginning with a liberal and conservative government but with an election resulting in a shift to a social democratic and green party minority government. In a country were historically the Social Democratic Workers Party has been in power throughout the majority of the 20th century. With this history in mind, it is perhaps not surprising that moral evaluations with reference to different ideologies are naturalised as common sense in this text.

The “Swedish Financial Market 2015” report does, as explained at the beginning of this chapter, aim to be something like a textbook. It is not unusual for texts of this genre to be full of
rationalisations. This is probably done to make it easier for a novice to understand the information. Unfortunately, another effect is that the lack of problematisation tends to be close to legitimisation of the practises described. Examples of rationalisations are: “Riksbanken’s monetary policy operational framework is crucial for Riksbanken to reach its goal to maintain price stability. Because of this it is designed so that Riksbanken can control the interest rate and thereby influence growth and inflation.” (ibid: 24). Some critical question to this rationalisation could be: Does the Riksbank really fully control the interest rate? Is the relation between the goal, the operational framework and the actions of the Riksbank really as straight forward and independent of external factors as described? Another example of rationalisations are the sentences: “Money is an asset which is generally accepted as […]” (ibid: 64); as well as the already mentioned quote “The financial system has three main functions […]” (ibid:6). The formulations of the sentences are assertive; “is” and “has”, and does not hint at the existence of any opposing theories regarding how money/the financial market could be understood. This assertiveness makes this description sound like a naturalisation of this specific interpretation of money/the financial market.

Mythopoesis
Legitimisation by mythopoesis (narratives whose outcomes reward legitimate actions and punish non-legitimate actions) deserves its own section since narratives play an important role in shaping peoples understanding of the state of the world, and also because narratives are frequently used when describing the complex history and process of money creation.

The most obvious narrative in this report is about the history of money. It reads:

“The most fundamental role of money is that as payment method. Previously everything from livestock to precious metals were used in this purpose but today we see notes, coins and deposits at bank accounts as money. […] During a long period the issuer of money needed to have a special asset, often gold, that the public could exchange their money to. This was necessary for the public to trust the value of the money. […] Today the gold reserve is a smaller part of the assets of the Riksbank and the bigger part is instead foreign currency […]. The value of Swedish money today only rests on the trust of the public. That they are usable depends on that we in the Swedish society have agreed to ascribe a value to them and have trust in that money store this value. This requires that we have confidence in that the inflation goal is reached – that is, that inflation does not erode the value of money. This makes it possible to use notes, coins and deposits to pay goods and services and repay debts.” (ibid: 64-65)

This narrative is linked to what was earlier defined as the ‘credit theory of money’. The development of money is depicted as a success story and the role of trust and legitimacy created by a governmental institution is emphasised. However, the first part about using goods as payment refers more to the ‘barter theory of money’. The phrase “we in the Swedish society have agreed to ascribe value to them and have trust in that money store value” is here interpreted as a legitimisation with reference to values like democracy, consensus and nationalism. The story
ends with the outcome that the current monetary policy operation framework practised by the Riksbank rewards society with an efficient, functioning market. An underlying alternative outcome to this success story could be interpreted as – if stretching the argument a bit – that without the current monetary policy that the general public has democratically agreed on, we would risk going back to an inefficient barter economy. In this version of the narrative the Riksbank plays the role of the efficient guarantor of the trust needed to maintain the market economy.

Versions of this narrative of the efficiency and superiority of the current system and the great difficulties inherent in a potential alternative, decentralised system is also found in some other parts of the text. An example:

“If every saver had to look for and analyse appropriate business projects to invest in, the transformation of savings to investments would not work efficiently. It would be as inefficient if every single business would have to find an amount of potential investors for their projects. The financial sector therefore has a central role by contributing to that savings are canalised to investments as efficiently as possible.” (ibid: 6)

Here the Riksbank claims that the financial sector is creating efficiency for savers as well as businesses in need of a loan. The outcome of not having powerful, regulated banks would, according to this narrative, be that savers and lenders would be “punished” with in-efficient markets. This narrative serves to legitimise the current monetary system as well-functioning.

The reference to political legitimacy of the current system is also present in this short narrative:

“The stability of the financial system is built on the trust of the public and the markets. If this [the trust] decreases the banks can get difficulties to conduct their business and then the system is in danger. The basic requisite for the trust is sound institutes and well-functioning markets.” (ibid: 10)

Here the Riksbank explains that public legitimacy – which comes from stability, trustworthy institutions and well-functioning markets – is a built in necessity for the financial system. The use of the words “in danger” can give the impression that the current system is worthy rescue operations in the same way as people suffering from an emergency catastrophe. This is a clear example of the credit narrative of money, where the Riksbank emphasises that the monetary system needs trust to function.

A further short narrative can be found in the legitimations of current regulations:

“Basel III has been designed as a consequence of the global financial crisis 2007-2009 and aims to further sharpen the rules, and thereby strengthen the banks abilities to resist losses and liquidity stress, and thus decrease the probability of financial crisis.” (:72)

According to this mythopoesis, regulations are rewarding for the private banks as well as society as a whole. Enhanced rules are strengthening the banks. The regulations are depicted as a natural consequence of the events during the years 2007-2009. This narrative naturalises the
policymaking process by giving the impression that there were no other options and the narrative also makes a positive moral evaluation about the effects of increased regulations.

**Argument and legitimisations by the Riksbank (2015):**

- **Claim for action:**
  Current regulations work well, so maintain status quo.

- **Means goal:**
  Current Policy maintains trust and low inflation which is essential for an efficient market.

- **Goal:**
  2% inflation.

- **Value premise:**
  Growth and efficiency is good, unemployment is bad.

- **Circumstances:**
  Banks create money and Riksbanken sets the price of money. The system needs trust and maintaining the inflation goal creates trust. Regulations of banks are necessary to avoid financial crisis. Banks help people to allocate their savings and financing investments.

- **Legitimisations:**
  Banks are experts but too risk-prone. Regulations result in benefits for all. Swedish society have agreed to ascribe value to money and trust that it stores value. Riksbanken protects trust via inflation goal. Without trust in banks we would not have an efficient market and growth. Basel III decreases the risk of crisis.

Figure 2: Riksbanken’s Argument and Legitimisation of Monetary Policy


The book “Macroeconomics 9th edition” is a textbook that is widely used at universities in many countries. The book is an international top best seller in its category, which the sales statistics at Amazon.com confirm. This was the only textbook used in the 15 credits course in Basic Micro and Macro Theory A at the Department of Economics at Uppsala University during the autumn semester 2015. It was also the only textbook (the European Edition 2008) used when I took the course in the year 2008. It is written by N. Gregory Mankiw, professor of economics at Harvard University (together with Taylor in the 2008 European Edition).

---

The European 2008 Edition gives the impression that most monetary systems in different countries are alike and describes mainly examples from the EMU zone and the UK. However, the Ninth Edition (“International Edition, Not for sale in the USA or Canada”) mainly describes the US monetary system. The analysis in this thesis focuses on the 2015 Edition’s chapter 4 “The Monetary System: What It Is and How It Works”, but also briefly on chapters 1, 5, 8, 9, 20 and other chapters that are relevant to answer specific questions.

Just like in the previous chapter, I will use the tools of Political Discourse Analysis defined in the Method Chapter to summarise the political argument about monetary policy that is made in this book. I will then analyse the argument by discussing the legitimisations and de-legitimisations present in the text.

4.2.1. A Succinct Reconstruction of the Argument

Claim for action – what regulations are proposed?
It is stated various times in the book Macroeconomics that the government can rely on the market and its ‘invisible hand’\(^\text{16}\) and, hence, preferably should not regulate (Makiw, 2015, for example on pages 254, 586). But the book is also full of policy advice. Some of the policy advice is directed towards a decreased role of the government. For example, governments are suggested to do fiscal reforms that stop governments from creating hyper-inflation by printing too much new money and instead cut spending and use tax (or debt) to finance remaining costs. Interwar Germany is used as an example of bad governmental practices (ibid: 128). Governments are also encouraged to increase private saving rates by cutting taxes (ibid: 253). Policy should be used to ‘level the playing field’, for example by creating laws against fraud and ‘malfeasance’ (that is, wrongdoing – especially by a public official), and the state should also demand accountancy reports to decrease asymmetric information so that all actors on the market are well informed (ibid: 586-587).

Some policies that interfere more with the free market are suggested by Mankiw. For example Mankiw explains that bank deposit insurance create confidence in the banking system and prevents bank runs (that is, masses of people withdrawing their deposits in fear of bankruptcy), (p 100). However, Mankiw also warns that deposit insurance may create so called moral hazard problems (because banks then have incentives to take on extensive risk when the government have insured that they will bail them out) and as a consequence the government must regulate the risk that the commercial banks are allowed to take (ibid: 598).

Goal premise – what is the desired outcome, the goal for regulation?

\(^{16}\) A metaphor invented by Adam Smith to describe how individuals acting according to self-interest result in social benefits for society as a whole. In the context of Mankiw’s book the expression is used to argue that the market works best if individuals are free to act as they wish and are not regulated by policy-makers.
The overarching goal of the market economy system according to “Macroeconomics” is economic growth. It is clearly stated that the financial system should foster economic growth by directing savings to investments (ibid: 582, 586).

Value premise – what is the moral evaluation or reference to system of norms?
To have ever higher material welfare – which reflects on other aspects of quality of life, like life expectancy – is what is depicted as progress (ibid: 246-247). The capitalist open market economy is assumed to achieve growth and in turn increased material welfare. Classical economic theory is used in this book to explain economic phenomenon, with reference to thinkers/economists like David Hume, Adam Smith and Milton Friedman (chap 3-7). Marx is also mentioned, but as someone whose theory has been proven wrong (ibid: 246).

Means-goal premise – How does the regulation contribute to the goal?
Economic growth should be promoted, (ibid: 251) by the means of efficient financial markets, (ibid: 587, 254) encouraging the right level of savings (ibid: 253) and a monetary policy directed to no/low inflation (ibid: 132).

It is assumed by Mankiw that the free market naturally reaches balance, so the government should not disrupt the market by increasing the money supply excessively or charge excessive tax. The government should, instead, cut spending and only regulate the financial market in order to make it more efficient by creating confidence and decrease problems like asymmetric information and moral hazard. Well-functioning legal institutions are claimed to be an important factor for economic growth (ibid: 587).

Circumstantial premise – how does the actor describe money, growth, interest, regulations, the relation between money and economy and power over money creation/fractional reserve banking?
How regulations are viewed has already been discussed above. Growth (discussed in Macroeconomics’ chapter 8-9) is describes as improving living standards, advancement, to take people out of poverty. Focus is put on how to promote growth.

Mankiw states that governments control the money supply by printing money (ibid: 86). Monetary policy – the control over the money supply – is delegated from government to the central bank (in the US called The Federal Reserve or shortly the Fed). The Fed controls the money supply mainly by open market operations – to purchase and sell government bonds (ibid: 86), and also in the role of lender of last resort – being the bank of the banks (ibid: 96).

“[…] the central bank can create money out of thin air by, in effect, printing it. (Or, more realistically in our electronic era, it creates a bookkeeping entry for itself that represents those monetary units.)” (ibid: 595)

This quote implicates that central banks have a sort of alchemistic power (creating something out of thin air) over money production. But then, Mankiw states that this is a simplification because commercial banks multiply base money when they act as intermediaries and lend deposits (ibid: 88-89). By how much the central bank’s base money is multiplied by banks depends, according to Mankiw, on the reserve-deposit ratio (the fraction of deposits banks hold in reserves) and the currency-deposit ratio (the amount of cash or bank deposits people hold) (ibid: 94). The
argument in the “Macroeconomics” book is that the Fed can influence the reserve-deposit ratio by regulating reserve requirements, but Mankiw goes on adding that such regulations are rare and not efficient since banks often hold more reserves than required. Another way of influencing the reserve-deposit ratio according to the “Macroeconomics” book is by paying interest on reserves, which is said to be unusual but happened during the 2008 crisis (ibid: 96).

In the 9th Edition of Macroeconomics, Mankiw includes a discussion about Full Reserve Banking in the chapter about money. However, this is not to discuss the FRB reform suggestion posed by Friedman, Fisher and other scholars who are frequently referred to in this textbook. Instead, it is used as an imaginary example of an economy with no financial intermediation – no professional making of loans. Mankiw claims that if banks were to hold 100% of the deposits as reserves they would be prohibited from creating debt. Then Fractional Reserve Banking is introduced to explain how financial intermediation enables banks to create money by multiplying base money when making loans (ibid: 89-91).

Each chapter in “Macroeconomics” explains different economic phenomenon like money, inflation and growth. The wider theory, or worldview, of what money is and does and how it is created is not expressed very clearly. But by adding together individual chapters and how the different parts connect to each other a wider theory emerges. As stated above the main emphasis is on growth and the argument can be summarised as follows: too much new money causes inflation (and an inefficient market) which lowers the interest level (the real interest is lower if inflation eats up the nominal interest and also interests are assumed to be set by supply and demand) which lower the incentives to save, lower savings levels creates less investment capital and hence less new production (growth). So as a result, a monetary policy that maintains no or low inflation is important to achieve growth.

4.2.2. Legitimisations in the Text

Authorization, moral evaluation, rationalisation and naturalisation

On a general level Mankiw uses legitimisation by authorisation very frequently in the text—especially by reference to what other economists have said and also to econometric models. Theories about how the economy works are explained with mathematical models and with reference to important economists. But how the theories correspond to empirical observations is seldom discussed, unless there is a major mainstream debate within (neo-) classical economics on the same topic. So, the use of econometrics can be seen as a sort of naturalisation of the argument made since arguments are “proved” by mathematics (which can be understood as a sort of natural law) and not much discussed. It is also emphasised in the introduction that macroeconomics is a (social) science comparable to natural science (ibid:1), which can be understood as an authorisation and naturalisation of the discipline in general – that economics should be understood as dealing more with natural law than with human culture.

Comment: compare with previous analysis of the Swedish Riksbank, who claims to use this instrument a lot.
Just like in the Riksbank report the functions of money is rationalized in Mankiw’s argument as three undiscussable characters (store of value, unit of account and medium of exchange). Rationalisation and silencing is frequent used throughout the textbook by omitting any other approach than the mainstream (neo-) classical, liberal theory.

Mankiw admits that he is making a rationalisation after having described the Central Bank as fully controlling the money supply. It is said to be “highly simplified” but “a good starting point for understanding what determines the supply of money” (ibid: 88). Yet, after having described how commercial banks create most money, there is still no discussion in the chapter 18 about the responsibilities of banks in the money creating process. There is however, a short discussion in which it is described that the Fed does not fully control the MS. The 1930s crisis is used as a case study and it is explained that more than 9000 banks suspended operations and that the bank failures reduced public confidence in the banking system. In connection with the 1930s crises Mankiw goes on discussing in what was the Fed was to blame for the crisis. He concludes the discussion by stating that the federal deposit insurance has prevented large fluctuations. But there is no mention regarding any internal problem within banks that contributed to the crisis and that would justify any regulations of the banks. This argument, to blame the Fed but not private banks, can be seen as a rationalisation, but also a moral evaluation – that governmental but not private institutions should be held responsible for their actions. To only discuss the guilt of the Fed and not private banks serves to delegitimise the power of the Fed/government. The negative attitude to governmental power and positive attitude to private companies expressed in this delegitimisation is in line with a liberal tradition of thought (Färm, 2007).

The proposal of Full Reserve Banking can be said to be delegitimised by mythopoesis, rationalisation and silencing. FRB is discussed as an imaginary state with no functioning market for investments, which is quite different from how for example Fisher (whose other theories are described and discussed in the Macroeconomics book) suggests that a FRB-system should be designed (see Background chapter). Mankiw mentions in Macroeconomics that the Fed can change the reserve requirements, but this is dismissed as an unimportant tool and the theory of the advantages of a 100 % requirement is not mentioned.

**Mythopoesis**

Mythopoesis is frequently used in this textbook, mainly in two ways: in case studies that are used to empirically prove a point; and by making an argument by asking the reader to imagine a world different from what is said to be present reality, and then ascribe negative characteristics to the assumed imagination. Two examples of each kind of mythopoesis, the case studies and the imaginations, will be further examined below.

For example, to prove a point made – that barter economies are inefficient and that commodity money evolves naturally – there is a case study about “Money in a POW Camp”. The narrative

---

18 On page 593, 16 chapters later, there is a discussion about “Who should be blamed for the financial crisis of 2008-2009?” only then are investment banks mentioned in a list of seven other potentially culpable actors like home-buyers, the Fed and regulators.
goes that the Nazi’s prisoners of war received some things in prison, but the distribution of goods did not match the prisoners’ preferences. Barter proved to be inconvenient since it required the double coincidence of wants. Eventually, cigarettes became the established currency used as store of value, unit of account and medium of exchange. (Mankiw, 2015: 83)

To illustrate how commodity money naturally can evolve into fiat money there is a case study about “Money and Social Conventions on the Islands of Yap”. The narrative is that big stones where used for exchange. However, it was so heavy to carry these stones around, so eventually people started to claim the stones without physically moving them which is interpreted as something in between commodity and fiat money. (ibid: 84)

Mankiw does not frequently use empirical examples, but instead merely asks the reader to imagine. An example:

“To better understand the functions of money, try to imagine a world without it: a barter economy. In such a world, trade requires the double coincidence of wants – the unlikely happenstance that two people each having a good that the other wants at the right time and place to make an exchange. A barter economy permits only simple transactions.”(ibid: 82)

This narrative very clearly undermines non-monetary exchange, by saying that it is in practice barely possible, and rewards the monetary economy as efficient and with other words legitimate. According to this narrative money is a natural development, because without it people would probably sit around and starve, unless able to be completely self-sufficient at all times.

Mankiw also asks the reader to imagine how money evolved to its more modern forms:

“To understand how the evolution from commodity money to fiat money takes place, imagine an economy in which people carry around bags of gold. […] The government might first get involved in the monetary system to help people reduce transaction costs. […] The next step is for the government to accept gold from the public in exchange for gold certificates – pieces of paper that can be redeemed for a certain quantity of gold. […] Finally, the gold backing becomes irrelevant. If no one ever bothers to redeem the bills for gold, no one cares if the option is abandoned. […] Notice that in the end the use of money in exchange is a social convention: everyone values fiat money because they expect everyone else to value it.” (ibid: 84)

Mankiw explains that money has developed from impractical commodity money into currency without backing to overcome inefficiency. It is interesting to note that in this barter narrative, the government steps in to “help” achieve a more efficient market. This can be interpreted as a legitimisation of the idea that the government should and is controlling the money supply. This can be compared to other historical narratives which emphasises that money was created by governments/kings in order to be able to more easily collect parts of farmers’ harvest as tax. In Mankiw’s narrative people are rewarded and monetary development is a success story, whereas the latter narrative paints a less optimistic picture.
4.3. Analysis of the Textbook *Ecological Economics* (Daly and Farley, 2011)

4.3.1. A Succinct Reconstruction of the Argument

**Claim for action – what regulations are proposed?**
Full Reserve banking is the reform that the *Ecological Economics* textbook suggests in relation to the monetary system (Daly and Farley, 2011:296).

**Goal premise – what is the desired outcome, the goal for regulation?**
To achieve steady state economics is the goal of reforming the monetary system for Daly and Farley. Steady state economics in this context means to reach an optimal economic scale that serves human welfare and still is within ecological boundaries. (ibid: 55)

**Value premise – moral evaluation/overarching goal**
Ecologism or rather green ideology (the more parliamentarian version of ecologism) appears to be the value system referred to. There is a clear focus in the Ecological Economics textbook on respecting ecological boundaries and reducing environmental destruction.

**Means-goal premise – How does the regulation/action contribute to the goal?**
FRB means that private banks cannot create new money. If they lend money the saver cannot access the money meanwhile it is lent out. So, according to Daly and Farley FRB is not a way to stop banks from intermediating savings to loans (like Mankiw claims), only that the act of lending is actual intermediation of savings and not creation of new money. (Ibid: 292) FRB is seen as a reform to reach steady state/optimal scale economics because the new monetary system is assumed to not charge interest for making new money. Daly and Farley argue that commercial banks’ act of charging interest on loans (new money) enforces growth. Charging interest is at the very core of fractional reserve banking and interest is seen as evading natural law because it does not have a limit.

Three reforms to make the economic system follow the laws of thermodynamics are suggested: firstly, gradually raise reserve requirements; secondly, governments create new money by spending (following a price level index); and thirdly, have freely fluctuating currency exchange rates. (Ibid: 294)

**Circumstantial premise – how does the actor describe money, growth, interest, regulations, the relation between money and the economy, and power over money creation/fractional reserve banking?**
Growth is defined as an “increase in throughput, which is the flow of natural resources from the environment, through the economy, and back to the environment as waste”. The authors call for an end to growth. Sustainable development is defined as development without growth. Limits to growth do not imply limits to development according to Daly and Farley. (Ibid: 6)

Daly and Farley argue that money is the problem – because it evades the laws of thermodynamics – unlike matter and energy it can be created out of nothing and destroyed into nothing and some people can live on interest. (Ibid: 295)

“Money functions as a medium of exchange, a unit of account and a store of value. […] A moments reflection shows how tremendously inefficient barter is and consequently how efficient money is. In barter there must be a coincidence of wants.”
(Ibid:285)

Here Ecological Economics is using what was in the Background chapter defined as the barter narrative and the reference to the idea of a need for “double coincidence of wants”. So, Daly and Farley are in this part making the same definition and historical/’common sense’ reference as Mankiw (2015) when describing money. Though, even if money is said to be efficient, ‘efficiency’ is not seen as a value-free, objective criterion of good by Daly and Farley. Whether or not policy makers should strive for efficiency depends on what the effect of increasing efficiency would be. Efficiency is not an end to itself. (Ibid: 4) But in this specific part, where they define money as efficient, there is no discussion as to whether monetary efficiency would be undesirable.
Daly and Farley are also talking about the inconvenience of barter when discussing the concept of “virtual wealth” (defined as “the aggregate value that the community voluntarily abstains from holding in order to hold money instead”). They explain that to avoid the inconvenience of barter people prefer to hold token papers instead of real assets. (Ibid: 288)

Interest is defined according to Marx theory of exchange profit (despite referring to Marx’s connected labour theory of value as “problematic”) and is said to shift motivations from increasing use value into increasing exchange value. The exponential nature of interest is said to evade the laws of thermodynamics and allows the economy to grow beyond ecological boundaries. (Ibid: 286). Daly and Farley, here, give the example of financial speculation, which they argue is 20 times bigger than the global production of goods and services (Ibid: 297).

Regarding the role of interest in the monetary system they state:

“Most of our money supply bears interest as a condition for its existence. Whoever borrowed it into existence must pay back what he borrowed plus interest. Thus, a requirement for growth (or else inflation) is built into the very existence of our money supply”.

(Ibid: 290)

They argue that charging interest is built into the current monetary system since new money is debt and that this creates a, so called, growth imperative. Remembering Daly and Farley’s definition of growth leading to more waste, this means that the connection between money, interest and growth is portrayed as something negative for the environment in this context.

According to Daly and Farley, the Fed manipulates the MS via reserve requirements which they argue is rarely used because of its large impacts on the financial sector.19 Daly and Farley continue to explain that the Fed manipulates money supply by, changing the interest (discount) rate to banks, by making it more or less profitable to lend and thus expand/limit the MS. Another way, according to Daly and Farley, for the Fed to manipulate the money supply is by open market operations (OPOs) such as directly increasing/decreasing MS by buying/selling government bonds, which indirectly also increases deposits and thereby possibilities to make loans.

Daly and Farley claim that private commercial banks create most money, 90 %, of the money supply in the form of demand deposits. That is to say, they make money out of nothing and lend it at interest. The interest charged on debt is claimed to be the real seniorage (money issuers’ revenue) today, and not mainly central banks printing notes. (Ibid: 290) Daly and Farley argue that private banks create money in a fractional reserve banking system by multiplying Central Bank currency that becomes a deposit, which in turn is used to finance a new loan, which is new money. The level of the reserve requirement decides how many times the base-money (central bank currency) can be multiplied, for example a 10 % reserve requirement means that the banking sector can create 9 times the original amount of cash. (Ibid: 293-293) The multiplicator theory presented by Daly and Farley (even though they do not use that name) is the same

19 Compare to Mankiw who claims reserve requirements is not used frequently as a monetary policy tool because it has little impact.
circumstantial premise that the Riksbank and Mankiw describe, but which the Bank of England report opposes (as discussed earlier).

About regulations Daly and Farley claim that “Economics […] is inescapably about policy […]” (ibid: 37), because economics is about allocating scarce means among competing ends and this implies policy making. They argue that neoclassical economists reduce ends to a question of individual taste – which leaves people to physical combat or manipulation and no true reasoning. Like scientific theories, desirable ends should according to the Ecological Economics textbook be subjected to empirical testing and falsification (ibid: 43). The book Ecological Economics aims at integrating ecology and economics, not by economic imperialism or ecological reductionism, but by trying to find a steady state subsystem for the economy within the ecosystem. Daly and Farley argue that this was the goal of classical economists like John Stuart Mill as well, but according to Daly and Farley it was abandoned by neo-classical economics. (Ibid: 55-56)

A reform to FRB is said to have advantages and the current fractional reserve system is delegitimised, for example by the following argument:

“The fact that most of our money was loaned into existence and must be paid back at interest imparts a strong growth bias, as well as cyclical instability, to our economy. There is no economic reason why the monetary system must be linked with the private commercial activity of lending and borrowing.” (Ibid: 253-254)

This quote implicates that the current monetary system creates a debt burden, enforces growth, the risk of economic recessions and the authors’ claims that these problematic side effects of the system are unnecessary since the system could be designed in a better way. The premise given in this quote serves to build up the authors argument that the monetary system needs to be reformed and that the FRB reform would eliminate what is depicted as the negative parts of the current system.

4.3.2. Legitimisations in the Text

Authorization, moral evaluation, rationalisation and naturalisation

In Ecological Economics authorisation by reference to other economists/researchers is frequently used (and in a few cases econometrics). Frequent references are made to the chemistry professor Frederick Soddy. Economists Irving Fisher, Frank Knight and John Stuart Mill are referred to in order to legitimise the support of FRB or steady state economics.

In Ecological Economics naturalisation is used, not so much by silencing other perspectives, but more by direct reference to natural laws. The current monetary system is delegitimised by the argument that it does not follow the laws of thermodynamics. According to Daly and Farley, unlike matter and energy, money can be created and destroyed and leads us to believe that exponential growth is possible in a world of finite resources. The argument is that as long as money works this way the economic system will lead to environmental degradation. (Ibid: 285 and 295) Generally this textbook aims to explain how economy affects ecology and the other way around, so references to natural science is frequent. The naturalisation involved in this
argumentation is also intertwined with the moral evaluation of the authors, as the environmental concern is at the core of the value premise of the argument made.

Moral evaluations in this textbook are also apparent in the unconventional definitions of and perspectives on common economic words. Some examples: Efficiency – whether it is something to aim for or not depends on the consequences of the efficiency. A comparison to Hitler being efficient in killing Jews serves to delegitimise the concept of efficiency as neutral or good. (Ibid: 4) Growth – as already explained above, is defined as an increase of waste, which is a word with negative connotations (ibid:6). Money – is called a public good, a definition which results in the argument that seigniorage earnings from creating new money should be a public, and not private, revenue (ibid: 293-294). Daly and Farley write that “Private citizens (counterfeiters) are sent to jail for making even small amounts of it, yet private commercial banks make most of it, and we pay them for it!” (:285) The metaphor between counterfeiters and banks is an example of delegitimisation by moral evaluation since the quote implicates that the real criminals are the bankers. In the definition of profit, Daly and Farley claim that the existence of added exchange value (the difference between the use value traded and the profit made) shifts the driving motive from increasing use value to increasing exchange value (the authors refer to Marx theory, however dismissing the labour theory of value in general) (ibid: 286). This definition of profit serves to delegitimise the knowledge produced by conventional economists, like Mankiw, for whom profit is the natural goal for all economic actors.

The critique of bankers and profit relate to a socialistic rhetoric but is also present in ecologist discourse. The argument made by Daly and Farley connects mainly to green ideology since it proposes policy reform in order to protect the environment. A comment to my argument that these definitions express moral evaluations is that the reference to norms is apparent exactly because the definitions are unusual. This does not mean that mainstream definitions are value-free, only that the moral evaluation expressed in mainstream definitions is less obvious because of its “hegemonic” position.

**Mythopoesis**

Daly and Farley start by repeating the frequent mythopoesis (used by Mankiw) about the inconvenience of barter – to legitimise the need for a monetary market economy (ibid: 285). This can appear as unexpected considering that they build a very different argument about monetary policy than Mankiw and many other economists. However, Daly and Farley emphasise that they are trained Economists (ibid: xviii) and that Ecological Economics is a discipline that aims to evolve Economics in general into integrating ecology (ibid: 6). Classical and Ecological Economics have most basic concepts (like supply and demand, comparative advantage, national income accounting etc.) in common (ibid: xvii). It can be seen as that Daly and Farley try to legitimise their knowledge by referring to the authority of conventional Economics.

There is also a narrative about local currencies. Ithaca HOURs local currency club in New York is explained to be a well-functioning, decentralised monetary system (ibid: 291). This mythopoesis might serve to strengthen the impression that money is a human invention which can be changed and designed in different ways and that more ecologist monetary systems (decentralised community systems with focus on local trade) do exist and function.
There is a narrative of the power and madness of exponential growth built up in the book. For instance, Daly and Farley give the example that: if someone were to put one grain of wheat on the first square of a chessboard, two on the second, four on the third, eight on fourth and so on, by the 64th doubling it would demand far more than the world’s whole wheat crop. Daly and Farley make the comparison with populations of people, cars, livestock etc. to show that there is a limit to exponential growth. With this, Daly and Farley go on to state that the financial conventions assume that this doubling will go on forever. (Ibid: 296). The mythopoesis of the results of exponential growth is a narrative where the outcomes of such financial conventions and ideas are punished by making an example where such practise is unrealistic. The narrative also serves to de-legitimise economists who promote growth by portraying them as ignorant.

Daly and Farley use another narrative to explain their view of the illegitimate power of bankers in today’s monetary system:

“The one who creates money and is the first to spend it gets a real asset in exchange for a paper token. The difference between the monetary value and the negligible commodity value of a token, the profit to the issuer of money, is called seigniorage, in recognition of the lordly nature of this privilege. Who is this fortunate person? Historically it was the feudal lord, or the king, the sovereign, who issued money within his domain. One might expect that this privilege would have been passed on to the sovereign’s legitimate heir, the democratic state. To some extent this is the case, because only governments can issue currency or legal tender. However, over 90% of our money supply today is not currency but demand deposits created by the private commercial banking system. They are created out of nothing and loaned into existence by the private commercial banks under rules set up by the government. Who gets the seigniorage? Seigniorage from currency goes to the government. Seigniorage from demand deposits goes to the private sector, initially to commercial banks. To the extent there is competition between banks for savings, they will redistribute some of the seigniorage to depositors. Sectors of society too poor to save will receive nothing” (Ibid: 289-290)

Daly and Farley claim that private banks have taken over the power and earnings from creating money from the historical feudal lords, but that the government is the legitimate and fair owner of this power and these earnings. There is a sort of “alchemist narrative” in the emphasis of the ability to create something as powerful as money out of nothing (Daly actually uses the word alchemists’ to describe bankers in a blog post20 from 2015). This narrative serves to delegitimise the current monetary system by claiming that the ‘legitimate’ receiver of seigniorage is the democratic state and that 90% of new money – in other words a large share of the money-creating revenue – does not go to democratically shared and controlled institutions (nor to the public).

20 http://steadystate.org/nationalize-money-not-banks/
4.4. Short Analyses of reports produced for IMF, Bank of England, Club of Rome and The Swedish Environmental Protection Agency

In this section the arguments in the four selected texts will be summarised very concisely in bullet points, due to the space restrictions of this thesis. More focus will be placed on the legitimisations than the arguments and the analyses in this section will be shorter than in the previous sections. However, the findings in this section will be equally summarised and compared in the final concluding discussion, just as the previous three in-depth analysed texts will be.

4.4.1. IMF report: Chicago Plan Revisited (Beneš and Kumhof, 2012)

Short summary of the argument

Claim for action – what regulations are proposed?
  • A Full-Reserve Banking reform.
Goal premise – what is the desired outcome, the goal for regulation?
- A well working economy less prone to crisis due to recession, bank runs or debt crisis (ibid:4).

Value premise – moral evaluation/overarching goal
- The monetary system should be a public, well-functioning, infrastructure and not a private source of wealth and power. Connects to a socialist value system.

Means-goal premise – How does the regulation/action contribute to the goal?
- Fractional reserve banking means that banks tend to create more money during booms and less during recessions which increases the fluctuations in the economic cycle. Under FRB money and credit would be separated; money creation would be under a set money growth rule and banks could not increase their lending by self-financed new debt, but credit would be affected by policies like Basel III (ibid: 5, 8).
- When money is created as debt, as under fractional reserve banking, this means that debt has to increase in order to increase the money supply. If governments would issue debt-free money this connection would be cut and debt-levels could be reduced. (Ibid: 6)

Circumstantial premise – how does the actor describe money, growth, interest, regulations, the relation between money and the economy, and power over money creation/fractional reserve banking?
- Money is currently created by banks when they create debt (ibid: 9), but was originally created interest-free under rule of law by governments (ibid: 12). Now private banks have the power to create money (ibid: 9).
- Banks are not intermediaries now, since loans are self-financed. But they would become intermediaries under FRB, since they would then transform loans from the government to private loans (ibid: 5, 9).
- It is possible to regulate money to create positive outcomes like cyclic stability, decreased debt and tax levels. (Ibid: 5, 6, 50)
- Private issuance of money leads to major societal problems, due to usury associated with private debts, which is proved by a variety of historical examples. Usury is not just defined as the charging of excessive interest, but as “taking something for nothing through the calculated misuse of a nation’s money system for private gain”. (Ibid: 13)
- Under FRB money creation will be debt and interest free (ibid: 50). The general interest burden would decrease under a FRB system (ibid: 4).
- In this text, the word “growth” is mainly used in relation to growth in the money supply, GDP growth is instead referred to as “output gain”. Output gain is positive and FRB can increase output gain: FRB will result in lower real interest rates, lower tax and lower monitoring costs which in turn will create a 27 % increase in investment and 5 % increase in consumption which will create a macroeconomic output gain that eventually approaches 10 % of GDP annually. (Ibid: 8, 50)
- How money is regulated is the key to avoid economic problems like recessions, public and private debt crisis and bank runs. (Ibid: 4)
- If saving and borrowing activities were separated in banking, as under FRB, savers would not have to fear the risk that their savings would disappear if lenders cannot pay back, so there would no risk for bank runs and no need for deposit insurance (Ibid: 5 and 21).
• If governments could create new money to finance spending, taxes could be cut. This in combination with reduced debt levels would free up money for consumption and investment which would contribute to increased GDP growth (ibid: 8).

Legitimisations

Legitimisation by authorisation is done by saying that their conclusions are shared by prominent economists like Fisher (ibid: 17), Milton (ibid: 17) etc. On page 15 there is even a list of prominent persons who promoted government money issuance. Except for the reference to economists there is also a lot of reference to anthropological and historical empirical research (ibid: 12). The mainstream economic knowledge discourse about money as barter is delegitimised by claiming that they do not use empirical evidence but imagination (ibid: 12).

There is a negative moral evaluation about interest – which is an important basis of the current monetary system – where Beneš and Kumhof define interest as usury. They explain that seigniorage is “privately appropriated by the small group that owns the privilege to privately create money. This is a privilege that, due to its enormous benefits, is often originally acquired as a result of intense rent-seeking behav[io]ur.” (ibid: 13). I interpret this quote as that Beneš and Kumhof portray the current issuers of money as greedy and egoistic.

The historical reference to state issued monetary systems are repeatedly described as “successful” (ibid: Chapter II. A), which is a word with a moral positive connotation. The mainstream economic barter theory of money is called the “fallacious notion of commodity money” (ibid: 15), where the word “fallacious” gives the impression that the users of that theory are consciously manipulating and lying.

Econometrics is used as the main method to authorise (or naturalise) the legitimacy of their findings showing that FRB reform would have positive implications. But historical narratives are used as a background circumstance to establish the credit theory of money and that governmental issuance of money creates sounder economies than privately run monetary systems.

An important mythopoiesis in this paper is the narrative that fractional reserve banking is the reason we have certain economic problems (debt crisis, volatile business cycles, high tax, etc.) today – and that a FRB reform would result in success in the sense that the specified problems would disappear. No doubts are mentioned in relation to the risks connected to radical untested reform.

There is also a mythopoiesis regarding private money issuance leading to problems whereas governmentally run monetary systems more often lead to success. Beneš and Kumhof state that their theory does not support the frequently stated idea that governments tend to create inflation when they get the power to issue money (ibid: 9). They claim that hyperinflation under government issuance has occurred, however as a result of the ruler’s bad character (ibid: 16) or because it was tied to an unnecessary metal standard (ibid: 15), but would not happen if the right to issue money would be tied to a money growth rule. Historical examples of privately issued monetary systems show that they repeatedly lead to crisis and “triggered disastrous business cycles” (ibid: 15). Mankiw and others argument about Interwar Germany as a bad example of
governments creating hyper-inflation, is claimed to be incorrect since in 1922 the Allies granted total private control over the Reichsbank (ibid: 16). Instead Beneš and Kumhof refer to research showing that private money issuance has repeatedly led to major societal problems throughout recorded history, due to usury associated with private debts (ibid: 13). The right to require interest or usury enables the “private creators of money to manipulate the money supply to their benefit […] It repeatedly led to systemic borrower defaults, forfeiture of collateral, and therefore the concentration of wealth in the hands of lenders.” (ibid: 13). FRB, on the other hand, is said to result in debt-cancelation, just like the 599 BC “successful” reforms of Solon (ibid: 14). Beneš and Kumhof also write that the collapse of the Roman Republic might have been due to the introduction of a private monetary system (ibid: 14).

Argument and legitimisations: Benes and Kumhof (2012)

Claim for action: Full Reserve Banking reform

Means goal: FRB reduces public and private debt levels as well as interest and tax burden. It also reduces volatility in business cycles and the risk of bank runs. It increases growth.

Goal: A well working economy less prone to crisis due to recession, bank runs or debt crisis

Value premise: The monetary system should be a public and not private infrastructure.

Circumstances: The monetary system was originally successfully created by governments as fiat money but has been taken over by private banks who create money as debt. Privately run monetary systems repeatedly create societal crises due to usury associated with private debts.

Moral evaluation: Governmental money is interest-free and seigniorage goes to public benefit. Under fractional reserve banking money is connected to usury, where the lenders manipulate the system to cause debt default in order to expropriate collateral and concentrate wealth.

Legitimisations: Reference to anthropological and historical research to legitimise the institutional credit narrative. Delegitimisation of mainstream economists’ lack of interest in empirical evidence and use of barter narrative. Use of econometric models to prove future consequences of monetary reform.

Figure 5: Beneš and Kumhof’s Argument and Legitimisation of Monetary Policy


Short summary of the argument

Claim for action – what regulations are proposed?

- The text does not focus on any need for regulations, but rather about a need to update the economic knowledge discourse.
Goal premise – what is the desired outcome, the goal for regulation?
- Correct information about the monetary system among economists.

Value premise – moral evaluation/overarching goal
- Economists are misinformed.

Means-goal premise – How does the regulation/action contribute to the goal?
- The Bank of England is now giving the correct information, which should guide the economist knowledge discourse.
- Low and stable inflation is an aim for the Bank of England, to create a resilient economy.

Circumstantial premise – how does the actor describe money, growth, interest, regulations, the relation between money and the economy, and power over money creation/fractional reserve banking?
- The majority of money in the modern economy is created by commercial banks making loans (McLeay et al., 2014: 1) and by buying assets (ibid: 4).
- This process is limited by regulatory policy, as well as market opportunities and risks, and the behaviour of money holders (ibid 4).
- Money is destroyed by repaying debt (ibid: 1).
- Money is essentially IOUs – credit (ibid: 2).
- Banks are not intermediaries – the concept is called a “misconception”. Bank lending creates new deposits. (ibid: 1) Savings are not an asset to be lent out but a liability of the bank (ibid: 3).
- Banks do not multiply central bank currency – the theory is called a “misconception” (ibid: 1). There is not a fixed ratio between currency and deposits. Instead banks create as much debt (new deposits) as they find profitable under current policy (interest rate) and then they decide how much currency they need to meet customers’ needs for withdrawals. Currency is then supplied on demand by the central bank (ibid: 2).
- Growth is not discussed, but to stimulate spending in the economy during recession is said to be an objective of the Bank of England. (ibid: 1)
- History and origin is not discussed in this text, which focuses only on the current situation.
- Interest is described as the Central banks major monetary policy tool (ibid: 1). But if the interest rate reaches its effective lower bound, *Quantitative Easing* can also be used to create money directly, by the central bank buying assets using its own reserves to get liquid money out in the economy (ibid: 8).
- The interest level determines how many profitable loans a bank can make, how much households and companies want to borrow and hence the money supply (ibid: 2, 4). So, the Central Bank’s monetary policy ultimately influences the money supply (ibid: 1).
- Regulations create resilience in the economic system and constrain banks’ activities (ibid: 1). The central bank has an important role in ensuring financial stability in the economic system (ibid: 2).
- Bank of England’s use of current monetary policy aims at making sure that money creation is consistent with low and stable inflation (ibid: 1).

Legitimisations
This document is not full of value-loaded words or even references to other knowledge producers who think in line with this text. It appears that this knowledge producer, the Bank of England, considers itself as the foremost source of knowledge. Diagrams are used to illustrate the Bank’s portray of how new money is created as debt. However, the knowledge producers who are frequently mention – that is, authors of economic textbooks – are portrayed as ignorant about basic facts about how the monetary system works. Some exceptions are however mentioned (ibid: 2). Interestingly, Beneš and Kumhof (2012) are referred to for further reading about “the money multiplier myth” (ibid: 8).

I identify some words that can be seen as value-loaded and hence represent legitimisation by moral evaluation. The word “misconception” is used many times and also “myth” a couple of times, to describe popular and mainstream economic theories about some of the basic workings of the monetary system. These words clearly delegitimise competing knowledges as being uninformed. The words “resilience” (ibid: 7) and “stability” (ibid: 2) are used in connection to the “economic system” when The Bank of England discusses the consequences of their use of monetary policy. These words have positive connotations and I interpret these expressions as aiming at legitimising current monetary policy and the role of Bank of England in the monetary system. Also the word “loan” is much more frequently used than “debt” throughout the text. As mentioned in the background chapter the latter choice of words has more negative connotations than the former, so talking about money being loans sounds more positive than money being debt. There is no discussion regarding any critique of the current monetary system which can be interpreted as legitimation by silencing.

Since history is not used in this text it is difficult to identify clear narratives or mythopoesis. The Bank of England does however clearly use a credit theory of money which is shown by the general theory they present and also by the definition of money as IOUs (ibid: 2, 11).

**Short Summary of the Argument**
This analysis mainly focuses on the chapters most relevant for the questions posed in this thesis, which are chapters 2, 14 and 15.

**Claim for action – what regulations are proposed?**
- It is first stated that there is a desperate need to redesign the financial system (Wijkman and Rockström, 2011: 138-139) and nationalising money issuance is mentioned as a possible reform (ibid: 140). FRB is mentioned, but not by name, in positive terms (ibid: 140). It is proposed that we should rethink the framework of the financial system with the aim of controlling the credit volume and obliging banks to incorporate environmental risk in their operations (ibid: 159). But it is also stated that it is not the aim of Wijkman and Rockström to propose a thorough reform (ibid: 147). Instead several small adjustments of the financial sector are proposed: A shadow price of 40 Euros per tonne of CO2 should be applied to the assessment of loans to and investments in businesses that rely heavily...
on fossil fuels, mandatory reporting on environmental impact, quarterly reporting should stop – since it enhances short-termism, etc. (ibid: 147-148).

**Goal premise – what is the desired outcome, the goal for regulation?**
- An economic system within planetary boundaries (stop climate change, loss of biodiversity, and general environmental destruction) to assure human welfare.

**Value premise – moral evaluation/overarching goal**
- Wijkman mentions his past as a conservative and Christian democrat politician, but claims to have abandoned this ideology. Green parties are mentioned positively as the only parties who criticise growth – but are criticised by the authors for just saying “no” and not offering options. (Ibid: Chapter 2) The value premise is clearly green, in the sense that it promotes regulations in order to stop environmental destruction (for a discussion about the core of green ideology see Färm, 2007, and Dobson, 2007).

**Means-goal premise – How does the regulation/action contribute to the goal?**
- The authors propose many adjustments of the current system to make the financial sector more accountable for its environmental impact. It is not clearly explained how each small change will contribute to change the system in total. Wijkman and Rockström mention that there is a need to redesign the framework of the financial system, but also state that it is not their purpose to propose radical reform. (See page references under “Claim for action”)

**Circumstantial premise – how does the actor describe money, growth, interest, regulations, the relation between money and the economy, and power over money creation/fractional reserve banking?**
- People – including political decision-makers – do not know that most money is mainly created by commercial banks as debt. If the public knew they would demand reform. (ibid: 139).
- There is a lot of malpractice in the financial sector, but the governments are also responsible because they have systematically deregulated the banks to stimulate economic growth by increasing debt (ibid: 138).
- Increased credit volumes lead to increased investment and consumption which accelerates the pressure on natural resources (ibid: 140).
- Humanity is at risk because we have exceeded, or are almost exceeding, several planetary boundaries, like biodiversity loss and climate change (ibid: 44-47)
- The economy today is already too large for the ecological base and the situation is getting worse by economic growth (ibid: 149, 158). “Our society has long been built on the myth of endless growth” (ibid: 4), in the long term this is causing catastrophic climate change according to Wijkman and Rockström.
- Green growth is called “a myth”, because there will be rebound effects (ibid: 155-156, for definition see the Background chapter of this thesis).
- There is short-termism in the process of interest on interest; it imposes exponential growth on the economy (ibid: 138). Also new debt must be created for people to be able to pay back their loans plus interest (ibid: 139, 158).
• Wijkman and Rockström are throughout the book hopeful of the capacity of regulations to decrease environmental destruction, but are worried that politicians lack necessary visions and knowledge (see for example ibid: Chapter 2).
• Basel III is mentioned, but is said to not resolve the problems.

Legitimisations
Legitimisation by authorisation is done by reference to ecological economist (like Daly ibid:126) and natural scientist (like Darwin, ibid: 41, and Einstein, ibid: 127) who are said to be aware that humans are an integrated part of nature. Economists in general are delegitimised, by claiming that they do not understand science and natural law and that they believe in infinite growth on a limited planet (ibid: 125-127). Adam Smith and his current influence on economics is also delegitimised, by saying that his theories were built on 1750 premises that are no longer true; for example, that with a world population of less than 1 billion and very low GDP it was reasonable to assume that growth could expand exponentially without problems (ibid: 125).

Legitimisation by naturalisation of ideas about planetary boundaries, and the need to adjust policies accordingly, is done by referring to Natural Science (ibid: Chapter 19, 5 etc.) and specifically to the Laws of Thermodynamics (ibid: 11-12, 126-127).

The linguistic style of this report contains a frequent use of de-legitimisation by moral evaluation, through the use of value-loaded words. For example, the monetary system is metaphorically described as a “pyramid scheme” (ibid: 139). Economists who promote growth are said to believe in the “myth of perpetual growth” (ibid: 65). The public and policy makers are portrayed as uninformed about how the monetary system works and it is said (guessed) that if they were better informed, they would demand reform (ibid: 139). Politicians are described as lacking visions necessary to improve policy (ibid: 10). Lack of action towards reform is frequently (including the report title) called “denial”. All these depictions can be seen as disparaging – since the persons described (economists, politicians, people in general) would likely not agree with the choices of words (believing in myths, being uninformed or in denial, etc.) used to describe themselves.

This report by Wijkman and Rockström offers a sort of green master narrative about the state of the world. It might be summarised as: The economic system (built on short-termism, the idea of endless growth and externalisation of natural resources) has brought us to exceed planetary boundaries, which is now putting humanity at risk. Industrialisation and population growth has moved the planet out of the geological epoch Holocene – where agriculture is possible and global temperature is human-friendly – into the new epoch called the Anthropocene – an unknown epoch where humanity has put itself at risk of self-extinction. But this disastrous change has just begun and we still have a small chance to save ourselves, if we quickly undo with unsustainable practises and change the direction of the sinking ship, which human society now resembles. To stabilize the human population on earth, by strengthening women’s sexual rights (ibid: 83), and forcing the financial sector to take environmental consideration is portrayed as the keys to start living within the planetary boundaries. In this mythopoesis the economic system and its defenders (mainstream economists and politicians) are the villains whereas scientists (like Rockström) and brave, green politicians (like Wijkman) can offer a road towards a sustainable (or perhaps 'resilient') future.
4.4.4. The Swedish Environmental Protection Agency’s Anthology: *About Possibilities, for the Human and Everything Living* 21 (Chapter 3, Hornborg, 2011)

**Short summary of the argument**

This analysis concerns only chapter 3, "Possible Money and Impossible Machines" 22, in the mentioned anthology.

**Claim for action – what regulations are proposed?**

- Introduce a governmentally managed ‘local’ currency – only usable to pay for locally produced goods and services – that does not generate interest, issued in the form of an unconditional basic income (Hornborg, 2011: 65, 67).

---

21 Authors translation, original title: *Om möjligheter, för människan och allt annat levande.*

22 Chapter title in original language: “Möjliga pengar och omöjliga maskiner”.
Introduce separate currencies for local and for global spheres of exchange (ibid: 67)

**Goal premise – what is the desired outcome, the goal for regulation?**
- A new global economic order with increased social justice and decreased environmental impact.

**Value premise – moral evaluation/overarching goal?**
- Capitalism is causing socioecological collapse and should be replaced with an environmentalist system.

**Means-goal premise – How does the regulation/action contribute to the goal?**
- Local products – like housing, food and care can be provided locally, whereas global products – like luxury items and capital goods – usually demand long-distance transport. In the long term the sustainability problems will probably depend on our ability to separate these two exchange spheres as incomparable values, according to Hornborg. If it was possible to institutionally and socially immunise the metabolism of local communities from the global capital flows, patterns of energy and resource use would radically change. Not only would human societies become more ecologically sustainable, but the integration in the local community would also strengthen social sustainability. (ibid: 66)
- If consumption was significantly localised, the sharp decrease of transport, energy use and CO2-emissions would have considerable ecologic and economic effects (ibid: 69).
- An alternative currency for local transactions would decrease the, now increasing, costs to administrate and fix the logistic, social, medical and ecological problems that present industrial capitalism creates (ibid: 69).
- There is no reason to save or accumulate (capital accumulation is a core problem in capitalism, see below) this alternative currency, because it has an expiration date and bears no interest (ibid: 67).

**Circumstantial premise – how does the actor describe money, growth, interest, regulations, the relation between money and the economy, and power over money creation/fractional reserve banking?**
- Money (just like the machine) is a fetish according to Hornborg – it makes social relations appear as relations between things, and it mystifies unequal societal exchange relations. To understand the situation of humankind, and avoid the worst consequences of systematic collapse, we must reveal the mystified exchange relationships that appear for us as money (and machines). (ibid: 62)
- Natural scientist must understand money as a cultural sign system, which is a component of the ecosystem that directs energy and material flows. Strategies to increase sustainability must be based on interdisciplinary knowledge that does not close its eyes to the importance of changing a cultural sign system like money to change those flows. (ibid: 56)
- Hornborg argues that we could regard economic growth and technical development as a sort of zero-sum game of global resource allocation, rather than a cornucopia (ibid: 57). To advocate technical solutions to problems of sustainability is the same as proposing displacement of environmental impact from rich to poor parts of the world (ibid: 59).
Monetary gains are invested in technique which again gives more revenue – so the relation between economic growth and technical development (money and machines) is mutually reinforcing (ibid: 62).

To propose a localised currency is in line with de-growth, which more and more serious analysts call for (ibid: 69).

Interest-bearing money constitutes an end in itself and gives the owner incentives to accumulate capital (ibid: 65). If we should seriously aim to change our cultural sign systems in a sustainable direction, it is important to pay attention to power dimensions in the current system, by reducing the possibility to self-reinforcing capital accumulation trough different forms of unequal exchange (ibid: 58, the current price mechanism that hides unequal exchange of labour hours compared to agricultural land, is also mentioned as providing forms for unequal exchange: 62).

According to Hornborg, few would deny the important role of money for how modern society has been shaped and is affecting the environment, but few, even among environmentalists, question that money should continue to have this role. But maybe changing the logic of money is our only available chance to achieve sustainability. (ibid: 64)

Political decisions can have great impact. So far, there is little evidence that policies will affect the sustainability in production or consumption of scale. But, it is possible that the political alternatives will look different facing a collapse – so far however we have seen that the threat of collapse has been used to legitimise democratically questionable decisions. Hornborg calls for an open discussion about the real reasons to socioecological crisis – and an electorate incorruptible to short-sighted nationalism – which could lead decision-makers to more sustainable ways of organising the metabolism and economy of the world society. (Ibid: 61)

Legitimisations
Legitimisation by authorisation is done by using formal referencing, but since the referencing system used is footnotes, and with little direct reference to authors in the text, it is not obvious that Hornborg is legitimising his knowledge by pointing to support from other influential knowledge producers.

The authority of David Ricardo – one of the founders of the economic discipline – is delegitimised by a narrative that explains that Ricardo’s aim was to explain the success of English bankers, with no consideration of how colonial relations affected biophysical reality (ibid: 56).

One legitimisation by rationalisation is done by claiming that natural scientists see the ecosystem as uninhabited by humans and that social scientists see humans as independent of the biophysical reality – and therefor strategies for sustainability must be based on interdisciplinary research (ibid: 56). Even if it can surely be argued that this tendency is present in different disciplines, Hornborg’s claim is very stark for a big community of very diverse researchers. It serves to legitimise his own interdisciplinary field of Human Ecology.

An important part of the legitimisation by moral evaluation is focused on delegitimising economic discourse. It is said that economic science is an ‘ideology’, in the sense that it consists of a set of ideas that systematically mystifies societal power relations as natural. For this reason,
Hornborg sets out to scrutinise aspects that are usually held outside of economic analyses. (ibid: 57) With the earlier mentioned historical reference to David Ricardo (ibid: 56), Hornborg emphasises that current economic discourse is not applicable for an economic science interested in the distant ecological, medical and societal consequences of a region’s economic growth – another vocabulary is needed (ibid: 57).

Generally, Hornborg frequently uses value-loaded words. For example, he writes about “immunising” local communities from global capital flows (ibid: 66), which creates a metaphor of the globalised capitalistic market as a sort of disease. In a section title, money is called “the root of all evil” (ibid: 64), no need to comment this moral evaluation. The word “deny” is frequently used throughout the text, either to portray researchers with a different view (ex. ibid: 58, 60) or to say that Hornborg’s view is unquestionable (ex. ibid: 66). The use of the word denial (in Swedish “förnekelse”) gives the impression that a specific view is unquestionable – and that people who do question the view are involved in some kind of conscious manipulation.

Legitimisation by naturalisation is done by reference to natural law like the law of entropy, planetary boundaries, finite resources and thermos dynamics. Hornborg argues that the dilemma of sustainability is the idea of general purpose money in a universe ruled by the second law of thermodynamics – and that it is clear that the former but not the latter can be changed by political decisions (ibid: 64). Hornborg also delegitimises the use of naturalisation within economics, by claiming that economic discourse refers to the logic of the economic system as a sort of natural law, and not correctly as a consequence of political decision-making (ibid: 69).

There is mythopoesis about the early 19th century “Luddites”, who were textile workers who attacked industrial machines in protest against that their profession was replaced by machines. Hornborg explains this movement as logic – since these machines reified human relations – but unsuccessful. Just like other physical sabotages against capitalism and capitalists have proven to be unsuccessful – because the sabotages do not manage to change the logic of capitalism. (ibid: 62-64) This narrative is used as a part of a wider argument; that to radically challenge capitalism, it is not enough with physical protest, but an intelligent alternative is needed. An alternative that would change the core of capitalistic logic – defined as the functions of money. Hence, an alternative monetary system is needed in order to truly challenge capitalism.

Local currency NGO’s are also delegitimised as unsuccessful by a narrative. Hornborg suggests that many Local Exchange and Trade Systems (LETS) have been short lived because they have lacked a rule prohibiting exchange of goods produced at a far distance. According to Hornborg, this means that they have lacked a systematic analysis of general purpose money and their influence on causing transport needs, and because of this these NGOs have deprived their potential to create social transformation. (ibid: 65) This narrative serves to legitimise Hornborg’s argument, that a local currency should be designed according to his proposal and is best run by the government. In contrast to Hornborg’s narrative, my own research about local currency clubs shows that people tend to leave the clubs after economic recessions, exactly because the local currencies restrict the users’ consumption options – and only the very devoted environmentalist stay out of conviction. However, my research also shows that a government can use their power to prohibit an informal currency, and for that reason I agree with Hornborge’s argument about the crucial importance of having legal support to local currencies. (Lundkvist, 2009)
5. Concluding Summary and Comparison

We have now analysed how each actor individually answer the questions of this thesis and how they argue in favour of and legitimise their perspective. Now, it is time to analyse how these different perspectives relate to each other, to let the arguments ‘meet and discuss’. How are they similar and/or different? And what are the main points of conflict or confusion when making these different arguments meet and discuss? There are some key issues in these portrayals of reality that I have identified as: theories about the origin of money; how growth and the relation between money and the environment are depicted; the concepts of intermediation and money multiplication, who creates money and how the money supply is controlled.
In the end of this comparison and discussion there is a discussion about internal conflicts in each actor’s portrayal of reality in each text, and whether certain arguments are inherently ideological. All these key issues will be further analysed below.

5.1.1. Definitions of the Origin of Money

The Riksbank uses a mix between the credit and barter narrative of money to explain what money is, which makes their argument difficult to follow. This is especially the case as later in the report there is a visual explanation with diagrams showing how the actual money creation process occurs, which can be interpreted as in line with the debt theory. The Riksbank clearly emphasises the credit perspective (the importance of trust and political legitimacy for a monetary system to work), but they make some short historical reference to barter. Since the barter narrative is something like what was earlier defined as a “master narrative”, which everyone is expected to be familiar with, their short hint to the barter narrative is enough to confuse the reader about which money theory the Riksbank actually uses. Traditionally in economics textbooks, like Mankiw’s, the barter narrative of the origins of money goes together with a barter view of money being notes and coins, which substitute other goods as medium of exchange in the rationalised barter economy that still exists. The later part of that barter story seems to differ from the observations made by the Riksbank about how the monetary system works. However, when the Riksbank refer to history they choose to repeat the barter theory of money; that money is a development of the goods based barter market, instead of telling the perhaps more controversial debt or credit histories of money (see Background chapter). The Riksbank does not use the debt narratives history of slave and bride trade as the start of market based measurement of value, neither the credit narrative of money being invented in order for the rulers to more easily tax the farmers’ production, but they do emphasise the importance of public trust and legitimacy. The Bank of England uses a much clearer credit narrative in their text.

Mankiw has a purer barter narrative throughout his book. Case studies are used to give empirical evidence to this narrative. A critical comment to these case studies, in Mankiw’s book, is that the interpretation is very simplified. The source of the POW case study is from 1945 and the Yap case study is from 1929. More recent research (see Graeber, 2011) suggests that the use of local currencies to facilitate barter is commonly created among people who are used to, but prevented from, acting within a modern economic system – like the Prisoners of War. But it cannot be said to be a “natural” or needed development for all economies, since most non-monetary economies are/were gift economies, rather than barter economies, and do/did not appear to suffer from the so called “inconvenience of double wants” (Graeber, 2011). In this view the social conventions at the Islands of Yap can also be interpreted differently and cannot be said to empirically prove any naturalisation of the current monetary system.

Daly and Farley are making a very different argument than the Riksbank and Mankiw. There is, however, not only opposing descriptions, but also similarities between how these ecological and conventional economists portray reality. For example, in the definition of money, which is done by all actors according to its so called three functions of money and assumed history of inconvenient barter. Earlier, in the background chapter of this thesis, I stated the hypothesis that the debt definition of money might be used to delegitimise fractional reserve banking. So, what definition of money is present in Ecological Economics? Just like in the Riksbank case,
Ecological Economics is a bit confusing in this regard. Daly and Farley start by referring to money as much more efficient than barter. For someone who is making the argument that money should follow natural laws and not be created out of nothing – like Daly and Farley – it is perhaps a bit surprising that they choose to delegitimise barter as inconvenient. Daly and Farley make use of the master narrative of the barter theory of money, which is normally used to legitimise the perspective that money is neutral and not a problem. However, Daly and Farley also make a negative moral evaluation of the use of efficiency as something automatically good, so perhaps barter being inefficient is not so bad after all? Local currencies (which can be viewed as less efficient, since they restrict the supply of available goods) are depicted positively. Daly and Farley’s text mainly focuses on money as illegitimately being created by banks as loans. So, it is quite clear that these researchers have a debt-perspective on money. Not so much is said in this text about credit and the importance of trust in the issuer of money, as in the Riksbank’s report. So, Daly and Farley cannot be said to represent the credit theory of money. Not so much is said in this text about how to promote growth and it is explained how growth creates positive effects like progress, technological advancement, health and longer life expectancy. The Riksbank report on the other hand does not discuss growth at all, but mentions it in a way that makes the reader understand that growth is a requisite for a functioning market. Daly and Farley present a totally opposing picture of what growth is and what it results in. For the latter, growth is not compatible with a sustainable development. Daly and Farley’s perspective is shared by Hornborg as well as Wijkman and Rockström. In other words, criticism of growth can be seen as a core component of ecological economic knowledge discourse.

The three ecological economic portrayals – represented by Daly and Farley, Wijkman and Rockström, and Hornborg – all share a very negative view on interest as a phenomenon contributing to injustice and environmental degradation. So, the role of money being created as interest-bearing debt is deeply delegitimised by all these actors. This narrative is also shared by Beneš and Kumhof, even though they do not mention environmental aspects, but focus more on social power relations. Beneš and Kumhof are clearly influenced by Graeber’s debt theory (they refer directly to his research), whereas all three analysed examples of ecological economic texts were published the same year as Graeber’s book and hence could not make use of his findings.

5.1.2. How is Money and Growth Affecting Ecology?

In Mankiw’s textbook a lot of focus lies on how to promote growth and it is explained how growth creates positive effects like progress, technological advancement, health and longer life expectancy. The Riksbank report on the other hand does not discuss growth at all, but mentions it in a way that makes the reader understand that growth is a requisite for a functioning market. Daly and Farley present a totally opposing picture of what growth is and what it results in. For the latter, growth is not compatible with a sustainable development. Daly and Farley’s perspective is shared by Hornborg as well as Wijkman and Rockström. In other words, criticism of growth can be seen as a core component of ecological economic knowledge discourse.

Mankiw, the Bank of England and the Riksbank all depict monetary policy as important for achieving growth, economic stability and general economic development. Beneš and Kumhof also claim this, but intend to prove how current monetary policy is failing to achieve this and how reform would lead to more growth and stability. Daly and Farley, again, see current monetary policy as enforcing growth, which result in ecological crisis and create a system where...
lack of growth results in an economic crisis – a sort of inbuilt “Catch-22” in the monetary system. Daly and Farley argue that the monetary system should be radically reformed to be able to achieve de-growth without a financial crisis, if de-growth is what it takes to keep the economy within planetary boundaries. Hornborg’s argumentation is in line with Daly and Farley’s view, but Hornborg adds one more component to what would make a non-interest-bearing governmentally issued currency ecologically sustainable: to restrict the interchangeability between resources by restricting consumption to only locally produced goods and services. This aspect is not mentioned by any of the other ecological economists, even if Daly and Farley portray local currencies in a positive manner.

It is interesting to observe that Beneš and Kumhof as well as Daly and Farley argue in favour of the same reform, but are suggesting what at first might appear as completely opposite results when it comes to growth. However, in fact Daly and Farley are not claiming that FRB would result in de-growth, only that FRB would mean that the monetary system would be changed so that the government could better control the growth rate, and that a lack of growth would not result in a debt-crisis.

It is clear that Ecological Economics is using unorthodox definitions of basic economic concepts. A question is if Daly and Farley really are speaking the same ‘language’ as for example Mankiw and the Swedish Riksbank? If words have almost the opposing meanings, are they really discussing the same issues? And will they be able to debate the same reform suggestions? In Hornborg’s case he actively dissociates with ‘economic discourse’, whereas Daly and Farley as well as Wijkman and Rockström are trying to keep their discussion within the mainstream debate. As a result, Hornborg reaches more radical (or maybe ‘mad’ or incomprehensible, in the Foucauldian sense) conclusions.

5.1.3. Conflicting Portrayals of Intermediation and Money Multiplication

The description of banks being intermediaries is a concept under debate, as already discussed in the analysis of “The Swedish Financial market 2015” when comparing the statements given by the Swedish and the English central banks. It remains to be further debated how banks can both be said to intermediate savings to loans and at the same time create new money when they give out a loan. To further clarify in what respects the Bank of England and the Riksbank have different opinions, it might help if they more clearly discussed their views on the concepts of full or fractional reserve banking – which are not concepts they use in their reports – since FRB is by some (like Benes and Kumhof) seen as a way of controlling intermediation.

The Riksbank, Mankiw and Daly and Farley all make use of the concepts of intermediation (that savings are transformed to investment) and the money multiplier (more discussed further below), even if not all actors mention the phenomenon by name. When it comes to intermediation Daly and Farley differ from the other two in how they use the concept. Daly and Farley are not using the term intermediation, but they do describe the phenomenon of banks lending out savings as the core of the fractional reserve system. However, an important difference, compared to Mankiw, is that Daly and Farley claim that banks under FRB could still intermediate, but the savers who choose to let banks lend out their money would be restricted from withdrawing their savings meanwhile. It is interesting that the Bank of England report argues that since banks can lend money that are not in a savings account, but in a current account which is simultaneously...
being used for transactions, there is no real intermediation to speak of (debt has no connection to deposits, more than that a debt is also a newly created deposit). So, with the perspective of the Bank of England in mind, the kind of restricted intermediation that Ecological Economics promote – where only fixed savings should finance investments – can be seen as the only true intermediation. Beneš and Kumhof are making exactly that point; that a FRB reform would lead to true intermediation (Beneš and Kumhof, 2012: 5). Daly and Farley are not making that point, but they also challenge the concept that only a fractional reserve banking system allows banks to direct savings towards investment.

The money multiplier theory is presented in very similar ways in all the first three texts that are analysed in-depth, even if it is not referred to as money multiplier by all actors. The money multiplier theory, which explains why most money occurs as bank deposits and not currency, is discredited in the Bank of England report, as already mentioned. Money multiplier is the idea that banks multiply the central banks base money, in other words notes and coins, by intermediation; people deposit cash into a bank account and the bank uses the saving to make a loan, which then circulates as new money in its own right. The Bank of England claims that the theory is a “popular misconception” (McLeay et al., 2014: 1). According to the Bank of England report, money is created by debt as self-financed deposits. They argue that banks attempt to make as many loans as they find profitable, and in accordance with current prudential policy, and whether there is something left for reserves or if they have to borrow from the central bank to have money liquid for withdrawals is decided by how many profitable loans they can make (Ibid: 2), and not by how much base money (central bank currency) is available for them to multiply, as Mankiw’s theory implies. I have no comment to which of these descriptions are truer (it might also be a difference between banking in different countries), but it is clear that they portray different realities.

As already explained, all the first three texts analysed in-depth in this thesis seem to accept the money multiplier theory as generally accepted knowledge. Still, the Bank of England as well as Beneš and Kumhof claim that it is a myth. The myth argument could strengthen Daly and Farley’s argument in favour of FRB, since it depicts banks as having uncontrolled power and really do create money ‘out of nothing’ instead of ‘out of Central Bank currency with restrictions’. However, the Bank of England presented their theory in 2014 and Ecological Economics 2nd Edition was published in 2011, as a result we do not know if Daly and Farley were aware of the idea that money multiplication is a myth, or if they disagree with the Bank of England’s argument.

5.1.4. Who has the Power to Create New Money?

All the analysed texts seem to agree that a great majority of what is moving around as money today is bank deposits, and that a new loan is used as new money in its own right. But Mankiw uses a rhetoric suggesting that the central banks still have most power and responsibility, which the other actors do not use.

The Riksbank as well as Daly and Farley argue that private banks are crucial for the financial system to work, and that risky behaviour from banks can create big problems. But while the two central banks explain that current regulations reduce that risk, neither Daly and Farley, Beneš and Kumhof nor Wijkman and Rockström agree that current regulations solve the problems they
see as most concerning – which is the banking sector being an engine of social injustice/environmental degradation. Mankiw also delegitimises current monetary policy, but on the grounds that he advocates general deregulations.

Mankiw, as well as Daly and Farley, use what I defined as an ‘alchemist narrative’ about the power to create money out of thin air, but they depict different actors as the alchemist. Mankiw focuses on the alchemist power of the government, and delegitimises this power by claiming that governments tend to misuse it and create inflation. Daly and Farley, as well as Beneš and Kumhof and Hornborg, claim that private banks have this power – and that this results in an illegitimate distribution of wealth.

The concept of seigniorage is also being used in both Mankiw’s and Daly and Farley’s textbooks, to shed light on the phenomenon of making money by issuing money. But while Mankiw uses the concept to delegitimise state power, Daly and Farley are use it to delegitimise the power of commercial banks. They seem to have different (ideological) opinions about which actor is best representing the interest of the public; the unregulated market or the democratically elected government.

5.1.5. How is the Money Supply (MS) Controlled/Influenced?
It is interesting to note that whereas the Swedish and English central banks claim that they mainly try to control the MS by affecting the interest rates and by exception by Quantitative Easing, Mankiw argues on the contrary that the US Fed mainly use open market operations (OPO), and interest rates only in exception. According to the Federal Reserve’s own portrayal of reality, OPOs are indeed a frequently used monetary policy instrument. But while Mankiw describes this as a way of directly increasing or decreasing the MS in the hands of the public, the Fed describes how they – even before the financial crisis – used OPOs to adjust their reserves because that changed the interest rates, which in turn could stimulate economic activity and job creation. My interpretation is that different central banks may focus on different Monetary Policy Instruments, but they all aim at affecting the interest rate, because that is what determines how much debt/investment is created by banks (how much new debt and hence interest payments people/businesses calculate to afford) and in other words how much new money is added to the aggregate supply. Mankiw’s simplification of how OPOs work is not in line with this interpretation, but is rather consistent with his idea that money is something that governments/central banks create by their own.

Reserve requirements are mentioned by Mankiw and Daly and Farley, but not by the Riksbank, as a possible monetary policy instrument. But whereas Mankiw claims that it is not being used because it would not have a big effect because banks already hold reserves, Daly and Farley claim that it is not being used because it would have such big effects on the banking industry. Beneš and Kumhof claim that FRB has not been introduced due to lobbying from the private banks that would be severely affected. When Daly and Farley speak about reserve requirements, they have a gradual increase of reserve requirements up to 100 % in mind, and of course this is

23 http://www.federalreserve.gov/monetarypolicy/openmarket.htm
very different from adjusting within a very low interval of reserve requirements, which Mankiw discusses.

5.1.6. Conflicting Legitimisations/Portrayals within the Arguments

It has already been discussed how the Riksbank uses a credit narrative of money and Daly and Farley use a debt narrative of money, but they are all still clearly influenced by the barter narrative.

Mankiw’s textbook gives a more or less consistent view of the economic system. It can be seen as positive that a text is not full of contradictions. Nevertheless, this also means that a lot of simplification of our complex world has been done. It may mean that case studies and theories that are in line with the moral evaluation and system of norms of the author are presented, but competing information has been excluded. An important contradiction, in the argument of Mankiw, is that after some “simplifying” assumptions, he admits that banks create most money – but his policy advice still focuses on how to prevent governments from printing too many notes and coins.

The argument of the Riksbank regarding monetary policy and bank regulations is quite straightforward. However, there are some conflicting portrayals of reality that deserves some special attention. The Riksbank has a controversy in its depiction of banks as the good guys (experts that all benefit from) and the bad guys (excessively risk-taking that consumers need to be protected from) at the same time. But as the analysis of legitimations show, these conflicting realities seem to serve the purpose of legitimising the power of banks as well as the government’s power over banks.

Another observed conflicting portrayal given by the Riksbank is that of growth being the overarching goal of all the actions and practises described in the document, and at the same time growth is not explained, defined or exemplified in any way. It seems helpful to think of the discussions about what legitimisation is, and that what is naturalised and taken for granted does not need to be justified. If we live in a growth paradigm, advocating growth does not need to be legitimised. It is quite clear that Daly and Farley, on the other hand, need to justify carefully why they do not see growth as something inherently good.

In the case of Beneš and Kumhof’s IMF-report, I see a conflict in how they first delegitimise economist knowledge discourse by claiming that it lacks historical evidence – then they go on ‘proving’ that FRB would have positive impacts by almost exclusively using mathematical modelling. A possible explanation to this contradiction might be that the delegitimising criticism of economist knowledge discourse was written by archaeologist Beneš, while the chapters using a pure economist knowledge discourse (expressed in econometrics) were probably written by economist Kumhof. It should be said, though, that they also first use some historical reference to argue that governments do not necessarily create hyperinflation, just because they get the power over money issuance, and that governmentally run monetary systems have been successful historically.

In Hornborg’s argument I observe a conflict between his argument that the worst function of money is that it allows substitution of resources that biologically cannot be substituted – and the
following proposal to create a currency that only allows consumption of locally produced goods. This proposal does indeed create a limitation to the global interchangeability of resources, but it does not stop substitution on a local level. However, a response to this questioning could be that in a local context people are capable of taking ethical responsibility over their actions, in contrast to a global context where we are restricted from observing the consequences of our actions. So as an example, with a local market for production and consumption we would probably not cut down all trees in the local forest to be able to obtain a valuable metal in the local mine, but on a global market such behaviour is not as unlikely. If this response holds, the argument that local trade restricts interchangeability is not as inconsistent as it first might seem.

Another internal conflict in Hornborg’s argument, which he does not answer, is that he does not claim that the national currency should be abolished. He even claims that the local currency and the national one should be possible for businesses to exchange. Since the local currency would be under geographical restrictions and less tax pressure, I would argue that it is naïve to underestimate how loopholes – like the possibility to exchange currencies – can be taken advantage of for private benefit and to get around the geographical restriction as well as avoid tax. Hornborg also, surprisingly, argues that at first the introduction of a local currency, in the form of an unconditional basic income, would free up money for consumption of global goods (Hornborg, 2011: 67). It is never explained why this increased consumption – which earlier was described as a root to injustice and environmental destruction – would eventually diminish.

It could be seen as a self-contradiction by the Bank of England to claim that savings do not fund loans, but that instead debt creates deposits. Why would commercial bank then accept savings accounts, if it is just an unnecessary cost to them? An answer could be that to be able to create debt they must naturally also accept that that debt is instantly turned into a deposit, like for example a saving. As already mentioned, the Swedish Riksbank claims that banks do need to have finance to be able to create a new loan. Granstedt (2014) claims that the Bank of England’s description is against his empirical observations as a Chair of the Board of a small bank, and that since the new deposit immediately is used by the borrower to pay something, that deposit disappears from the bank’s balance sheet and cannot be used as finance. Personally, I do not think that Granstedt’s argument necessarily holds, since deposits are constantly being transferred as payments we can assume that just like the borrower is transferring the deposit to another bank – other banks are simultaneously transferring payments to the borrower’s bank – and overnight loans balance any imbalances the banks might have in their accounting.

5.1.7. Are Certain Claims for Action Inherently Connected to Certain Value Systems?

By looking at different actors’ arguments and policy proposals and how they morally evaluate their claims, is it possible to observe a common theme between the actors’ claims for action and the ideology expressed? In other words, would it be correct to claim that certain political proposals are inherently ideologically biased? Färm (2007) define liberalism as more prone to minimising governments’ power, and claim that whereas ecologism generally seeks decentralised power (including decentralised power of the market) green ideology and socialism on the other hand are ideologies more positive to the notion of increasing governments’ power – if it is seen as protecting the interest of the environment or workers. This statement has been
exemplified by Mankiw’s clear liberal moral evaluation and demand for decreased government power.

The question now, however, is rather if there is something inherently ideological in promoting Fractional Reserve Banking? But, as explained already in the Background Chapter, there are separate arguments in favour of FRB, where some claim it would be good for a functioning market with more growth (like Beneš and Kumhof) whilst others, like Daly, Farley, Wijkman and Rockström, claim that FRB would or might be good for protecting the environment and be able to decrease growth in a controlled manner. It should be added that Beneš and Kumhof put as much emphasis on fractional reserve banking creating an instable market as unjust distribution of wealth – hence there are clear references to more socialist values in their argumentation.

We can also observe that among those who express a green ideology there is no consensus that FRB would be the best economic reform to reach the goal of sustainable development. Wijkman and Rockström are taking a less radical reform approach, whereas Hornborg is suggesting a more radical form of governmental currency – but without abolishing fractional reserve banking and instead keeping it as a complement. A key difference between these green oriented actors’ arguments is what they see as the main driving force behind environmental degradation. They all share a strong focus on criticising growth as well as interest. This critique of the connection between growth and interest is a core in the green argument in favour of FRB. Wijkman and Rockström are choosing a more moderate path with many small reforms to adjust the current financial system to make greater consideration of environmental aspects. Hornborg is also expressing a green moral norm, but is reaching a very different claim for action. He is not talking much about growth and interest – in fact he is avoiding the use of typical economist words and is expressing a critique against using what he sees as economist hegemonic discourse. Instead, Hornborg is criticising money as a means of environmental destruction by being used as a fetish designed in a way that enables us to make biologically non-exchangeable resources (for example we cannot drink wood instead of water) exchangeable on a market. What we see here are different theories of how the economic system degrades the ecological system, and as a consequence different proposals on how to reform the economy.

In the beginning of this thesis I selected texts according to the categories mainstream and ecological economic knowledge discourses, with the assumption that the former would be more liberal and the latter would be more ecologist. After having done the analysis, I would rather categorise the seven texts in four categories: Mankiw stands out as a very typical example of a liberal neo-classical discourse, the two central banks stand for a more mixed ideological moral evaluation (with traits of liberalism as well as socialism and conservatism) where the governmental institutions and their use of current policy is depicted as the guarantor of financial stability. The three texts meant to represent ecological economics all share a green ideological approach to the State as a possible protector of the environment. Beneš and Kumof stand out, as a fourth category, in the sense that they share many aspects in their argumentation with the ecologist de-legitimations of the current system, but they do not use environmentalist rhetoric. Beneš and Kumof are more concerned with social justice (which is also true for the environmentalists) and financial stability (like the central banks).
## 5.1.8. Comparing Summary

Table 1- a simplification and overview of how the analysed knowledge producers answer the questions of this thesis. All the parts have already been thoroughly discussed.

<table>
<thead>
<tr>
<th>Actor\Argument</th>
<th>Growth definition</th>
<th>Interest Definition</th>
<th>Money theory</th>
<th>Money-Resources relation</th>
<th>Who controls money supply</th>
<th>Reform suggestion</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Riksbanken</strong></td>
<td>A basic requisite for the market to function and not have a crisis.</td>
<td>A basic requisite for the market to function efficiently. The price of money.</td>
<td>Conflictiong. Credit and Barter narrative. Debt explanation.</td>
<td>Trust in money (store of value) is crucial for the economy to function and grow. Low inflation is important for correct signalling about scarce resources.</td>
<td>Private banks create most money by creating loans. The Riksbank affects the demand for money by controlling the interest rate.</td>
<td>No. Basel III and other regulation are necessary to maintain trust. Current monetary policy is creating price stability.</td>
</tr>
<tr>
<td><strong>Mankiw: Macroeconomics</strong></td>
<td>Advanceme nt, quality of life, goal for society.</td>
<td>The cost of the funds used to finance investment.</td>
<td>Barter narrative.</td>
<td>Free markets and liberal governmen ts create growth which is advancement.</td>
<td>The central bank by creating base money and via its monetary policy instrument s. (Though it is a simplified picture).</td>
<td>Government should stop using the money press to finance spending. Austerity programs should be introduced instead.</td>
</tr>
<tr>
<td><strong>Daly and Farley: Ecologic Economics</strong></td>
<td>An increase in throughput, which is the</td>
<td>A money issuer’s tax charged by</td>
<td>Debt theory and mythopoe sis, but</td>
<td>The current monetary system is an engine</td>
<td>Private banks. The central banks</td>
<td>A Full reserve Banking Reform –</td>
</tr>
<tr>
<td>Reference</td>
<td>Topic</td>
<td>Description</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>flow of natural resources from the environment, through the economy, and back to the environment as waste</strong></td>
<td><strong>private banks, resulting in unsustainable growth and redistribution of wealth.</strong></td>
<td><strong>also barter narrative.</strong> <strong>to environmental degradation.</strong> <strong>influence how much debt the banks can create.</strong> <strong>gradually increase reserve requirement s up to 100%</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Beneš and Kumhof (2012)</strong></td>
<td><strong>Output gain of the government.</strong></td>
<td><strong>The interest and debt load associated with private money is currently contributing to problems in the economic system.</strong> <strong>Debt and credit narrative.</strong> <strong>Current monetary system allocates resources to hands of the already wealthy.</strong> <strong>Commerci al banks.</strong> <strong>Full Reserve Banking.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Bank of England (2014)</strong></td>
<td><strong>To stimulate spending during recession is an objective of the bank.</strong></td>
<td><strong>Interest is the main instrument by which the bank can influence the money supply.</strong> <strong>Credit narrative.</strong> <strong>Not mentioned.</strong> <strong>Commerci al banks, restricted and influenced by the central bank as well as available market opportuniti es.</strong> <strong>Not mentioned.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Wijkman and Rockström (2011)</strong></td>
<td><strong>The myth of endless growth is causing catastrophic climate change.</strong></td>
<td><strong>Interest on interest imposes exponential growth on the economic debt narrative.</strong> <strong>Current economic system is the driver of resource depletion.</strong> <strong>Commerci al banks.</strong> <strong>Many small reforms and new policies to make the financial sector take greater</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6. Discussion

In this section I will discuss how the analyses have answered the general questions posed in the questions chapter of this thesis. I will end this chapter with some more personal reflections that have occurred to me during the research process, and finally propose some ideas for further research.

6.1.1. Legitimising Status Quo or Change?

Of the seven actors whose arguments have been analysed only two do not propose any reform. Unsurprisingly, the two central banks are the actors who claim that the monetary system and current monetary policy framework is working in a satisfactory way. All other actors seem to agree that the monetary system is in need of change, though they do not agree about in what direction this change should go. Mankiw stands out as the one actor proposing less power to the state and more power to the private financial sector. The other four selected texts all argue for extensive reforms. But where Wijkman and Rockström favour many small reforms, the remaining three all call for reforming the entire monetary system. This overrepresentation of
reformism among the analysed actors should, of course, not be interpreted as a proof of such a tendency in knowledge discourse in general – only that the phenomenon that this thesis aimed at discussing (like the relation between the monetary system, the environment, and power-relations) are more apparent in texts discussing reform.

Another underlying question in this thesis was if any of the arguments favour powerful groups? This is not easy to answer because it seems to depend on an ideological moral evaluation. Mankiw, for example seems to regard the government as a powerful group and argue that less state power would mean more freedom for all citizens. The other reform enthusiasts, on the other hand, argue that the private banking sector has illegitimate power and that a reform which reduces that power and increases the government’s power would result in a fairer distribution of wealth and power between citizens.

When it comes to the argument of the two central banks, it is important to keep in mind that it was not their mission to discuss policy change in the analysed reports. To express proposals for radical change would be inappropriate for a governmental institution, if they were not commissioned to investigate that specific question. However, the core meaning of the Bank of England report is that economists – and probably policy makers as well – are gravely misinformed about the basic functions of the monetary system. This de-legitimation of the mainstream economic discourse might serve as lighter fluid for reform campaigners – at least if Daly, Farley, Wijkman and Rockström are right in their divinations.

### 6.1.2. A Power Relation between Knowledge Discourses: Shifting Hegemony?

It is clear that all the conflicting definitions of key words (*growth, interest, money*) that were discussed in the background chapter appear in the different analysed arguments. There is an obvious distinction between how mainstream economists (including central bank investigators) and ecological economists use the economic vocabulary. Beneš and Kumhof exemplify an interesting bridge between these two parallel discourses, by incorporating de-legitimisation of interest as well as de-legitimisation of the origin of money in their argument. Beneš and Kumhof wrote their report for the IMF, which can be considered to be an institution that represents a typical example of mainstream economic discourse. However, the interdisciplinary approach used by Beneš (an archaeologist) and Kumhof (an economist) tangents the methodological approach used within ecological economics. A supplementary question though, which will not be answered in this thesis, is if Beneš and Kumhof’s report is an example of a shifting discourse within the IMF – or if their investigation rather is what, in the theory chapter, was defined as a marginalised “public relations ploy to avoid criticism”, according to the theory of ‘paradigm maintenance’?

Slightly more surprising is the debate about basic economic key concepts introduced by the Bank of England, as well as Beneš and Kumhof. Their profound critique of the theories of ‘intermediation’ as well ‘money multiplication’ is probably influential to mainstream economic debate. Even if their critical arguments will not be accepted as new ‘facts’, other mainstream economists will likely need to start to legitimise their use of these theories since they are no longer ‘consensus knowledge’.

81
As Beneš and Kumhof demonstrate, the de-legitimation of these two core theories in mainstream economic discourse serves efficiently to legitimise their own proposal for a FRB reform. This ‘efficient’ de-legitimation obviously also serves the interest of many ecological economists, who so far have not picked up this critique of the concepts of intermediation and money multiplication. It seems that the many decades long de-legitimation of growth and interest practised by ecological economist has not yet managed to influence mainstream economists, noticeable in that mainstream economists do not justify their positive view on growth and interest. But the intra-disciplinary critique within mainstream economics, expressed by the Bank of England and the IMF researchers, is already forcing actors like the Swedish Riksbank and the Macroeconomics textbook author Mankiw to revise their knowledge production – in the sense that the more recent editions of their works include more discussions about what money and fractional reserve banking is.

Graeber (2011) as well as Beneš and Kumhof describe the barter narrative of money as a sort of hegemonic knowledge discourse within economics. Mankiw, with his bestselling economics textbook, does indeed exemplify this statement. However, Mankiw stands out as the only true advocate of this theory among the seven analysed actors. This may be due to the selection, which includes many examples of ecological economists and actors who criticise the monetary system. As Beneš and Kumhof say, the barter narrative can be used to legitimise and naturalise the power of commercial banks. But even so, considering the amount of influential knowledge producing actors who now use other money narratives (especially the credit narrative) I would say that it is no longer correct to claim that the barter narrative possesses a hegemonic position within knowledge production. A sign that the barter narrative has been the grand master narrative within economics can be found in the Riksbank’s as well as Daly and Farley’s contradictory hinting at barter narratives when telling the credit narrative. But, at least from what has been found in the texts selected for this thesis, it appears that there is an ongoing shift where the credit narrative is ‘outrunning’ the barter narrative as having the dominant position in knowledge production.

It has not been the purpose of this thesis to study how money creation is regulated in law texts. To be able to answer the question of how the knowledge discourse affects law, such law texts must of course be analysed (this could be a suggestion for further interesting research). It has been mentioned though in the background chapter that the Swedish currency regulations with its origin from 1904 is assuming state monopoly on money issuance – and that governmental investigations afterwards have been using the barter narrative to legitimise lack of regulations on new monetary innovations like e-money. It is however clear, from the Riksbank text and the discussion about capital requirements, that the new Basel III regulations aim at restricting private banks abilities to risky lending. This could, perhaps prematurely, be interpreted as a sign that the shift in knowledge discourse from focusing on central bank power to the power of private credit institutions is causing a shift in which actors are being regulated in new legislation.

Although the ‘barter narrative’ is dismissed in the ecological economic (Daly), anthropological (Graeber) and archaeological (Benes) texts analysed here, the barter narrative might still be the dominant theory within Economics. To know this, more texts similar to Mankiw’s would have to be analysed. Mainstream economics is still dominant over other disciplines when it comes to where policy makers take their advice. Whereas the barter narrative can serve to naturalise money and make econometrics appears as a Science, the debt narrative can serve to make money appear as a cultural phenomenon – which places economics into the Humanities. A shift of
mainstream theory would according to this reasoning have severe implications for the role of economics – for example the ability of economists to offer (over-)confident predictions.

6.1.3. The Relation between Fractional Reserve Banking, Economy, Power and the Environment

All the analysed actors agree that the monetary system is a foundation stone for general economic development. The actors who have been categorised as ‘mainstream economists’ (including Beneš and Kumhof in this case), all argue that a stable financial system and stable price formation provide a good basis for growth. For Beneš and Kumhof, this stability is achieved by a FRB reform. For Mankiw it is achieved by letting the economy reach its ‘natural balance’ by reducing unnecessary regulations. For the central banks the current monetary policy, including Basel III, is already providing the necessary framework for achieving stability. The more ecologically oriented actors on the other hand argue that the current monetary system, based on interest-bearing money, has a built in growth imperative that enforces excessive use of natural resources and hence an unsustainable economic development. The ‘environmentalists’ also argue that if we want sustainable economic development without growth, the monetary system must be transformed. But, there is no consensus even among the environmentalist perspectives regarding how the system should be transformed, or that FRB is actually the key to change.

All the actors (except maybe Hornborg who avoids economic discourse) depict how fractional reserve banking results in private banks creating new money. For the actors who promote FRB (including Wijkman and Rockström) this ‘fact’ is portrayed as problematic and an expression of illegitimate power. Hornborg’s vision of a sustainable monetary system also implies that the government issues non-interest-bearing money. For the central banks it is not a problem that private banks create money, since they argue that they are still able to ensure financial stability with the monetary policy framework at hand. For Mankiw, fractional reserve banking and what he views as money multiplication by banks is not either a problem since, according to his narrative, only governments misuse their monetary power and cause hyper-inflation.

6.2. Personal reflections

During the writing process many new questions have arisen, these are not conclusions but rather personal reflections. As I have mentioned in the introduction, a personal motivation for the research process has been the search for economic reforms to increase socioecological resilience. For example, I have considered whether or not FRB is really a realistic proposal considering how difficult it is to define money? As Dittmer (2015) have argued, the lack of success for this proposal might have to do with the fact that money is a cultural innovation under constant change. New sorts of ‘near money’ can quickly be used as ‘normal money’, if the general public choses to do so. If full reserve requirements are introduced, commercial banks, or other ‘capitalists’, might find loopholes or other ways to redistribute wealth and natural resources in their own direction.

Another question is if FRB really is such an environmentalist proposal considering that the actual relation between FRB and growth is portrayed so differently? The key argument by Daly,
that fractional reserve banking creates a growth imperative, obviously needs to be more researched and empirically evidenced. There are other ideas that appear to me as more ecologist in the sense that power is decentralised away from the state as well as the market. Those proposals are more focused on local communities, like the introduction of gift economies (Eisenstein, 2011), or local currencies run by the communities themselves (Greco, 1990).

I have also given thought to Graeber’s idea that money is “a substitute for physical violence” (Graeber, 2009). How does a FRB reform affect that? If FRB does manage to lower debt levels and decrease environmental impact (which might be seen as violence against the ecosystem as well as people affected by human induced environmental disasters) it can indeed be seen as a reform to ‘disarm’ the monetary system.

In this thesis I have analysed the texts with regards to their attitude towards regulations. A researcher who has yet not been mentioned is James C. Scott and his research about how reform can be used to create or avoid so called natural disasters (1998), “so called” because according to Scott the results depend on human reaction and organisation and nature should not be blamed. Since he has not been mentioned before, his theory does not fit in the conclusions. But since his perspective is important to my thoughts about reforms for socioecologic resilience, I want to mention his theory in this section. To Scott a core argument is that there is hubris in thinking that we can ever know enough to be able to make correct plans for the future. Instead it is the inventiveness, collective intelligence (a term which I do not think Scott uses, but fits his argument) and the practical knowledge carried by all individuals at local levels that provides solutions to the problems that arises. To create a good basis for this bottom-up approach to problem solving Scott offers four guidelines to policymakers; take small steps, favor reversibility, plan on surprises and plan on human inventiveness (Scott 1998: 345). From this perspective the radical reform proposed by Daly and Farley is perhaps not the best way to go, even though they do suggest a gradual increase of reserve requirements. Instead, Wijkman and Rockström’s more moderate, many small reforms appear as ‘safer’. Also, local currencies, again, is an example of making use of local knowledge and allowing for a multitude of innovations instead of only one ‘correct’ governmental solution.

6.3. Further research

An overarching aim of this MA thesis is to contribute to the understanding of how the financial system influences socioecological development. I quickly identified that within academic knowledge discourse there are totally opposing theories with regards to how or whether economy affects ecology – and at the same time these conflicting theories share assumptions that could be empirically questioned. I have during this process identified some topics for further research. Those topics include; formulating a coherent, evidence based, theory of what the relation between the financial system and the biosphere looks like; identifying how policy can be changed to make this relation resilient to socioecological development (and hence decrease environmental impact); and also research how financial innovation and policy affects economic behaviour on real ground micro-level.

- To formulate a coherent and scientifically underbuilt ecologic economic theory of how the current financial system and connected policy affect the biosphere:
Herman Daly and Joshua Farley (2011) have made an important contribution to this theory building. But as Dittmer (2015) and Jackson (2015) observe, there is still a lack of empirical evidence to the very key claim that there is an inbuilt growth imperative in the monetary system due to money being created as interest-bearing debt. The question of growth imperatives in economic policy – that institutions are built in a way that makes collapse unavoidable if economic growth is not achieved – is highly interesting in analysing if a specific financial tool or reform is resilient from a socioecological perspective. Binswanger (2009) has made an important contribution to this field of research, but as Dittmer (2015) states, the theory is not complete and important aspects are lacking in Binswanger’s evidence. The existing econometric model developed by Jackson (2015) should be complemented with historical case studies. Growth imperatives are mainly discussed in connection to the monetary system, but to me it is evident that growth imperatives can be present in other important areas like tax policy, and this should be considered too.

The notion that separation between credit and money (as well as financial and monetary policy) rests on a conceptual confusion is important for the proposed research project. To understand how finance and money historically and currently are inseparably intertwined should be the basis for any study of the financial system and its surrounding policy. Daly and Farley’s (2011) general ecological economic financial theory is underdeveloped with regards to their historical money theory which in parts is self-contradictory and somewhat confused. Recent compilations of historical and anthropological research (like Graebber, 2011, and Benes and Kumhof, 2012) as well as official statements from the Bank of England (2014) offers broader support for a more critical approach of the historical development of the financial system than what is present in ecological as well as mainstream economic discourse.

- Policy change and governance dimensions to support the implementation of real sustainable financial innovation on the ground:

With the proposed formulation of an ecologic economic theory of how the current financial system and connected policy affect the biosphere, further investigations can proceed about how to develop the financial system towards socioecological resilience.

There are today many ‘green’ financial innovations (like green bonds, impact investment, climate funds, crowd equity, ethical credit institutions and local currencies, to mention a few). One might question how ‘green’ or ‘greenwashed’ these innovations really are, if ‘green’ is defined according to a theoretical framework and not only the agenda of financial institutions? For example, within Swedish cooperative and ethical banking24 there is an ongoing discussion about whether environmentally sustainable finance is created by prohibiting usury/interest or by having strict socioecological investments criteria to follow. An in-depth analysis of the ways in which the financial system affects the biosphere must precede any analysis of how policy can support present green finance, counteract unsustainable financial practises and support development of new financial instruments for a resilient socioecological economic development.

24 See www.ekobanken.se and www.jak.se.
Having identified ways in which current financial policy have a negative impact on the biosphere, a natural next step would be to analyse how these policies can be changed in the desired direction. This is a highly important, but unfortunately overlooked, research area. I would suggest a research project that looks into the three following part questions:

**Question 1) Which are the key actors in the financial system, what do they do and how are they connected?** A first step would be to identify the important actors in the current financial system – including the actors who are developing ‘green’ financial innovations. What kinds of financial instruments they use, what kind of policies and legislation they are affected by, and which the target groups/customers of these financial actors are must also be analysed. This first part of the project would aim to map out what the current financial system looks like. Actor Network Theory, as developed by Latour, Callon and others (see for example Latour, 2005), provides a functional theory and methodology for conducting such a study. A network theory like ANT that actively avoids the culture/nature dichotomy is especially useful considering that the next step of the project involves identifying the connections between the financial system and the biosphere.

**Question 2) In what ways do financial instruments and innovations affect the biosphere?** This part of the project would focus on analysing how the financial system – and its parts, including ‘green’ financial innovations – influences flows of energy, resources, pollution, biodiversity etc. As mentioned earlier there is ongoing debate within ecological economic research as well as within ethical banking regarding what the key mechanisms are through which finance affects ecology. There are strong, however under researched, assumptions about how interest is an engine to systematic unsustainable development (for example represented by Herman Daly, 2011 and 2013). However, there are also other approaches which seek to explore how financial practise can underpin or undermine sustainability by the investment criteria, required rate of return, or other practises of the financial institution (see for example Wijkman and Rockström, 2011). As Galaz et al (2015) explain, the ways in which finance affects ecology can be indirect and very complex, for example by commodity price shifts that enforce changes in agricultural landscapes. Here the Actor Network Analysis could be extended by looking at how the financial actors interact with the natural systems. The mentioned econometric model researching growth imperatives in the economic system should also be developed and empirically tested. To further outline a more complete theory of how the financial system affects the biosphere, I suggest that Social Metabolism (see for example de Molina and Toledo, 2014) should be used as a theoretical as well as methodological framework. Social Metabolism has been successfully used to define how societies organise the exchange of matter and energy with their natural environment, to explain socioenvironmental change and for analysing the biophysical behaviour of economies (Ibid. p. 44).

**Question 3) How can policy be changed to better support a development towards a socioecologically resilient financial system and overcome governance gaps?** The final step of the project would be to analyse how current structures can be reformed to better work for sustainability. How are insights regarding how the financial system affects the biosphere integrated in current policy – and if there are gaps, how can those insights be applied to overcome gaps? It would here be interesting to analyse macro as well as micro aspects of how governance can be practised:
3a) Considering the Foucauldian notion that liberal government is conducted at a micro-level by a sort of self-regulating citizen, studied in the field of Governmentality (see for example Bröckling et al. 2011), I want to explore how financial policy is implemented on the ground through the social practises of credit institutions, households and business. For example, how does the monetary policy framework (usually implemented via the repo rate) affect individuals’ decisions to consume? Does the use of different financial tools or sources of investment (commercial bank loans, unsecured loans, microloans, loans from ethical banks, crowd funding, equity shares, etc.) affect the socioecological considerations in the investment decisions of businesses? How are local producers affected by new (green) financial investment strategies? These sorts of questions could be approached by field studies including interviews, surveys and macro data statistical analysis, following the Governmentality methodology.

3b) For a more macro oriented analysis the work already done by Wijkman and Rockström (2011), Hornborg (2011), Galaz (2015) and others could be developed according to the analytical framework regarding the relation between finance and ecology developed in the project. Through a Critical Discourse Analysis relevant treaties and policies should be scrutinised. Scott’s (1998) historically based research about what constitutes sustainable policies to prevent and combat human induced ‘natural’ disasters provides a suitable theory.

7. References


Dobson, Andrew (2007), Green Political Thought, New York: Routledge


Färm, Göran (2007), Politiska ideologier: en liten bok om stora idéer, Stockholm: Bilda förlag


Hall, Charles A. S. and Day Jr, John W. (2009) Revisiting the Limits to Growth After Peak Oil: In the 1970s a rising world population and the finite resources available to support it were hot topics. Interest faded—but it’s time to take another look, *American Scientist*, Vol. 97, No. 3 (MAY-JUNE 2009), p: 230-237


Huber, Joseph and Robertson, James (2000), *Creating New Money – A Monetary Reform for the Information Age*, New Economics Foundation.


Sigurjonsson, Frostri (2015) Monetary Reform – A Better Monetary System for Iceland, Reykjavik


Sveriges riksbank (2015), Den svenska finansmarknaden 2015, Marklund, Lisa (editor), Stockholm

Sveriges riksbank (2012 and 2013), Den svenska finansmarknaden 2012, and Den svenska finansmarknaden 2013, Mannent, Jenny (editor), Stockholm


Internet sources:


http://www.federalreserve.gov/monetarypolicy/openmarket.htm

Happy Planet Index, *The Happy Planet Index (HPI) is the leading global measure of sustainable well-being*, (Accessed 2016-05-17)  
http://www.happyplanetindex.org/about/

http://hdr.undp.org/en/content/human-development-index-hdi

http://www.isecoeco.org/about/cross-discipline-approach/

Organisation for Economic Co-operation and Development, *Domestic Product*  
(Accessed 2016-05-17)  

http://www.riksbank.se/sv/Penningpolitik/Inflation/Inflationsmalet/

http://www.riksbank.se/sv/Riksbanken/

**Appendix 1**

**Definition of Economics: Classical, Neo-classical, Environmental and Ecological**

Economics is a social science studying how governments, individuals and firms make choices on how to allocate scarce resources to satisfy their wants. In other words, economics is the study of how production, consumption and distribution of goods and services are managed. (http://global.britannica.com/topic/economics)
Classical economics refer to an English school of economic thought from the 18th century. Adam Smith, David Ricardo and John Stuart Mill are considered some of the most prominent representatives of this school of thought. They opposed mercantilist ideas and advocates free trade and free competition to enhance economic growth. (http://global.britannica.com/topic/classical-economics)

Neo-classical economics, also sometimes referred to as mainstream economics, are built on the ideas of classical economics but where developed in the 19th and 20th century. Some of the new aspects include the focus on mathematical techniques and the development of rational choice theory. (http://www.businessdictionary.com/definition/neo-classical-economics.html)

Environmental economics is a sub-field of economics focusing on the effect of environmental policy and how to include hidden environmental costs into market prices – ‘to internalise externalities’. (Stavins, 2007)

Ecological Economics differ from the three mentioned schools of thoughts in the sense that it is a transdisciplinary field that sees the economic system as a subsystem to the ecosystem and its focus is on preserving natural capital. (http://www.isecoeco.org/about/cross-discipline-approach/)