

Jochum Beetsma

German Decision Makers' Beliefs and the Budgetary Deficit Crisis

A Cognitive Mapping Study on Learning from Crisis Experience

JOCHUM BEETSMA

3276074

UTRECHT UNIVERSITY

UTRECHT SCHOOL OF GOVERNANCE

TUTOR GROUP GOVERNANCE

SUPERVISOR: FEMKE VAN ESCH

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Preface

Of beter gezegd: een woord vooraf. Na een maand lang Engels schrijven, denken en dromen is een A4 Nederlands een welkome afwisseling! De scriptie die voor u ligt is het eindproduct van een proces dat het beste te omschrijven is als 'hollen of stilstaan'; een klein half jaar aanmodderen en worstelen en dan een flinke eindsprint. Hoewel een ieder kan bedenken dat dit niet de *verstandigste* manier is om een scriptie te schrijven, durf ik te stellen dat het wel een *leerzame* manier is geweest. Sterker nog, het is mijn manier. Voor nu. Het *leren* tijdens het schrijven van deze scriptie is zeer gevarieerd; mijn academisch Engels is vanaf het moment dat ik begon sterk verbeterd, het uitvoeren van empirisch onderzoek heb ik beter onder de knie gekregen en mijn inzicht in de wondere wereld van 'cognition, beliefs and decision making' is vele malen groter dan het was. Dat is allemaal leuk en aardig, maar valt in het niet bij wat ik over mijzelf heb geleerd: ik kan 'hollen', en hard! Dat ik kon stilstaan was mij, en de mensen die mij een beetje kennen, niet onbekend. Roeien ging me ook aardig af. Maar om enthousiast – geobsedeerd bijna – aan iets te werken wat ik eerder enkel als 'huiswerk' kon zien is nieuw voor mij. En het smaakt naar meer!

Dit alles was mij in mijn eentje natuurlijk niet gelukt. Het inleveren van deze scriptie misschien nog wel, maar de ontdekkingstocht die ik de afgelopen weken heb mogen maken nooit. Gelukkig hoefde dat ook niet: er was hulp. En daar ben ik dankbaar voor. Bedankt dus, Femke, voor het feit dat je zo begaan was met mij, voor je vertrouwen in tijden van 'stilstaan'. Maar bovenal: bedankt voor je aanstekelijke enthousiasme, wat er voor heeft gezorgd dat ik ben gaan 'hollen'. Er zijn nog meer mensen, zonder wie het stuk zoals dat hier nu ligt niet zou bestaan. Ook hen ben ik dankbaar.

Terug naar de scriptie. Een stuk waar ik, uiteindelijk, met tevredenheid naar kan kijken. Een stuk ook, dat mij nog lang zal heugen. Ik hoop u ook!

Veel leesplezier gewenst!

Summary

For a long time, the studies of foreign politics, political science and governance have, by large, neglected a cognitive approach to decision making. However, a growing awareness in these research fields has led to the conclusion that more studies should be devoted to unearthing decision makers' beliefs and their influence on policymaking. This thesis does exactly that. It does so, by examining the budgetary deficit crisis that unleashed its full force in the spring of 2010 in Europe, from a cognitive perspective. With the help of a case study design, the beliefs that underlie the decision making of two high-level German actors – Angela Merkel and Axel Weber – are examined. For they have great influence on Europe's response to this crisis.

Two distinct but interrelated aspects of their belief systems are under inquiry; the stability of their beliefs throughout the crisis and the way in which their belief systems are structured. A large body of literature postulates two rivaling expectations on each of these aspects. The stability of beliefs throughout a crisis is thought to be a matter of 'all or nothing'; on the one hand crisis is expected to have a 'catalytic' effect on belief change and learning, on the other, crisis experience is believed to cause a rigidity in the way people think rather than new insights. The expectations on the structure of belief systems are just as conflicting; some scholars insist that belief systems are structured core-peripheral, while others expect them to be structured hierarchically.

Content analysis of Merkel and Weber's public statements produces the data from which their belief systems are derived. The technique of cognitive mapping and supporting software is used to design visual representations of these belief systems, which are used to test the hypotheses.

Counter intuitively, the findings on both of the aspects are self-contradictory. The rivaling expectations on belief change through crisis experience both proved useful in interpreting the empirical data. Where Merkel showed perseverance in her ideas, Weber's beliefs underwent a radical change. These results are a strong advocate for the use of a cognitive perspective in political science and governance, for they illustrate the subjectivity and context-dependency of learning and belief change. The findings on belief system structure support both the core-peripheral and hierarchical structure propositions. Yet the core-peripheral structure is more accurate in its expectations on belief stability.

Overall, this study shows that crisis experience indeed triggers belief change, but in different and contrasting ways. In addition, the effort to explore the structure of belief systems and their postulates on belief stability covers a lot of ground. As both, rivaling structures are supported by the findings in this thesis and partially overlap; they might very well be relatives rather than rivals.

By taking the first steps in explaining German decision makers' behavior in times of crisis and contributing to the meta-debate on belief system structure, this thesis hopes to provide a point of departure for future research in this fascinating field.

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1. Puzzling Germans

Since the autumn of 2007, problems on the United States' housing market have evolved into a global financial crisis. One year later, in the autumn of 2008, Europe is confronted with the effects of this crisis; both national and international banks need government aid in order to uphold economic and financial stability. Despite extensive government action, the financial crisis continues to roam globally and creates another problem for Europe in the beginning of 2010. At that point, Greece admits to have lied about its budgetary deficit, which turns out to be over 12% of their gross domestic product (GDP). This is the start of a shift of the problems from the banking sector to the public finances of European countries. This new budgetary deficit crisis does not only threaten Greece. Other euro countries are affected as well; by sharing a currency, they share, till a certain extent, Greece's fate. The stability of the euro is in danger. Most euro countries intend to assist Greece financially in order to safeguard the euro's stability, but German politicians oppose this solution.

German chancellor Angela Merkel is not convinced that financial aid to Greece is the best or only solution. Other countries openly accuse Berlin of being hesitant and thereby, jeopardizing Greece's fiscal situation and the stability of the euro. Germany, however, remains unclear about its intent. So much so, that euro countries and European Union officials alike are frustrated with the German ambiguity. Until, at the end of April 2010, Berlin suddenly supports the financial aid package for Greece. Moreover, Merkel stresses "that the negotiations with the Greek government, the European Commission and the IMF need to be accelerated" (Financial Times, 29 April 2010: p. 2). This sudden change is, albeit with surprise, welcomed by other members of the Economic Monetary Union (EMU). The financial aid package relieves Greece of its most urgent financial problems and averts a Greek default.

Later that year, while looking for a long-term solution to the fiscal problems of EMU member states, Merkel manages to astound the European community yet again. After emphasizing the need for automatic sanctions against member states that infringe the Stability and Growth Pact (SGP), the German Chancellor agrees to do without such sanctions at a meeting with French president Sarkozy in Deauville (Merkel, 2010d: 4). European countries that were in favor of automatic sanctions respond bewildered and accuse Germany of betraying them and jeopardizing the stability of the euro. No one understands these sudden changes in German decision making. What made Merkel and her fellow decision makers change their mind?

1.1 Solving the puzzle

The reaction of German decision makers to the budgetary crisis is described as erratic, hesitant and even counterproductive (Der Spiegel, 26 March 2010). Merkel in particular is subject to such critiques. She states that “the crisis has deeply shaken us”, although her inconsistent behavior leads many to suspect otherwise. If Merkel and other German policy makers are really that frightened by this crisis, why didn't they favor the Greek support package in the first place? And what caused them to support it vigorously a few months later? The answers to these questions are required to solve the puzzling German response to the crisis. For a puzzle it is, and an important one as well; millions of people are affected by the outcome of these decisions, yet no one understands why they are being made as they are. How to solve this puzzle?

1.2 Where to begin: behavior or beliefs

The best place to begin is, oftentimes, the beginning. Therefore, the goal of this thesis is to take the first, small steps in explaining the German decision makers' reaction to the budgetary crisis. It does so, by examining if they are indeed 'deeply shaken' by it and if they are, by examining how they are changed by that experience. The rationale behind this is that one cannot explain people's actions without knowing their underlying beliefs and motives. This might appear to be a truism, but it has important implications for the focus and locus of this study.

First and foremost, it implies that determining how the crisis affected the actions of Merkel and her colleagues must be preceded by determining whether the crisis has changed their underlying beliefs. Hence, this thesis focuses on *belief change* rather than *policy change*.

Secondly, the assumption that underlying beliefs are an important factor in decision making might seem self-evident, but it is relatively new to political science. The traditional perspective in this field of research – the Rational Actor Theory – treats the mind of decision makers as a “black box” (Rosati, 2000: 48). This renders the Rational Actor Theory unsuitable as a point of departure, as it foregoes the subject of inquiry. Therefore, this thesis uses a cognitive approach, which “*awards a pivotal role to an actor's belief system*” in decision making (Van Esch, 2009: 91). Consequently, the German decision maker's belief systems are the locus of this study. By studying these belief systems, Cognitive Theory promises to explain “*quite naturally and directly those events which are most puzzling when understood within a rational framework.*” (Steinbruner, 1974: 14). All things considered, Cognitive Theory is thought to prove useful in achieving this thesis' goal; taking the first, small steps in explaining German decision makers' behavior.

1.3 What questions to ask?

Why did German decision makers obstruct the Greek support package in the first place? And why did they support it vigorously a few months later? To answer these questions, one needs to ask oneself: (what) have they learned? Therein lays the clue to solving the puzzle of the German response to the crisis. And so, the central question of this study is:

Does the budgetary deficit crisis cause German decision makers to experience belief change on the topic of European monetary and fiscal policy?

A question can hardly be more straightforward than the one stated above. Although a simple 'yes' or 'no' might suffice, the reasons behind such a conclusion determine its significance. Hence, the central question is supported by two sub questions:

1. *How does the budgetary deficit crisis cause belief change?*
2. *Where in the belief systems of the German decision makers does this belief change take place?*

In chapter 2, after the examination of a large body of literature on the subject, sub questions 1 and 2 will be developed into hypotheses. The testing of these hypotheses will lead to the answers on the sub questions and the central question.

1.4 Does it matter?

Finding an answer to these questions matters. It matters for the field of political science because most research conducted in it does not take personal ideas and preferences of decision makers into account. This gap within the field of political science has led to the conclusion that "more research should focus on the content of elite beliefs [...] ideas and suppositions that shape policy" (Rosati, 2000: 56). It matters for the study of governance, as its attention for factors as personal ideas and beliefs is negligible as well. Yet policymakers on all levels have their own beliefs and preferences, and these influence their decisions, consciously or not. The focus on systematic and structural factors that influence (international) policy making, has left the study of cognition underexposed. This is a loss because, "ultimately, humans and policymakers are cognitive actors." (Rosati, 2000: 50). What is more, the influence of economic crises on belief change, i.e., learning is, not a frequent subject of inquiry. Any progress in this small field contributes significantly to the knowledge about crises and their influence on beliefs. Besides the scientific relevance of the subject at hand, the research conducted in this thesis combines the tested technique of *cognitive mapping* with the revolutionary *WorldView* software. This software is still under development, and the testing of its capabilities will help to maximize its contribution to the study of cognition.

In addition to its relevance for political science and the study of governance, this thesis is relevant to European citizens. It is argued that in “modern society many of the most important decisions affecting the quality of life and perhaps even our very survival are made by others” (Axelrod, 1976: VII). With the shift of decision making power from national governments to Brussels, the opaqueness of decision making has increased. The people making these decisions keep getting further and further away from us. Therefore, it is relevant to inquire how the people making those decisions for us, do so exactly. Why do they decide as they do? This thesis contributes to finding an answer to that question. For the citizens of small EMU countries – such as the Netherlands –, the ideas and preferences of German decision makers are of special interest. With the ongoing integration of the European Union (EU), more and more decisions are made in Brussels. As a result, decision making on topics within EU control, might be influenced more by German politicians than their own.

1.5 How to read?

The goal of this thesis has been made clear. The questions that need to be answered to achieve this goal have been raised. What is next? Finding the answers. In order to do so, this thesis is divided into the following chapters:

Chapter 2 will assess a wide variety of literature that is relevant to the central question and sub questions of this thesis. Starting point is the Rational Actor Theory, which serves as a background from which subsequently, Cognitive Theory can be distinguished. The literature on individual learning is addressed and reveals expectations on the structure of belief systems: a step towards positing hypotheses. Crisis literature also serves this purpose, and will be examined next. The last body of literature that is assessed is that which combines the fields of crisis and learning. Although it is small, it grants important insights in how crises can influence individual learning. Finally, the different bodies of literature will be integrated to be able to outline expectations about the influence of crises on decision makers’ belief systems.

In **chapter 3**, the methods that are used in this thesis will be highlighted. Starting with the decision to conduct a case study design. The choice for the case is justified, as well as the use of written statements as the source of empirical data. Some methods for inferring belief systems from these texts shall be examined, and the choice for the *cognitive mapping* method is explained. Thereafter, the variables that are used in this thesis will be operationalised and finally, the validity and reliability of this study are discussed.

The financial and budgetary deficit crisis and the German response to it will be described in **chapter 4** to provide the results of this thesis with the necessary background information. Although it is impossible to report all phenomena, noteworthy events and decisions will be highlighted. This

description shows how heavily policy outcomes in Europe are influenced by German decision makers. It is, therefore not only an account of the situation, but also a testimony to this thesis' social relevance.

The findings of this thesis are presented in **chapter 5**. First of all, each actor and their belief system before and after the crisis will be discussed in isolation. Subsequently, the belief systems are compared to analyze and test the hypotheses that are put forward in chapter 2.

Chapter 6, the conclusion, will summarize all findings and connect them to the hypotheses from chapter 2. This will result in the support or falsification of the individual hypotheses. The second part of this chapter is devoted to integrating these different conclusions, for most of the hypotheses are interrelated. The third part will answer the question that is central to this thesis as well as the sub questions.

In **chapter 7**, the issues of validity and reliability are revisited and reflected upon. In addition, this thesis' implications for the assessed body of literature are explored. This chapter will conclude with some recommendations on future research.

2. Literature: what to expect?

In this chapter, a wide body of literature – on political science, learning and crisis – will be assessed to shape expectations about the influence of crises on the content and structure of belief systems. In order to do so, four different facets of the literature will be addressed, after which, in the fifth part, these facets will be integrated to posit hypotheses.

The first part examines both the dominant 'Rational Actor Theory' and the theory used in this thesis; Cognitive theory. The assessment of the 'Rational Actor Theory' will be brief, as it has been used in most fields of social science – like economics, organizational theory and international politics (Rosati, 2000: 45). Therefore, the theory is so well-known that it hardly needs an introduction. Rather, it serves as a background from which Cognitive Theory can be distinguished. In doing so, it shows that the assumptions made by Cognitive Theory are radically different from the 'mainstream' Rational Actor Theory.

The second part focuses on the overlap and differences between 'belief change' – an issue that is crucial to Cognitive Theory – and 'learning'. This exploration shows that, in academic discourse, the two are intimately related. The literature on learning also reveals assumptions about the structure of belief systems. These propositions will be examined in order to postulate hypotheses concerning belief system structure in part five of this chapter.

The third part of this chapter is devoted to the study of crisis. Different definitions of crisis are summarized briefly, after which the definition used in this thesis shall be stated. In addition, the scope of the field of crisis research shall be explored, so as to determine if the used definitions can be applied to the budgetary crisis under inquiry in this thesis.

The fourth part examines the few studies devoted to the interface of crisis research and 'learning'. In this field, there are two rivaling views on the influence of crises on individual learning (belief change). Although both views find their origin in the same psychological principles as Cognitive theory, they expect very different effects. On the one hand, the view embodied by the *crisis-learning* hypothesis, is optimistic about learning triggered by crisis experience. On the other hand, the assumptions underlying the *threat-rigidity* hypothesis, which are more skeptical about the ability of individuals to learn in and after crisis situations.

Finally, in the fifth part, the examined literature will be used to formulate a number of hypotheses concerning the influence of crisis experience on belief change, the structure of belief systems and change therein due to crisis experience.

2.1 Rationality and cognition: rivals or relatives?

When explaining policy outcomes, both domestic and international, people try to empathize with the decision maker in order to ascertain what goals would make the policy in question *logical*. Logical, in this sense, can often be substituted by *rational*, and if the inquirer fails to explain the decision in this way, the decision maker is deemed *irrational*. The problem with this method is that it implies certain assumptions about how the physical and social world works. By doing so, it colors research outcomes. In the contemporary study of political science and foreign policy, there is a growing awareness for this phenomenon. From this awareness, alternative theories for explaining policy outcomes have emerged. Cognitive theory is one of these alternatives. In order to do justice to the ways in which it differs from the classical Rational Actor Theory, the latter shall be examined briefly.

2.1.1 Rationality: its rationale and consequences

The difficulty with the Rational Actor Theory is that it is used so often in so many fields of academic interest that in many cases it remains tacit. A few people have seen this implicit use of assumptions accumulated in Rational Actor Theory and have tried to explicate its mode of thought. Among those are students of foreign policy and the first question they ask is "What does it do?" (Allison and Zelikow, 1999: 13). The answer is something along the lines of: the Rational Actor Theory attempts to explain policy outcomes by recounting aims and calculations of actors and agents. This method is a trademark of the Rational Actor Theory and is used so universally, both in sciences as in every-day-life, that it is easy to forget it is based on fundamental assumptions.

All models and methods based on the Rational Actor Theory assume that: (a) what must be explained is an action, i.e., behavior that reflects purpose or intention; (b) the action is chosen as a calculated solution to a strategic problem and; (c) the explanation consists of showing what goal the actor was pursuing when it acted and how the action was a reasonable choice, given the actor's objective (Allison and Zelikow, 1999: 15). Furthermore, the Rational Actor Theory gives an overview of the processes that occur when actors decide. First of all, *goals and objectives* are translated into a "utility" function by which different sets of consequences can be measured. Secondly, the *alternatives* must be considered. The agent must choose between a set of alternatives displayed before him in a particular situation. Thirdly, each alternative has, its own set of specific *consequences* attached to it. The actor is aware of the consequences that will arise if a particular alternative is chosen. Finally, "the *choice* consists simply of selecting that alternative whose consequences rank highest in the decision maker's utility function" (Allison and Zelikow, 1999: 18).

Over the decades, severe criticism on the feasibility of this model of decision making has led to a division within Rational Actor Theory with on the one hand, *comprehensive rationality* as an ideal type, and on the other hand, *bounded rationality* as a more realistic approach to the theory (Simon, 1985). The comprehensive rationality model works along the lines described above. The agent is assumed to have a utility function by which it ranks all alternatives, choosing the alternative that scores highest. The central difference between the two types is that comprehensive rationality assumes the actor to “review *all* alternatives and accurately assess *all* consequences in making *the* value-maximizing choice” (Allison and Zelikow, 1999: 20). In contrast, bounded rationality recognizes the inevitable limitations on mental capacity and knowledge of actors. This interpretation of Rational Actor Theory gives some comfort to ‘irrational’ decision makers, for it accepts their values, beliefs and stereotypes, even if they are inaccurate (Simon, 1985: 295).

The same criticism that has led to the initial division between *comprehensive* and *bounded rationality*, has made the latter more credible and frequently used in academic discourse. This shift can be observed in the studies of political science and foreign policy. Classical theorists emphasize the necessity to “approach political reality with a kind of *rational outline*” (Allison and Zelikow, 1999: 29) and critics of this classical approach point out that despite of the inescapable limitations of actors, “governmental and political leadership remain tangential and are usually treated as a ‘black box’.” (Rosati, 2000: 48). These concerns, along with progress in the fields of psychology and social science, caused the emergence of an alternative: the use of Cognitive Theory in political science.

2.1.2 Cognition: its principles

Cognitive theory, as used in political science, tries to explain decision maker’s behavior by looking at the decision maker itself. It is a counterpart of the classical Rational Actor Theory, which also tries to explain decision making, but largely ignores the individual decision maker. Cognitive Theory focuses on the individual decision maker, and by doing so, explains “*quite naturally and directly precisely those events which are most puzzling when understood within a rational framework*” (Steinbruner, 1974: 14). According to the theory’s assumptions about the human mind, the individual decision maker influences policy outcomes a great deal. This influence is, for the major part, unconscious and is derived from four psychological principles on which Cognitive Theory is based.

1. The principle of inference

The first principle of the Cognitive Theory states that the human brain simply cannot receive all information available. This is impossible for “at any moment an infinite number of phenomena might be observed” (Lieshout as quoted in Van Esch, 2007: 91). Instead, it uses an inference system to filter information and store only that information that seems relevant. The incoming information is

filtered on the basis of the views already present in the brain. By doing so, the mind gives meaning to incoming information (Steinbruner, 1974: 96). This phenomenon has great implications for an actor's image of the world as it "is based on the information about the outside world on the one hand, and its preexisting ideas – or belief system – on the other hand" (van Esch, 2007: 90).

2. *The principle of consistency*

The second principle on which the Cognitive Theory is based states that the inference mechanisms of the mind are constrained by a demand for consistency. Rather than freely storing information in the brain, the mind operates in such a way as to keep internal beliefs consistent with one another (Steinbruner, 1974: 97). This principle affects the organization of memory as well as the processing of new information. New information is deemed relevant if it is consistent or compatible with views already present in the mind.

3. *The principle of reality*

The third principle of the Cognitive Theory states that "the human mind is in contact with its environment" (Steinbruner, 1974: 100). The inference mechanism and the principle of consistency are always constrained by reality as "stable and important features of the environment impose themselves quite reliably on the mind" (Steinbruner, 1974: 101). If there is a big change in the environment that remains stable for a long period of time, eventually the mind has to 'give in' and accept the change as real. Especially if the events and their meaning are straightforward, the mind's margin to filter out or reinterpret information becomes small (van Esch, 2007: 93). If, however, the events are abstract and ambiguous, reality will not severely constrain the first two principles (Hermann, 1976: 331).

4. *The principle of economy*

The principle of economy states that the cognitive decision maker, since he is maintaining a complicated, interacting set of beliefs and is constrained by external reality and internal consistency, needs simplicity and stability. Because the world is immensely varied and constantly changing, the mind would not be able to cope with all the complex changes without some protection mechanisms. The first of these is the principle of simplicity, which states "that cognitive inference mechanisms work to keep the structure of beliefs as simple as possible" (Steinbruner, 1974: 101). The second, the principle of stability prevents regular restructuring of the belief system as a major change in beliefs is likely to set off a chain reaction, which is very costly for the mind. The beliefs that are at the 'core' of a belief system are even more resistant to change, as changing these will have wider repercussions than a change in peripheral beliefs (van Esch, 2007: 92; Rosati, 1995: 63; Steinbruner, 1974: 102).

2.1.3 *Cognition: its meaning*

The principles of Cognitive Theory are clear, but what do they mean for the studies of political science and foreign policy? A cognitive approach, based on these principles, challenges much of Western thought on the assumption of rationality (Rosati, 1995: 50). First and foremost, by vindicating the inference mechanism, Cognitive Theory “awards a pivotal role to an actor’s belief system” (Van Esch, 2007: 91). Decision makers’ beliefs play a large role in determining policy outcomes for they colour essential information such as the definition of the situation, possible problems, possible causes and possible solutions (George, 1979; Welch Larson, 1994: 24). So much so, that “it is often impossible to explain crucial decisions and policies without reference to the decision maker’s beliefs about the world and their images of others” (Jervis, 1976: 28).

But what are exactly these ‘belief systems’? In the literature, they are generally defined as “the total universe of a person’s beliefs about the physical world, the social world and the self.” (Rokeach, 1988: 123). They include both empirical beliefs – on the state and the functioning of the world – and normative beliefs. Contrary to its contents – “*which vary so enormously that empirical generalizations are simply overwhelmed*” – the structure of belief systems show remarkable similarities across individuals and cultures (Steinbruner, 1974: 95). For instance, Cognitive Theory proposes that belief systems have a core-peripheral structure with some values and concepts having greater meaning for the actor than other beliefs.

By analyzing these similarities and the principles which underlie Cognitive Theory, it is possible to gain greater insight in the process of decision making and thereby help explain (foreign) policy outcomes. This inquiry can be done in at least four ways: (1) through the analysis of contents of policymaker beliefs; (2) through the analysis of structure of policymaker beliefs; (3) through the analysis of common patterns of perception (and misperception); (4) through the analysis of cognitive rigidity (and flexibility) for change and learning. These new ways of gaining insight in the minds of policy makers should compel students to consider Cognitive Theory when studying decision makers. Or as Rosati puts it: “actors, such as states, should be considered cognitive actors.” (2000: 53).

2.1.4 *Cognition: its beliefs about stability and change*

Central to Cognitive Theory are its assumptions on whether actors are capable of adjusting their views (Welch Larson, 1994: 22). Changing existing beliefs is thought to be very difficult, for the principle of inference and the principle of economy imply that individuals will attempt to ignore inconsistencies caused by new information or find ways to remove the inconsistency while upholding their pre-existing ideas (Van Esch, 2007: 92). A commonly used example of this is the

saying 'the exception that proves the rule'. It illustrates one way for people to deal with incongruent information without changing their belief system fundamentally (Welch Larson, 1994: 27).

The flexibility of an idea can vary however, and is thought to be determined by two factors. In the literature, stability is defined as "a function of the age of a belief and the frequency of its use as an organizing concept" (Steinbruner, 1974: 114). Therefore, the older and more frequently used a concept is, the more stable it is expected to be. The 'age' and use of a concept depends, in its turn, on two factors; the centrality of a belief and the expertise of an actor on the subject. Firstly, the centrality of a concept is important because central beliefs are, according to Cognitive Theory, especially resistant to discrepant information; a change would entail altering many other associated beliefs. The economy principle implies that the actor will try to prevent this as much as possible.

Secondly, because the principles underlying Cognitive Theory imply that the mind clings to stability, an actor is more open to new information if he/she is younger. In an early stage – as there is less pre-existing information –, the mind is most susceptible to new information. These early stages are thought to be the beginning of one's professional career. Changes in a belief system thus appear to be more costly to *experts* who have a lot of experience in their field of work. They are expected to stick to their beliefs over a long period of time. Although some literature suggests that experts could notice incongruent information better than novices (Fiske and Taylor, 1991), it also suggests that they can easily incorporate this information, so it has less impact on their belief system (Welch Larson, 1994: 28). This leads to the conclusion that "Paradoxically [...] informed people can better use contradictory information but are less likely to be influenced by it" (Welch Larson, 1994: 28). In other words, an expert's beliefs are expected to remain very stable over time.

Actors that are under inquiry in the study of political science are generally not in the early stages of their professional career. Moreover, they show – in comparison to ordinary citizens – an increased interest in the issues under examination and can be expected to have some experience with them. Therefore, policy makers in this study are to be considered experts on the general field of politics and the topic of monetary and fiscal policy. These propositions are supported by studies devoted to examining the influence of expertise on the stability of beliefs (Van Esch, 2007: 319). Concluding, according to Cognitive Theory, these actors are not likely to change their beliefs.

Cognitive Theory, however, is not alone in positing assumptions that influence the likeliness of belief change. As belief change and 'learning' share a large overlap, literature on learning is relevant to further examine theoretical expectations on changes within a belief system.

2.2 Learning and belief change: splitting hairs?

In every-day-life, 'learning' can refer to two different concepts. Firstly, the most common use of 'coming to know': acquiring a new skill or information that is believed to be true, valid or realistic and is an improvement compared to its predecessor. Secondly, learning is treated in a more normative and subjective way: learning about what is good or bad, which is always relative to the person judging the learning process (Robison, 2010: 6). For example, Americans have often stated that the Cold War ended because the Russians 'learned' that communism had failed, which implies that Americans believe that communism failed.

In academic debate, however, belief change and learning are closely related, as scholars often mention learning as the main process of change that occurs in one's personal preferences (Steinbruner, 1974: 136). But 'learning' as a concept is used in different respects. Stronger still, the literature on learning has been identified as 'a conceptual minefield' (Levy, 1994). It has been argued that learning is a concept which cuts across all the major theoretical and meta-theoretical cleavages in the social sciences (Stern, 1997: 69). There is great debate over the locus of learning (*who or what actually learns?*), the incentives of learning (*why do we learn?*) and developing criteria to be able to distinguish learning from non-learning based belief change. When looking at the diverse body of literature devoted to the concept of learning, one can fit most of these disagreements into five different interpretations of 'learning' (Tetlock, 1991; Levy, 1994).

1. *Neorealist conception of learning*

In this view, it is the state that learns, and is motivated to do so by the international hierarchy of power. Learning is described as a rational response to objective stimuli in the international community. A state adapts its behaviour to its position in the hierarchy in order to survive the international jungle.

2. *The cognitive psychological approach to learning*

This is the approach often used in social psychological science and it states that learning occurs within the minds of leaders, strongly influenced by simplifications of reality that leaders make out of necessity.

3. *The cognitive structuralist approach to learning*

Learning is thought to enhance belief structure complexity and improve self-reflection. This complexity criterion is used to distinguish learning from ordinary belief change (Robison, 2010: 18). Learning, defined as changes in a belief system in the direction of greater complexity can occur along several dimensions: (1) cognitive complexity: the number of distinct arguments underlying a set of beliefs; (2) evaluative complexity: the degree of inconsistency among these

beliefs; (3) cognitive integration: the extent to which these distinct elements are integrated into a larger framework that resolves inconsistencies and value trade-offs; and (4) self reflection: one's capacity to reflect on one's assumptions and causal inferences (Tetlock, 1991: 32-35).

4. The efficiency definition of learning

Learning as finding ways of matching means and ends up as efficiently as possible. This view assumes three necessary elements for learning to occur: "(1) a change in the content of one's beliefs that (2) is in the direction of greater accuracy about the world and that (3) facilitates the ability to achieve one's goals" (Levy, 1994: 291).

5. Learning at the level of institutions and political cultures

This view assumes that institutions and large aggregations of individuals can actually learn themselves. The institutional learning view is not relevant for this thesis, as it focuses solely on individual belief change.

2.2.1 Learning: defining an elusive concept

Out of these different views, each with its own definition of the concept of learning, the cognitive psychological approach is most suitable for the research conducted in this thesis. When looking at their ontological focus, several views on learning appear to be unsuitable. Because this thesis focuses on the individual, both the neorealist conception of learning (1) and learning at the level of institutions and political cultures (5), which focus on the state of organisation, are inappropriate. The cognitive structuralist approach (3) differs from the cognitive psychological approach by invoking the 'complexity' criterion. This criterion, has a significant drawback, however, as it is hard to measure. Although it is argued that accountability tends to make people more self-reflective information processors (Tetlock, 1991) who are inclined towards complex belief systems – learning as defined by the structuralists –, it is hard to prove that these changes are not merely strategic (Levy, 1994: 295). It is nearly impossible to determine whether an expressed complex argumentation in order to persuade adversaries is internally embedded or merely used strategically.

Therefore, the cognitive structuralist approach is not used in this thesis. Finally, the efficiency definition of learning (4) brings in the 'accuracy' criterion; in order for belief change to be considered learning, the new ideas have to be more accurate about the world and facilitate the ability to achieve one's goals. The assumption that new beliefs have to be more accurate than old beliefs turns out to be problematic, as this is impossible to measure objectively. This criterion implies a subjective aspect in learning, as determining whether beliefs are accurate or not comes down to comparing it to the scholar's own thoughts on the world.

The use of the concept 'learning' in this thesis is, therefore, best defined by Levy, who sees *"experiential learning as a change of beliefs (or the degree of confidence in one's beliefs) or the development of new beliefs, skills, or procedures as a result of the observation and interpretation of experience."* (1994: 283). This definition has several implications that are noteworthy.

Firstly, learning does not require policy change to happen. One can learn without being able (or willing) to adjust policy making accordingly. Secondly, this definition excludes any normative judgements about learning. The change of beliefs does not have to improve one's understanding of the world. And, thirdly, no increase in the complexity of the cognitive structure is necessary in order for belief change to be 'learning' (Levy, 1994: 283).

Furthermore, the definition of 'learning' used in this thesis, implies that learning is an active process in several respects. Learning is an analytic construction, for what one learns can be influenced "less by history than by the frames applied to that history" (Levy, 1994: 283). Moreover, actors actively search for the necessary information in order to construct a – in their eyes – valid interpretation of the experience. In addition, actors experiment to test their assumptions, learning by trial and error. The simulation of crises, performed so often by civil services, is a fine example of this. Finally, it is argued that interpretations of an experience are not only learned, but taught as well. People try to influence each other on how to interpret the experience.

The gap between belief change and learning is very small according to this definition, but it is preferable to other, stricter definitions, as was argued above. In fact, it is so small that in this study, 'learning' and 'belief change' are considered equivalent. Therefore, these concepts are interchangeable.

2.2.2 Belief system structure: exploring an undefined domain

Belief systems are thought to be structured, but in what way exactly is unclear. The structure of belief systems is relevant to determine *where* belief change is expected to take place. In order to answer the second sub question, an inquiry into belief system structure is expedient. Most scholars using Cognitive Theory agree that beliefs are structured core-peripheral, yet these propositions are not specified. It is argued that core beliefs are more stable than peripheral beliefs, but how this core-peripheral structure is operationalised is up to each scholar examining belief systems. As such, the core-peripheral structure remains ambiguous and its operationalisation arbitrary. Cognitive Theory does not have an adequate solution to this problem.

Fortunately, the literature on learning might come to the rescue. In this literature, "several lines of work suggest that [...] beliefs are structured hierarchically" (Tetlock, 1991: 28; Levy, 1994: 286). This hierarchical structure would consist of (1) an apex, containing fundamental assumptions and policy objectives, (2) an intermediate level, made up out of strategic policy beliefs and preferences and (3)

the base of the system, containing tactical beliefs and preferences (Tetlock, 1991). The apex resembles Cognitive Theory's system core in that it is more stable over time than peripheral/lower level beliefs. However, for the apex, not the centrality or saliency matter, but the content of causal beliefs and concepts determine whether they are stable. It is argued that "policy makers reconsider their basic goals or objectives only after repeated strategic failures", which implicates that learning on the level of tactical preferences is easier and thus more frequent than learning on the intermediate level (Levy, 1994: 286). Learning at the level of fundamental assumptions and policy goals is thought to be so psychologically difficult that it is likely to occur only in conjunction with massive personal shifts. Unfortunately, this is where the literature's description on hierarchical structure ends.

Students in the field of 'learning' appear to be struggling with the same problem – how to operationalise belief system structure? – which was found in the study of Cognitive Theory. The one thing that is sure is that some beliefs are more stable over time than others. Whether these stable concepts exist in the 'core' of a core-peripheral structure or in the 'apex' of a hierarchical structure is not yet clear. Possibly, the apex and core overlap. A reason to suspect this is that the stability in both structures is grounded on the principles posited by Cognitive Theory. Hierarchically higher beliefs, as well as central or salient beliefs are thought to be more resistant to change because of the effort it would take the mind to change them. All in all, this niche in the literature calls for further exploration on and testing of the structure of belief systems.

2.3 Crisis: a definition in transition

The research conducted in this thesis examines the influence of crises on the belief systems of involved actors. In order to do so, it is necessary to clarify what exactly 'crises' are. This part of the chapter will do exactly that. Furthermore, some changes within the field of crisis research will be discussed. Their impacts will be assessed at the end of this section. But first: what defines a crisis?

In social conversation, crisis often refers to something bad; an unexpected and undesirable situation. In academic discourse, however, "a crisis marks a phase of disorder in the seemingly normal development of a system" (Boin; 't Hart; Stern; Sundelius, 2005: 2). In this view, crises are transitional phases that interrupt the 'normal' situation. An economic crisis, for instance, interrupts a period of growth that is perceived as normal. These transitional phases are often experienced as a threat to the wellbeing of its subjects.

Moreover, scholars generally agree upon the fact that a crisis consists of three conceptual core elements: threat, urgency and uncertainty (Boin; 't Hart; Stern; Sundelius, 2005). *Threat* is perceived if widely shared values – such as safety, health and welfare – become endangered. The more lives

that are affected by the values under threat, the deeper the crisis is. This perception of threat does not necessarily have to be in accordance with reality. *Urgency* entails the time pressure element of crisis. If a problem is not perceived as an immediate threat, it is not likely to be addressed as a crisis (Boin; 't Hart; Stern; Sundelius, 2005). In order for people to perceive a crisis, an urgent threat is required, which policy makers must address. This sense of urgency and threat should be accompanied by a high level of *uncertainty*. More often than not, it is uncertain what caused a crisis as well as what its consequences will be. It is not hard to imagine that the uncertainty is larger still when thinking about possible solutions that could stop the crisis or avert a new one. These three core elements define crises. As Boin's definition of crisis will exemplify: "we speak of a crisis when policy makers experience a serious *threat* to the basic structures or the fundamental values and norms of a system, which under *time pressure* and highly *uncertain* circumstances necessitates making vital decisions." (Boin; 't Hart; Stern; Sundelius, 2005: 2).

In the field of crisis management, there is a strong notion that crises are changing shape. Contemporary crises are becoming more complex in nature and are increasingly transboundary and interconnected. (Rosenthal, 1998 as quoted in Boin and Lagadec, 2000: 185). This notion of changing crises has led to the definition of different forms of crisis, one of which is the transboundary crisis. This new transboundary crisis is set apart from its traditional counterpart by its emphasis on the "tightly woven web of critical infrastructures that characterizes modern society" (Boin, 2009: 368). The transboundary crisis has three characteristics that were not recognized in traditional crisis research: (1) the transboundary crisis can easily cross geographical boundaries, and by doing so threaten multiple cities or countries; (2) the transboundary crisis is also able to cross functional boundaries, jumping from one sector to another and; (3) this new crisis is hard to pinpoint in time as there is uncertainty about when it started and when the last consequences will be felt. These characteristics combined, make sure that "these crises have no clear beginning, escalate suddenly, and, in unforeseen directions, exploit linkages between functional and geographical domains" (Boin, 2009: 368).

Not only the crises are changing, the scope of crisis research is changing as well. Where the predominant focus of crisis research lied within the military-security domain in the past, contemporary students of crisis management underline the importance of researching "crisis decision making in politically salient areas outside the traditional national security field" (Stern and Sundelius, 1997: 33). The empirical research, to date, shows that such crises are comparable to national defense-related crisis in many respects. This thesis makes use of the definitions stated above, for literature suggests they are relevant for and accurate in describing the current financial budgetary crisis.

2.4 Learning through crisis: believers and disbelievers

When looking at the few studies devoted to learning (belief change) through crisis, one can observe two major trends in the effects of crisis experience on learning (Stern and Sundelius, 1997: 34). On the one hand, it is often hypothesized that crisis and their associated conditions may facilitate learning and change (Stern, 1997: 69). The experience of crisis could lead to cognitive openness and individual learning. On the other hand, opposing the crisis-learning hypothesis is the threat-rigidity hypothesis. This argues that the increased uncertainty and threat that accompanies a crisis may trigger a restriction of information processing, resulting in a narrowing of the field of attention or a reduction in the number of used information channels (Staw, Sandelands and Dutton, 1981: 502). From this point of view, crises may cause the strengthening of existing beliefs and 'rigidity in response'.

2.4.1 Believers: the crisis-learning hypothesis

Some literature on both crisis and individual learning suggest a positive relation between the two. Crisis is thought to have a 'catalytic effect', speeding up processes that generate learning (Stern and Sundelius, 1997:33). According to this line of thought, crises speed up learning in several respects. First of all, a crisis issue will usurp much, possibly all, political attention. This attention is one of the scarcest goods available to policy makers. By focusing a lot of it on one subject, the possibility of belief change concerning the subject seems likely to increase. Secondly, experiencing a crisis often implies the challenging of tacit or explicit beliefs about "the character of the environment and the adequacy of existing organizational and political arrangements designed to cope with that environment." (Stern, 1997: 73). In other words, crisis experience is a severe test for existing beliefs about a broad variety of issues.

Thirdly, crises cause the electorate to pay special attention to decision makers' actions or inaction. This, in turn, causes a heightened sense of accountability of the political actors, which motivates them to become "more vigilant, thorough and self-critical information processors" (Stern, 1997: 75; Tetlock, 1987). Fourthly, crises often produce situations of intensified interaction, wherein ideas about actors and the environment are put to the test. Through the intensification of interaction, feedback tends to be more rapidly forthcoming, which accelerates learning processes. Besides intensifying interaction, the stress involved with crisis experience may force decision makers to confront issues they would rather avoid. As a result of facing complex value trade-offs, actors are able to establish new, unambiguous value hierarchies. Lastly, crises can trigger individual belief change through the shifting of advocacy coalitions. Different advocacy coalitions struggle to dominate public debate and impose their interpretation of the crisis situation. They may also

propose contesting policy solutions. All things considered, "experiencing crisis tends to change the way people think, in important ways" (Stern, 1997: 73).

2.4.2 *Disbelievers: the threat-rigidity hypothesis*

According to the literature supporting the *threat-rigidity* hypothesis, crises put in motion two different effects that lead to a rigidity in response (Stern, 1997: 77; Staw, Sandelands and Dutton, 1981: 52). The first effect, a *restriction of information processing* refers to phenomena like a narrowing of the perceptual field and a restraint on the amount of information that can be received. Secondly, threat and uncertainty are also thought to contribute to a constriction of control, for example directed decision making power to higher levels in the hierarchy. The latter primarily effects group or organizational learning, but can also be linked to individual rigidity by, what Janis calls, *groupthink* (Tetlock, 1979: 1314). In this subsection, both effects will be examined shortly.

The literature most relevant to individual threat experience deals with the effects of stress, anxiety and arousal. The combination of threat, uncertainty and urgency will more often than not lead to perceived stress. Studies on problem solving and learning show that "subjects in stress conditions have been found to be less flexible in their choice of solution methods than non-stress subjects" (Staw, Sandelands and Dutton, 1981: 504). Stress-subjects continue to use the existing solutions even when they are no longer appropriate for the problem at hand. Furthermore, in studies exploring the relationship between anxiety and performance/decision making, it is generally concluded that (a) anxious subjects are less sensitive to stimuli, and (b) anxiety interferes with vigilance and test performance (Staw, Sandelands and Dutton, 1981: 504). Moreover, arousal researchers have investigated several aspects of human functioning and concluded that "the effect of arousal upon perception is to narrow the range of cues processed by decreasing sensitivity to peripheral cues" (Staw, Sandelands and Dutton, 1981: 505). In terms of learning and performance, arousal is thought to reduce flexibility and induce responses that are well-learned or habituated.

While these effects have mostly been tested in laboratory settings, they are reiterated by a large body of crisis research studies (Staw, Sandelands and Dutton, 1981: 505). An overview of disaster studies concludes that the anxiety individuals experience in crisis situations leads to "a narrowing of the perceptual field and a limitation of the information that can or will be received" and even more persistent threats may lead to a "greater constriction of cognition, rigidity of response, and primitive forms of reaction." (Withey, 1962: 118).

Summarized, these effects lead to the following manifestations of actors involved in crises:

1. A restriction in information processing through reliance upon internal hypotheses and an increase in attention to dominant or central cues.
2. A rigidity in response through the inclination toward producing well-learned or dominant responses.

In addition to these psychological and physiological effects, processes on the group level may influence an individual's capacity to learn. As Staw, Sandelands and Dutton state, one of the oldest, accepted hypotheses on the behaviour of groups is that "an external threat draws group members together and increases group cohesiveness" (1981: 507). This increase in cohesiveness could lead to the effect of *groupthink*. The groupthink phenomenon is caused by intense social pressures toward uniformity and in-group loyalty within decision making groups. When group members value group solidarity over independent critical analysis, groupthink occurs (Tetlock, 1979: 1314). Individuals avoid creating disunity by expressing unpopular doubts or opinions, which decreases the cognitive efficiency of the group and all group members (Janis, 1972). If combined with the direct individual effects of crisis experience, it is not hard to imagine that the capacity to learn is seriously impeded. All in all, the phenomena related to crises which the crisis-learning hypothesis labels 'facilitators' might well be 'inhibitors' to individual belief change and learning (Lebovic, 1995; Stern, 1997: 80).

2.5 From the literature to hypotheses

This chapter started by juxtaposing a cognitive approach to decision making to the dominant and classical Rational Actor Theory. This Cognitive Theory challenges much of the tacit thought and practice on the assumption of individual rationality. Moreover, it "awards a pivotal role to an actor's belief system" in determining policy outcomes (Van Esch, 2007: 91). Therefore, it is worthwhile to submit both the (change in) contents and structure of these belief systems to further examination. When it comes to belief change, Cognitive Theory states that it is – in general – difficult and rare for actors to change their preferences (Van Esch, 2007: 101). Especially, change in the belief system's core seems unlikely, as it would cause a chain reaction and have wide repercussions on the surrounding beliefs and the system as a whole.

The effect of crises on the likeliness of belief change is less straightforward. On the one hand, a crisis appears to be the strongest operationalisation of the reality principle as it causes a major shift in the reality around us. Moreover, the definition of crisis is based on perceived threat, urgency and uncertainty. This implies that the mind takes notice of these changes and their implications for the person's wellbeing. This input of new information about a changed world could, according to the reality principle, evoke a change in the core of a person's belief system. Following this line of

thought, a crisis is considered to trigger belief change, with its chain-reaction effects. These propositions are supported by some literature devoted to the effect of crisis experience on individual learning. The optimistic crisis-learning hypothesis argues that crises have a 'profound impact' on decision makers.

On the other hand, the uncertainty that comes with a crisis leaves ample room for the mind to ignore or reinterpret the new information to incorporate it into the existing beliefs. Moreover, the levels at which policy makers are confronted with the crisis and its consequences are highly abstract. Hardly any information is uncontested and straightforward. In addition, literature on the effect of crises on individual learning suggests a 'rigidity in response'. The stress, time pressure and uncertainty associated with crisis would rather impede learning than facilitate it. This leads to the question whether the budgetary crisis evokes the reality principle strong enough to change beliefs or that the crisis is too complex, abstract and uncertain to do so. If it does, change in the core beliefs, with its chain reaction effects are to be expected. If it does not, a rigidity in response is to be expected, with the strengthening of existing beliefs as a result. Both these effects (hypotheses 1a and 1b) will be tested in order to find an answer to the first sub question: How does the budgetary deficit crisis cause belief change?

On the structure of belief systems, much is uncertain still. As explained in section 2.2.2, different attempts to clarify what this structure is and how it manifests itself have yielded little results. The fact that scholars unanimously agree that beliefs that are in the core or apex of the structure are more stable than beliefs that are not, makes this assumption a meager but necessary point of departure for further investigation. Therefore, this thesis will test the assumptions of both the core-peripheral structure and the hierarchical structure on the stability of beliefs (hypotheses 2a and 2b). By doing so, it is possible to answer the second sub question: *Where in the belief systems of the German decision makers does this belief change take place?*

In addition, the possible overlap of the core-peripheral structure and the hierarchical structure will be explored (hypothesis 2c). As pointed out in section 2.2.2, the two might very well be related. Finally, a possible effect of crisis experience on the structure of belief systems itself is hypothesized. More specifically, hypothesis 2d focuses on the effects that crisis situations might have on the use of concepts on different levels. The rational underlying this hypothesis is that, when confronted by problems – such as a crisis – people tend to look for concrete solutions. In light of the examined literature on hierarchically structured belief systems, this would mean a shift towards strategic and tactical beliefs (Tetlock, 1991). In other words, a focus on means to avert or overcome the crisis.

Since there are so few studies devoted to the influence of crisis experience on belief systems, let alone belief system structure, there is little literature that literally supports this hypothesis. The

hypothesis is explorative of nature, and helps to determine whether a link exists between crisis experience and belief systems' structure. As the rational underlying the hypothesis has such a high commonsense appeal, it is reasonable to expect a tendency towards lower level beliefs.

All in all, the following hypotheses concerning the likelihood of individual preference change due to the crisis, the structure of belief systems and crisis' influence on this structure have been derived from the literature examined in this chapter:

1. Hypotheses concerning belief change throughout the crisis
 - a. *The budgetary crisis will cause a rigidity in response, leading to stable or strengthening beliefs.*
 - b. *The budgetary crisis will have a profound impact, leading to belief change in the system as well as the core.*
2. Hypotheses concerning belief system structure and stability
 - a. *Beliefs that are at the apex of a belief system are more stable than beliefs at lower levels.*
 - b. *Beliefs that are in the core of a belief system are more stable than beliefs in the periphery.*
 - c. *The most salient and central beliefs are at the apex of a belief system.*
 - d. *When confronted by a crisis, actors will focus more on tactical and strategic beliefs than on policy objectives.*

3. Methods: how to inquire?

In this chapter, the methodological choices made in this study will be justified. The first part is devoted to the choice for a case study design. Subsequently, the cases that are used in this thesis will be addressed. In the second part, the use of public statements as the source for empirical data will be justified. In addition, it will be argued that the use of cognitive maps has several advantages over other methods for analyzing belief systems. Thirdly, the central variables will be operationalised and this chapter concludes by examining the issues of validity and reliability.

3.1 Case studies: which one and why?

In their search for knowledge, scholars in the field of political science broadly use two research designs. On the one hand, "Large-N" statistical studies are used with the ambition to create general theories of decision making and belief change. On the other hand, "Small-n" studies, such as the case study design, are used to examine more close the processes involved in decision making and belief change (George, 2005: 3-5). This thesis uses a case study design and thus it is prudent to point out what this *case study research design* entails. In academic discourse, there is growing consensus that a 'case' is "an instance of a class of events" (George, 2005: 17). A class of events refers to phenomena that are of scientific interest. Therefore, before choosing one or multiple cases, one must identify a class of events to study. The second and final step in a case study design, is to choose one or several cases to develop or test a theory regarding the similarities and differences among cases in that class of events.

3.1.1 A case study: why?

Case studies are thought to have several advantages over other (more quantitative) methods. For one, a case study provides room for an in-depth analysis of certain phenomena. This in-depth analysis is necessary to do justice to the complex nature of most of the variables that interest social scientists (George, 2005: 19). Concepts as power, beliefs or ideas – let alone change therein – are notoriously difficult to measure. Case study designs have oftentimes been used to examine belief change and learning as it is vital to identify and consider contextual factors which might influence the complex variables at the heart of one's study (Levy, 1994).

This indicates another advantage of the case study design over "large-N" studies; the conceptual or construct validity. By looking closely at a limited number of variables, the suitability of the operational measures for the concepts being studied is often better than in statistical research (Van Esch, 2007; 105). Furthermore, as case studies examine the operation of causal mechanisms in individual cases in detail, they are better suited for exploring causal mechanisms (George, 2005:21).

Moreover, this thesis combines the method of *cross-case comparison* with the method of *over-time comparison*. This specific research design is believed to “generate considerable inferential leverage” (Bennet, 2007: 176). The reason for this is that it allows each case to be potentially compared in two different ways¹. To conclude, the case study design is best suited for the research conducted in this thesis.

3.1.2 A case: which one?

Now the advantage of a case study research over other methods is clear, it is time to address the next key question; which case(s) to study, and why? As mentioned in the literature, case selection is one of the most challenging aspects of case study research designs (George, 2005: 7). The class of events under inquiry in this thesis is: *possible belief change by decision makers due to change in the environment*. When picking a specific case of this class of events, some aspects are to be considered. Literature on case study designs stress the importance of ‘crucial case logic’; “a crucial case is one in which a theory that passes empirical testing is strongly supported and one that fails is strongly impugned.” (George, 2005: 9). Crucial cases are thus twofold². This thesis uses a *least likely case* for Cognitive Theory, relying on what Levy has labeled the “Sinatra inference”: if it can make it here, it can make it anywhere (2002: 442).

As Cognitive theory states that belief change caused by changes in the environment is “difficult and rare” (Van Esch, 2007: 101; see section 2.5) crises prove to be the least likely case. Change in the political, social and natural environment is strongest in times of crisis, as crises mark a transitional phase that interrupts the normal situation (Boin, ‘t Hart, Stern and Sundelius, 2005). The current financial and budgetary deficit problems have been identified as “*no doubt the most significant economic crisis of our times*” (‘t Hart and Tindall, 2009: 3) As such, it is the strongest, contemporary example of change in the environment and thus, the choice for this crisis as the ‘least likely case’ is justified. Now it is clear which ‘change in the environment’ is most adequate to use, the choice for German decision makers will be justified.

Germany has been picked for this thesis, due to the high social relevance of findings on German decision makers. In the end, the incentive behind understanding the contents and structure of belief systems and change therein is to (1) gain insight in policy outcomes and (2) increase our ability to predict future policy outcomes (Young and Schafer, 1988: 75). Germany is the biggest economy in Europe – contributing more than 20% of EU’s GDP – and thus has a decisive vote in a lot of economical decisions in the EU.

¹ As Bennet explains, case A at T1 can be compared to case A at T2 and to case B, which might also be divided into two periods (2007: 176).

² When the goal of a study is to *falsify* Cognitive Theory, a *most likely* case is considered ‘crucial’. If the aim is to *validate* Cognitive Theory, a *least likely* case is ‘crucial’.

3.1.3 *A decision maker: who?*

German decision makers that are of interest for this thesis, are expected to have a seat in institutions like the government and parliament, but where? Hermann and Hermann (1989) have defined an '*ultimate decision unit*' (UDU) to try and answer this question. "At the apex of foreign policy making in all governments [...] are actors with the ability to commit the resources of the government" it is argued (Hermann and Hermann, 1989: 363). What is more, these actors hold "the power to prevent other entities within the government from reversing their position" (Hermann and Hermann, 1989: 363). Decision makers under inquiry in this thesis, are likely to be in this ultimate decision unit. The ultimate decision unit depends on several factors. The form and internal relations may vary per subject area and over time. In the end though, for most policy problems an agent or group of agents make(s) a decision to commit or withhold national resources (Hermann and Hermann, 1989: 363).

The literature distinguishes three different kinds of UDUs. In some cases, the UDU consists of one 'predominant leader'; a single individual with the power to make the choice and to 'stifle opposition'. A second kind of UDU is the 'single group'. It consists of a set of individuals that are all members of a single body and collectively select a course of action. Moreover, consensus among members of this single group can force compliance from other agents. The third UDU is labeled 'multiple autonomous actors UDU'. It is made up out of separate groups or individuals who can act for the nation if some or all concur on the course of action. In order for an UDU to be labeled thus, it is essential that none of the separate agents "has the ability to decide and force compliance on the others" (Hermann and Hermann, 1989: 364). In a study devoted to explaining the establishment of EMU, it was concluded that Germany has a multiple autonomous actors UDU (Van Esch, 2007: 111-112).

The first member of the German UDU is the Chancellor; Angela Merkel. She has the responsibility for framing governmental action. The 'Bundeskanzler' has a relatively free role; she can pick those issues that interest her. Furthermore, ongoing European integration has increased the attention of the chancellor for foreign and European affairs.

The second member of the German UDU is the Minister of Finance, for German ministries are known to enjoy a high degree of policy-making autonomy (Van Esch, 2007: 111). The third and last member of the UDU is the president of the Bundesbank. Since the Bundesbank is constitutionally independent from the government, it has an important voice in determining fiscal and monetary policy outcomes. Moreover, before the emergence of EMU, the central bank was responsible for safeguarding both internal currency stability (price stability) and external currency stability

(exchange rate). That mandate however, obtained in the Bundesbank law of 1957 was replaced by a new law. Still, the Bundesbank has considerable authority with German politicians and citizens alike³. During the timeframe studied in this thesis, both Peer Steinbrück and Wolfgang Schäuble were Minister of Finance. After the general elections of 2009, Schäuble replaced Steinbrück. This replacement coincides with the emergence of the budgetary crisis. Consequently, the first belief system of the minister of Finance would be based on Steinbrück and the second belief system on Schäuble. Since it is pointless to compare belief systems of different individuals when looking for belief change, the German Minister of Finance will not be taken into account in this thesis. The decision makers under inquiry in this thesis are, as a result: Angela Merkel (Chancellor of Germany) and Axel Weber (President of the Bundesbank).

3.2 Capturing beliefs: where and how?

Studying cognitive concepts such as beliefs, preferences and ideas has proven to be difficult because these concepts are located in the minds of individuals and “therefore cannot be observed directly” (Van Esch, 2007: 116; Fiske and Taylor, 1991). Consequently, the best method is to “bring leaders into a controlled laboratory environment [...] and engage in a set of experiments” (Young and Schafer, 1998: 67). This method is, unfortunately, highly unfeasible.

3.2.1 Where: public statements

Although this poses a difficulty for studying these phenomena, obtaining information about cognitive concepts is not impossible. For when one is unable to observe the concepts directly, one may study their observable consequences (King, Keohane and Verba, 1994: 41; Van Esch, 2007: 116; Welch Larson, 1994: 28). The observable consequences, in the case of decision maker's beliefs, are either expressed statements or taken policy actions. In this thesis, it has been chosen to “rely on the observation, at a distance, of leaders' words” (Young and Schafer, 1998: 67). More specifically, public statements in the form of interviews and speeches will be used as a basis for inferring the belief systems.

The reason behind this is that there are more statements than policy actions and they are closer to the decision makers' actual preferences. A lot of policy decisions are made on the European level, which is not entirely under German influence. Therefore, those policy actions will not represent the decision makers' views adequately. This thesis will therefore study cognitive concepts as beliefs,

³ Literature suggests that since the mid '70s, the reputation and influence of the Bundesbank have increased, making its president even more autonomous (Van Esch, 2007: 112). Because the words of the Bundesbank president carry so much weight with the German electorate, he can “block another's initiative by initiating countermeasures that can seriously harm the other actors [German politicians] or their objectives [getting reelected]” (Hermann and Hermann, 1989: 368).

preferences and ideas by deriving them from written statements. Literature suggests that transcripts from significant decision-making moments are the most reliable sources to derive cognitions from (Van Esch, 2007: 125). Unfortunately most of these transcripts are unavailable, for they are classified for up to 30 years. Therefore, public statements will be used.

It is important to note that, as Holsti has pointed out, it is rare “that officials have no other motives than self-revelation in presenting their ideas.” (1976: 43). They can be expected to try to persuade their audiences by using whatever arguments seem most forceful. In order to overcome these methodological difficulties, the written statements used in this thesis are spread over time and a variety of audiences⁴. This way, it is possible to distinguish *genuine* from *strategic* beliefs (Van Esch, 2007: 126). This thesis will focus on the study of decision makers’ written statements. The next section will examine different methods which use these statements to contrive a person’s belief system.

3.2.2 *How: cognitive mapping*

There are several methods to study decision maker’s beliefs when looking at their written statements. Two of the most highly developed methods for achieving this are the *operational code* and *cognitive mapping* (Van Esch, 2007: 117; Young and Schafer, 1998; Rosati, 2000). There are some similarities between these methods, but they differ at a few, quite important points. Operational code and cognitive mapping overlap in their ability to identify decision maker’s beliefs and preferences. Furthermore, they both require an interpretative review of the data by the scholar, making the methods slow and laborious (Van Esch, 2007: 117).

The operational code, however, is used to capture a leader’s core beliefs about politics by using a list of standardized questions of which the answers will create a general idea by which operational code the target decision maker operates. The answers to these standardized questions can be obtained by studying statements made by the decision maker (George, 1969). In contrast, cognitive mapping is a method used for identifying and representing decision maker’s assertions about a delineated domain (Rosati, 2000: 55). “Beforehand, no assumptions are made about the possible relevance of beliefs” (Verbeek, 2003:28). The decision maker’s assertions have a commanding role in determining the concepts that are used in the cognitive map. These concepts are then used to draw a graphical representation (map) which illustrates the decision maker’s belief system (all the identified beliefs combined).

Literature suggests that, of the two, cognitive mapping is the more appropriate method for the research being conducted in this thesis. Young and Schafer state that “if there is a rich source of data on a particular issue [...] cognitive mapping provides us with the most appropriate information”

⁴ For an exact list of the speeches, interviews and policy-statements used, see appendix A.

(1998: 90). As was pointed out in section 2.4.1, crises tend to draw the attention of politicians, mass-media and citizens to a specific issue. This 'spotlight-effect' ensures that there is a rich source of data, as decision makers are eager to express their thoughts about the crisis situation.

This advantage over operational code is closely related with a second advantage; the 'discrete focus' of cognitive mapping. Where the operational code derives a generalized understanding of a decision maker's reasoning concerning a wide range of issues, cognitive mapping "enables the researcher to limit the assertions (data) to be studied to those dealing with the central object to be studied" (Van Esch, 2007: 118). As shall be emphasized later on, cognitive mapping is used to construct maps concerning certain specific beliefs. The discrete focus enables a more thorough analysis of the decision maker's beliefs concerning a delineated topic (Young and Schafer, 1998: 90). The subject of this thesis is very specific, to wit: *European monetary and fiscal policy*⁵.

A third and last reason to use cognitive mapping lies in the way operational code defines the 'core' of a belief system. According to the operational code, core beliefs are those preferences that stay stable over time. Because the stability of core beliefs is one of the main themes under inquiry in this thesis (see, 2.5), operational code is clearly unsuitable for the study conducted here⁶. Cognitive mapping has no such drawbacks (Van Esch, 2007: 119). The three reasons mentioned above, make cognitive mapping the more adequate method for the research conducted in this thesis.

3.2.3 *Methods for mapping: WorldView*

Cognitive mapping uses written statements to draw up a decision maker's belief system and, as such, is a valuable tool in understanding how actors view their environment (Young, 1996: 395). This much is clear. This subsection will further examine the cognitive mapping method. In addition, the use of WorldView software will be introduced and its advantages explained.

A specific feature of cognitive mapping is that it focuses mainly on the (causal) relations linking the concepts. This emphasis on relations is founded in the very origin of the method; it was constructed to improve insight in policy preferences of decision makers. Over the years, it has become clear that causal inference indeed plays a large role in problem solving and decision making (Young and Schafer, 1998: 75). Originally, only positive and negative causal relationships between concepts were taken into account.

These causal relations were used to create a (hand drawn) graphical representation of concepts – as dots – and relations between these concepts – as arrows. In these maps, positive and negative

⁵ The discrete focus on this topic is further enhanced by picking only those paragraphs that are relevant to 'European fiscal and monetary policy' rather than using entire speeches and interviews. Picking the useful paragraphs is achieved by content analysis of the texts. Only those paragraphs referring to 'European fiscal and monetary policy' and directly related issues like 'public finances', 'price stability' etc. are taken into account.

⁶ Van Esch also encountered this problem. For further explanation, see (Van Esch, 2007: 118-119)

arrows “may be viewed as equivalent, respectively, to the English expressions ‘is usefully or desirably associated with’ and ‘is adversely or undesirably associated with’.” (Lambert 1966 as quoted in Axelrod, 1976: 8). With these maps, decision maker’s policy preferences, causal beliefs and values will be clearly demonstrated (Van Esch, 2007: 123).

The drawing of such maps is, not surprisingly, laborious and time consuming. Luckily, technological advancements in recent decades have not escaped the eyes of scholars devoted to the method of cognitive mapping (Young, 1996). To relieve those that work with the cognitive mapping technique of such drudgery, the software program ‘WorldView’ was created. Worldview constructs “manipulable cognitive maps that provide a basis for process models of belief change and decision making” (Young, 1996: 395). It enables scholars to assess larger bodies of data and, more importantly, to denote different kinds of relations from texts.

Although this increases the amount of information that can be derived from the texts, it also has significant methodological drawbacks. Literature suggests that an increase in the amount of different types of relations causes a decrease in the method’s inter-coder reliability (Axelrod, 1976: 8). A researcher that is using WorldView is thus confronted with a trade-off; the ‘richness’ of information on the one hand, and inter-coder reliability on the other. With this in mind, the use of different types of relationships in this thesis is strongly limited. There are two basic relations distinguished; (1) causal relationships and (2) normative relationships. Causal relations are defined in the same way as scholars have done previously⁷. Normative relations reflect how the decision maker beliefs the world *ought* to be⁸. Both types of relations can be *positive* (+), *negative* (-) or explicitly *non-existent* (0).

After all written statements are assessed they can be loaded into WorldView. The software can plot a visual representation of the imported belief system (see appendix B). Furthermore, WorldView presents the scholar with a wide variety of other functions⁹. Overall, it can be concluded that by enhancing proven cognitive mapping techniques, “Worldview increases our ability to understand participants in international affairs” (Young, 1996: 412)¹⁰.

⁷ For a comprehensive description, see Axelrod, 1976: Appendix 2: The Questionnaire Method

⁸ This is significantly different from beliefs about how the world actually is. For example, the sentence: “ECB policy should be rigged towards safeguarding price stability” implies that the narrator beliefs the relation “ECB policy → + → price stability” *should* exist, not that it actually does.

⁹ The details of which carry too far for the purposes of this chapter. It is however, important to address some functions that are of value to the analysis used in this thesis. First of all, the possibility to describe the maps. This gives important information about the structure of the belief systems. Secondly, WorldView offers the ‘synonym’ facility, which “can provide insight into the coarseness of memory by varying the level of specificity of concepts in the belief system” (Young, 1996: 404).

¹⁰ For an extensive assessment of the WorldView software and its benefits for cognitive mapping, see Young, 1996: Cognitive Mapping Meets Semantic Networks.

3.3 Independent variables: how to measure?

This section, will explain the use of cognitive mapping to determine whether belief change has occurred during the timeframe being studied. In addition, the independent variables of *core beliefs* and *hierarchic levels* will be operationalised. This chapter concludes with a description of the use of *spectra* and the *dimensions* they contain.

3.3.1 How to measure: belief change

One of the most important purposes of the cognitive mapping method in this thesis is the testing of the hypotheses about belief change (1a and 1b). In order to do so, the preferences of each member of the German UDU will be measured at two separate instances in time¹¹. The two maps can be compared, which makes it possible to determine the differences in preferences throughout the crisis (Young, and Schafer, 1998: 78). Although this seems straightforward, the scholar is confronted with a methodological difficulty. By comparing cognitive maps in different points in time, he risks to produce unreliable results. This will happen if the texts, that are used to draw up the maps, deal with (partially) different subjects. The incomplete overlap can be misinterpreted as belief change (Van Esch, 2007: 128; Young, 1996: 409).

To circumnavigate this methodological hurdle, this thesis relies on three methods. 1) Instead of denoting every event as a single case, an attempt will be made to categorize these events under a broader concept. For example, the events of 'increase of public debt in Greece' and 'increase of public debt in Ireland' will be denoted as 'increase of public debt in EMU member states' rather than two unique events¹². 2) Rather than relying on a single text to derive assertions, (parts of) several speeches and interviews will be used for this purpose. This will reduce the risk of incomplete source overlap, as results are less likely to contain an overemphasis on one particular moment (Van Esch, 2007: 128). Third, single concepts will not be the only unit of analysis in this thesis. In addition to single concepts, the analysis of belief stability will focus on a higher scale of abstraction. This study uses two spectra for this purpose. By categorizing the individual concepts along these spectra, they can be compared on a higher scale. This method – called *dimension comparison* – is described in detail in subsection 3.3.4.

¹¹ In this thesis, all statements and writings on which the first cognitive maps are based date from prior to February 2010. The second maps are based on statements after February 2010. The reason behind this is that in February 2010, EUROSTAT alarmingly revised the Greek budgetary deficits. Financial markets responded quickly by downgrading Greek bonds. By that time, the budgetary problems gained so much momentum that they were deemed a crisis.

¹² While this requires the interpretation of the researcher, which might reduce inter-coder reliability (Axelrod, 1976: 291-332), it is necessary to be able to compare beliefs over time. If this technique is not applied, the stability of a belief will be dependent on an identical pronunciation before and after the crisis.

As a conclusion, this thesis will test the stability of the core of belief systems on the level of individual concepts and dimensions. Supplementary, the stability of the dimensions will be tested across the whole cognitive map.

3.3.2 *How to measure: core beliefs*

As was postulated in chapter 2, the extent to which a preference is expected to be stable is dependent on two factors¹³: (1) the centrality of the preference within the decision maker's belief system and (2) the hierarchical level to which that preference belongs. In order to determine whether a belief is central or not, this variable will be operationalised in this section.

What makes up the core of a belief system is, as is described in section 2.2.2, ambiguous. Literature suggests that core beliefs are more stable than peripheral beliefs. But how to determine which beliefs are in the core? Some choose to use the centrality of concepts to pinpoint the core. Others criticize this operationalisation and suggest using the saliency of a concept – the number of times a unique concept is mentioned by the actor – to determine whether it belongs to the core. The more a concept is mentioned, it is assumed, the more important its place in a belief system (Young, 1996: 403-7). A third option is to integrate the methods and use centrality as well as saliency to make up the core of a belief system (Van Esch, 2007: 133). But how central or salient a belief has to be, to be considered 'core' remains vague.

Therefore, this thesis uses a solution with a high commonsense appeal; the core is made up out of a percentage of the entire map. More specifically, core beliefs are those that score in the top 10% on *centrality* or *saliency* of the entire map. This has several advantages over other ways that determine the 'core', which are just as biased¹⁴. Overall, due to the lack of consensus and specificity on this issue in the literature, defining the core as described above, is justified.

3.3.3 *How to measure: hierarchical structure*

Unfortunately, for the operationalisation of hierarchical levels, the literature provides little guidance. While most scholars suggest that belief systems are hierarchically structured, there is no consensus on what this structure looks like (Tetlock, 1991: 28; George, 1969; Welch Larson, 1994: 20). Tetlock

¹³ To be complete, expertise is also thought to be important, but as was argued in section 2.1.4, both actors are considered *experts*. Therefore, this is no independent variable in this study.

¹⁴ In the method that is used by Van Esch (2007), core beliefs are those beliefs that score at least 66% saliency or centrality of the highest belief. It has an important drawback. The core becomes solely dependent on the score of the most salient or central concept. This means that in some cases, the core consists of only 1 concept (See appendix C, Merkel 1). As the core of another map might contain more concepts, this impedes the proper comparison of the core over time. For this reason, it is more logical to define the core as a fixed 'percentage' of the map's total size. The size of the maps used in this study is almost identical.

distinguishes three levels¹⁵, others discern two; ideological beliefs and instrumental preferences (George, 1969). Finally, some suggest that, while the belief system is structured hierarchically, the content of beliefs does not matter at all. The 'higher' beliefs are simply more general than the lower, specific preferences (Welch Larson, 1994: 20).

In this thesis, the *hierarchical structure* variable will be developed into two levels: *Values* and *Means*. The level of values contains 'fundamental assumptions and policy objectives' (Tetlock, 1991) and the ideological beliefs that "influence the leader's diagnosis of the situation" (Young and Schafer, 1998: 70). The level of means consists of beliefs that are in the 'intermediate level' and 'the base of the system' in Tetlock's hierarchy. These are comparable to the 'instrumental questions' (George, 1969). A decision maker's answers to these questions "lead him to favour certain types of action alternatives over others" (Young and Schafer, 1998: 70). The choice for these hierarchical levels is justified by the following reasons.

First and foremost, literature suggest that the division between 'values' and 'means' as defined in this thesis is the most clear. The difference between mid-level strategic preferences and lower-level tactical beliefs is never explicated. This makes those levels even harder to operationalise. The second reason is closely related to this theoretical problem; in the messy and chaotic constructs that belief systems are, it is hard enough to distinguish policy objectives from policy strategies, let alone different levels of policy strategies.

Classification of the hierarchical levels

By placing the concepts of Merkel and Weber's belief systems in either of these levels (if possible)¹⁶, the overall use and specific contents of a level at that point in time can be measured. If done for both the first and second map, this allows for the measuring of inter-level belief change. In order to calculate how stable the preferences on these levels are, the accumulated *saliency* of a level will be determined in both the first and second map. On the level of values, all policy objectives and fundamental ideas are assembled. On the level of means, all concepts that refer to strategic and tactical beliefs shall be assembled¹⁷. These are the means by which the actors wish to achieve their policy goals. By placing relevant concepts under these levels in both the first and second map, it is possible to measure and compare the amount of inter-level belief change. This is done by (1)

¹⁵ 1) an apex, containing fundamental assumptions and policy objectives, (2) an intermediate level, made up out of strategic policy beliefs and preferences and (3) the base of the system, containing tactical beliefs and preferences (Tetlock, 1991).

¹⁶ Not all concepts can be placed in either of these levels. Therefore, the group of '*Miscellaneous*' will be created for all concepts that cannot be identified as Values or Means. An example of a concept that cannot be placed on a hierarchical level is 'Budgetary crisis' for it is a threat rather than a strategic belief or policy objective.

¹⁷ For an exact list of concepts used in the level of *values* and *means* and the group of *Miscellaneous*, see appendix D.

comparing the values and means that are used in the first map to the values and means that are used in the second map, which results in a stability rating¹⁸ for each level (2) which is compared between the levels of values and means to determine which one is more stable over time.

3.3.4 How to measure: scales of abstraction

Section 3.3.1 stated that the analysis of individual concepts should be supplemented by the analysis of belief stability on a higher scale of abstraction. This thesis makes use of two spectra to measure Merkel and Weber's beliefs on a higher scale. In this section, these spectra and their contents shall be explained. The first spectrum entails the ways that European policymakers think about economic policy. It is called 'ideas on economic policy' and consists of the dimensions 'Ordoliberalism' and 'Keynesianism'. The dimensions are used as opposite ideal types, for they are the two ideas on economic policy that persist in Europe. After the fall of the Berlin Wall and the Soviet Union, capitalism remained as the dominant social system. Capitalism however, can be divided internally in to two major trends. On the one hand, Keynesianism, which is based on the ideas of John Maynard Keynes. On the other, Ordoliberalism, which has its roots in Germany.

Ordoliberalism

Ordoliberalism was, during World War II, further explored by opponents of the Nazi regime. They had witnessed the misuse of private economic power during the Weimar Republic and emphasised the need to protect individuals from such power (Vatiero, 2010: 690). Their experiences in the Weimar Republic led the Ordoliberals to "demand not only the reduction of political power but of economic power as well." (Vatiero, 2010: 690). The state has an active role in regulating competition, for the concentration of private power threatens individual freedoms through the pressures of interest groups. The government has the responsibility to set out general rules, but must reject regulations which hamper the proper working of markets. This mode of thought grew in popularity in West-Germany after World War II, and after reunification, in the whole of Germany. Although Ordoliberalism comprises other terrains as well, the ideas about monetary and fiscal policy are of particular interest for this study.

Central to contemporary Ordoliberalism in these areas, is the "primacy of price stability, which is the guiding principle by which all other policy-measures are assessed" (Van Esch, 2007: 121). Moreover, in the eyes of Ordoliberals, there is no trade-off between price stability and economic growth or employment. Crucial to the realisation of Ordoliberal policy objectives are stringent budgetary and fiscal policies (Van Esch, 2007:121). Otherwise, fiscal policies can overburden monetary policy, which leads to increased inflation. A second requirement, in the eyes of Ordoliberals, is the independence of the central bank. This will guarantee that monetary policy is based on expert analysis and focuses

¹⁸ The percentage of concepts that appear in both maps

on long-term stability. The meddling of politicians in monetary policy, with their political and electoral considerations, is one of the greatest threats for its credibility and consistency, which are important to price stability. This primacy of 'the economic' over political considerations characterizes the German opinion on European politics and integration (Van Esch, 2007). Ordoliberals are wary of cooperation with anyone that does not share their sound money ideas; for example: Keynesians.

Keynesianism

Keynesianism is strongly appreciated by most Western nations as a theory to base their policy on¹⁹. It is based on the general assumption made by John Maynard Keynes, that the economy does not self-adjust perfectly. Therefore, an activist government is permissible and even necessary. The government should execute an anti-cyclical policy to compensate for market fluctuations; in times of economic growth, the government should try to maximize employment, at the cost of price stability. In times of economic recession, an expansionist government policy is required to get the economy up on its feet. In the eyes of Keynesians, there does exist a trade-off between price stability and economic goals like employment and economic growth (Van Esch, 2007: 122). It is no surprise then, that a Keynesian expansionist view on government spending strongly contrasts with Ordoliberal ideas about fiscal policy. The use of price adjustment to maximize employment opposes Ordoliberal thoughts about the primacy of price stability.

Monetary and Fiscal policy

The second spectrum entails the ways in which a government can influence the economy. It is labelled 'ways to influence the economy' and consists of the dimensions 'Monetary policy' and 'Fiscal policy'. Again, these dimensions are opposing ideal types.

Monetary policy is one of the two ways in which governments can impact the economy (fiscal policy being the other). It focuses on the regulation of money supplies and interest rates to influence inflation and exchange rates. Most of these policies are performed by central banks in contemporary Europe.

Fiscal policy refers to the government's handling of the budget. Three forms of fiscal policy can be distinguished: expansionary (spending more than you earn); neutral (spending as much as you earn) and; contractionary (spending less than you earn). The two main instruments of fiscal policy are government expenditure and taxation. In modern Europe, most countries are familiar with expansionary fiscal policies, which they fund by printing money, borrowing money from abroad or their own population by issuing bonds. These are all forms of deficit financing. Fiscal policy is mainly in the hands of national governments.

¹⁹ For example: The United States of America, Great Britain and France are generally deemed Keynesian.

In summary, the two spectra used in this thesis have been explained, as well as the four dimensions that compose the spectra. By doing so, these dimensions can be used to measure belief change within the spectra in a similar manner as used for the hierarchical levels.

The two spectra and their dimensions

Ideas on economic policy	<i>Ordoliberal</i>		<i>Keynesian</i>	
	<ul style="list-style-type: none"> - Primacy of price stability - No trade-off between price stability and economic goals - Primacy of economic over political - Central bank independence 		<ul style="list-style-type: none"> - Primacy of economic growth - Trade-off between price stability and economic goals - Employment - Primacy of political over economic 	
Ways to influence the economy	<i>Monetary</i>	<i>Fiscal</i>	<i>Monetary</i>	<i>Fiscal</i>
	<ul style="list-style-type: none"> - Aimed at price stability - No meddling with interest rates to stimulate economic growth - Done by experts, not by politicians 	<ul style="list-style-type: none"> - Low public debt - Sound public finances (no deficit). - Neutral or contractionary 	<ul style="list-style-type: none"> - Aimed at stimulating economic growth - Adjustment of interest rates to 'help the economy' - Printing of extra currency to fill deficit 	<ul style="list-style-type: none"> - Expansionary in times of economic downturn - Government spending to stimulate economic growth will pay itself back via tax revenues

Table 3. 1

3.4 How to inquire: validity and reliability

Throughout this methodological chapter, there has been ample attention for the validity and reliability of the research being conducted. However, as these are important issues when determining the quality of a study, it is prudent to highlight both specifically. Reliability relates to the precision and consistency with which the research is being conducted. In other words, a study is reliable when there are no accidental mistakes (Van Thiel, 2007). The reliability in this thesis is warranted by the use of guidelines for the methods used. The greatest risk for the reliability in this study lies in the identification and extraction of the 'subject-relation-object' format from the written statements. To ensure that this is done accurately and consistently, guidelines for this process are consulted. The guideline used is explained by Wrightson in Axelrod (1976: 291-332). The methods described in the guideline are renowned for their high inter-coder reliability (Axelrod, 1976: 291).

The validity of a study concerns the degree in which systematic errors are prevented. Two kinds of validity can be distinguished; construct validity and external validity (Van Thiel, 2007). Construct validity determines whether the study measures what it is supposed to measure. External validity

means whether the conclusions from the study are relevant beyond the specific case or population that is under investigation. The construct validity in this study is achieved in several manners. First of all, case study designs offer advantages over statistical studies. They are better able to measure ambiguous concepts as beliefs, preferences and the change therein. Moreover, case studies do more justice to the complex environment in which these changes occur. Secondly, the hypothesis put forward in the previous chapter will be tested via different methods. This ensures that the right concepts and variables are being tested.

The external validity can be divided in quantitative validity and analytical validity (Yin, 2009). Analytical is not so much concerned with the amount of respondents or cases compared to the size of the total population. It is primarily concerned with the *quality* of the cases. The choice for the case used in this thesis has been justified extensively. The 'financial and budgetary crisis' case is identified as the 'least likely case' for this thesis. The choice for Angela Merkel and Axel Weber as 'German decision makers' is justified with the help of literature that reveals that the German UDU has *multiple autonomous actors* (Hermann and Hermann, 1989). Merkel and Weber were, alongside the Minister of Finance, the members of this German UDU. The justifications mentioned above make this thesis analytically valid to a certain extent. It is, however, always hard to generalize conclusions done in case studies as the case study design is made to take many contextual factors into account. It is clear that this study takes the issues of reliability and validity serious. Many of the methodological choices have been made with these issues in mind. Both the reliability and validity of this thesis will be reassessed and reflected upon in the discussion.

4. Crisis and the German response: what happened?

This chapter will describe the budgetary crisis and the German response; what happened? It starts with the financial crisis and how Germany tried to cope with it. Subsequently, the transition of the financial crisis into the budgetary deficit crisis will be highlighted. Greece's fiscal problems and Europe's reaction to it, in particular that of Germany, play a central role and will be examined closely. The establishment of a medium-term emergency fund and German decision maker's attitude towards it is a second issue that is highlighted. Creating a permanent successor to this emergency fund is a third issue that is emphasized. It is closely related with the buildup towards the second bail-out that EMU has known since its emergence: Ireland.

4.1 A crisis blew over the ocean

On Sunday 6 October 2008 the whole of Germany holds its breath. The financial crisis that started in the autumn of 2007 in the United States blew over to the European continent and has taken root in Germany. Bundeskanzlerin Angela Merkel and her minister of Finance, Peer Steinbrück, give a press conference and speak clear-cut language (NRC Handelsblad, 11 October 2008). The German real-estate bank Hypo Real Estate needs financial support from the federal government. Merkel and Steinbrück also announced a guarantee on German savings up to €500 billion in order to prevent a bank run. The great depression in the 1920s is still imprinted in the German's collective memory. Chancellor Merkel addresses the crisis as "the biggest test since the depression in the late '20s" (NRC Handelsblad, 16 October 2008). Other European countries already tried to coop with the ever worsening financial crisis. The Dutch and Belgian governments were forced into a joint effort to save Fortis from going default a month earlier (NRC Handelsblad, 29 September 2008).

In the following months, the German approach to solving the crisis in the European Union (EU) is criticized by other member states, France and Great-Britain in particular. They think their counterparts in Berlin lack the sense of urgency they feel. "Such a dire situation, with unstable banks and looming financial instability should historically be an incentive for Germany to take a prominent role." (NRC Handelsblad, 1 December 2008). However, as the Dutch minister of Finance, Wouter Bos, notices; "the Germans are absent in the entire debate" (NRC Handelsblad, 14 November 2008). French and British leaders press for a joint effort to address the financial crisis in the EU. Merkel wants an individual approach in which each member state solves its own problems. This frugality is appreciated by the German electorate, as the polls show (NRC Handelsblad, 9 December 2008). They

know that Germany is the biggest net-payer of the EU and will probably have to pay for other member states if a collective solution is agreed upon.

At the beginning of 2009, Berlin starts to make itself noticed in the European debate about the financial crisis. The German chancellor demands an independent course from the European Central Bank (ECB) and sets the Bundesbank – Germany's central bank – as an example (NRC Handelsblad, 3 June 2008). Not just the ECB, but other central banks are criticized by senior German politicians. Their criticism on central banks is noteworthy because German Ordoliberalism prescribes them not to interfere with central bank policy. These remarks indicate the worries Berlin has about the worldwide approach to the financial crisis. These worries are mutual though, as the German proposals to deal with the crisis have "evoked perplexity across the Atlantic" (New York Times, 17 March 2009). The U.S. and U.K. feel that Germany should give its economy an impulse by increasing government spending. In contrast to the Ordoliberal tradition, the pressure of upcoming general elections in Germany leads Merkel to aid car manufacturer Opel financially (NRC Handelsblad, 9 June 2008). This triggers other German companies in trouble to knock on the government's door. With national governments bailing out banks all across Europe, the financial crisis looks to be contained.

4.2 From the ATM to Athens: a crisis in transition

Until, later that year, the Greeks choose a new government. Andreas Papandreou, the newly elected Greek premier, announces that the last government has manipulated statistical data to create a more optimistic picture of its public finances. The Greek budgetary deficit is revised to 12.7 per cent of the total budget. The new estimates double the 6 per cent that was announced last April (NRC Handelsblad, 15 October 2009). In response, rating agency Fitch has downgraded Greece's rating to BBB+. It is the first time in 10 year existence of EMU that a euro country loses the 'A-rating' (NRC Handelsblad, 9 December 2009). The downgraded rating makes it harder for Greece to borrow money from financial markets. Because of the lack of faith in Greece's financial situation, financial markets are hesitant to buy Greek bonds. The perceived risk forces Greece to pay yield up to 7% over its 10 year bonds, thus making it almost impossible for Greece to reduce its budgetary deficit and improve its financial outlook. On the 10th of December, at a European summit, Papandreou makes a confession to his counterparts; as one policymaker recalls: "He basically said: 'My country is a corrupt country from A to Z.'" (Financial times, 11 October 2010).

Eurostat, the European Union's statistical agency, announces that there are still large irregularities in the statistical data that is used to determine the Greek budgetary deficits over 2008, 2009 and 2010. They announce that the deficits over these years can be even larger than anticipated before (Irish Independent 13 January 2010). This news has a shocking impact on the Greek stock exchange, which

drops 5% almost instantly (Wallstreet Journal 13 January 2010). The Council of the European Union, with the ministers of finance and economics (ECOFIN) also attend the Greek problems. In their meeting on the 19th of January, they express their worries about Greece's financial situation and urge the Greek government to revise its national statistical system. The council invites the commission to continue to play a supportive role to help solve the statistical problems in Greece (ECOFIN Conclusions, 19 January 2010). Later that month, newspapers report that European countries, of which France and Germany take a leading role, secretly deliberate on an emergency plan for Greece.

These unofficial meetings are attempts to find common ground on the issue before the official summit of euro zone member states on the 11th of February. At this summit, where Greece's budgetary and statistical problems are discussed, it is not the official chairman, Van Rompuy who calls the shots. Instead, Europe's largest countries – Germany and France – take a leading role in determining policy outcomes (NRC Handelsblad, 18 February 2010). But France and Germany cannot agree on the best approach; French President Sarkozy favors a European economic government and financial support for Greece. German chancellor Merkel, however, is more cautious. She promised the German electorate that the euro would be as sound as their beloved 'Deutsche Mark' and they won't like to pay for Greek debts that are caused by 'bad policy' (NRC Handelsblad, 18 February 2010).

Due to these differences, the official statement that concludes the summit remains vague: "All euro area members must conduct sound national policies in line with the agreed rules" (European Council, 2010a). No penalties are mentioned, however. There seems to be just one subject the euro zone leaders agree upon: Greece has to reduce its budgetary deficit to European norms and therefore should implement necessary measures "in a rigorous and determined manner to effectively reduce the budgetary deficit by 4% in 2010" (European Council, 2010a). The possibility of euro zone countries bailing-out Greece clearly remains a taboo. In their statement, the euro zone member states conclude they will "take determined and coordinated action, if needed, to safeguard the financial stability in the euro area as a whole." (European Council, 2010a).

A few days later, at a meeting on the 16th of February ECOFIN underpins the recommendations from the euro group. They welcome the updated stability program for Greece that sets 2012 as the date for reducing the deficit below the 3% reference value (ECOFIN, 2010b). Early March, Germany and France reinstate talks about helping Greece to cope with its budgetary problems if the Greek government is willing to adjust its public spending drastically (The Independent 1 march 2010).

In March, the situation in Greece takes a turn for the worse, forcing the other euro countries to come up with a solution quickly. The possibility to turn to the International Monetary Fund (IMF) to relieve Greece of its fiscal problems is blocked by politicians from Paris and Berlin. Sarkozy doesn't want the IMF involved because its president is the French socialist Dominique Strauss-Kahn who is likely to run against Sarkozy in the next French presidential election. If the IMF would bail out Greece, this would reflect poorly on Sarkozy's leadership and his chances to prolong his presidency. Germany is hesitant to rely on the IMF because it would mean they get a say in determining European monetary policy. Merkel wants to keep control over this policy area herself. In addition to these national reasons, an intervention by the IMF in the euro zone is seen as a political embarrassment (NRC Handelsblad, 4 March 2010).

But Merkel doesn't want to pay with German Euros either. She stresses that her meeting with Greek premier Papandreou early March "isn't about aid commitments but about good relations between Greece and Germany" (Financial Times, 4 March 2010). Merkel's remark is problematic for the Greeks because, as a Greek diplomat explains, Greece has a lot of partners to talk to "but there is only one that really matters: Angela Merkel" (NRC Handelsblad, 5 March 2010). Germany is the largest economy in Europe and Greece won't get a euro without their support. But Berlin wants Athens to solve its own fiscal problems for "Germans are for stability and austerity, and not for deficit spending. We know what it is to tighten our belts. That is why the Greeks are expected to put their own house in order, without any bail-out." (Financial Times, 8 March 2010).

The next week, however, Wolfgang Schäuble, German minister of Finance, announces plans for a European Monetary Fund (EMF) in combination with stricter rules to support Greece (Financial Times, 8 March 2010; NRC Handelsblad, 8 March 2010). Schäuble's words carry great weight in Berlin, for he is seen as the second most powerful member of the German government and a pro-European. He is also thought a defender of currency stability and budget discipline. Chancellor Merkel seems to be receptive to the plans of her minister of Finance: "this idea isn't bad, although a lot of details have to be looked at." (NRC Handelsblad, 9 March 2010). Merkel notes that, in order for the EMF to work, the treaty of Maastricht has to be changed.

The Maastricht treaty is the cornerstone of European monetary cooperation and changing it means a long and painful process that few but the Germans seem willing to enter. But since the treaty forbids bilateral loans between euro zone member states, it has to be changed at some point, according to Berlin. President of the Bundesbank, Axel Weber does not agree with the politicians. In his opinion, the EMF is "not supportive to a solution" and "a distraction from the real problem" (Financial Times, 10 March 2010).

Not just the German financial elite is unhappy about Schäuble's initiatives. His remark that financial stability is more important than economic growth has not been well received by his counterparts in European member states (Financial Times, 9 March 2010). In particular France and the U.K. – both advocates of Keynesianism – believe that economic stimulus is the solution to the crisis and see stability as stagnation of economic growth. The German approach to solving the crisis is not the only subject of criticism from other euro countries. At a meeting of Eurogroup's ministers of finance on the 15th of March, the issue of divergences in competitiveness and macroeconomic imbalances within the euro area is discussed. Although the conclusion states that "a consensus emerged both on the analysis of the situation and on necessary policy responses by all Member States", newspapers report otherwise (Eurogroup, 2010b).

According to the Financial Times, France accused Germany of increasing the economic problems in surrounding countries by its domestic economic policy. The 'Deutsche Wirtschaftswunder' is mainly based on a large export-surplus of which 40% goes to neighboring European countries. In the eyes of France and other euro countries, this causes financial imbalances within the EU and the euro zone. They feel that Germany has to increase its domestic demand. But Schäuble wants to solve the economic crisis "by gradually reducing excess liquidity and steadily cutting the budget deficit" (Financial Times, 17 March 2010). He thinks it is ridiculous to blame the well-performing German economy for problems in other countries. The lack of concrete solutions presented by the Eurogroup underpins these disagreements.

In the meanwhile, Greece's situation has not improved and the chances of swift and adequate support from Europe seem slim. On the 18th of March 2010, Greek premier Papandreou stresses the urgency of a solid emergency plan to reassure the financial markets of Europe's commitment to solve Greece's problems (NRC Handelsblad, 18 March 2010). He states that Greece is forced to approach the IMF if the EU doesn't come up with a solution quickly. At the same time, however, German chancellor Merkel and her minister of Finance, Wolfgang Schäuble restate their unwillingness to support Greece financially (NRC Handelsblad, 18 March 2010). The German inconsistency confuses Brussels, as a senior European official state: "Everybody is getting frustrated; nobody knows what Berlin intends to do." (NRC Handelsblad, 19 March). According to Brussels, the other European countries sought after an emergency plan for Greece as early as January, but Germany has hit the brakes. Opposing the plans for a European Monetary Fund, Merkel's spokesman stressed that a European rescue attempt is out of the question and that Berlin "supports a IMF-solution" (EUobserver, 18 March 2010).

4.3 Merkel's balancing act

On the 23th of March a third issue is addressed by the German politicians. Next to the continuing debate on (1) a solution for Greece's fiscal problems on the one hand and (2) preventing future crises by revising the European monetary system on the other hand, Merkel and Schäuble propose plans to transfer costs of future crises to banks and other financial institutions. The financial sector should design a compulsory trust fund to pay for future bankruptcies. With this, Merkel and Schäuble attempt to strengthen their solemn promise that lessons are learned from this crisis (NRC Handelsblad, 23 March 2010). This third topic is illustrative for the balancing act that Merkel is forced to perform. In Europe, she has to cope with pressure to assist Greece financially, in order to safeguard the financial stability of the euro zone. In Germany, she is confronted with an electorate that doesn't want to bailout Greece. This domestic pressure is increased by important upcoming elections (Financial Times, 25 March 2010). Forcing the financial sector to pay for future crises is an attempt to appeal to the German electorate.

Merkel's balancing act is manifest at the euro area summit on the 25th of March. The summit addresses the coordinated financial support to help Greece cope with its debt problems. In the summit's concluding statement, the heads of state and government of the euro area reaffirm their willingness to take action to safeguard financial stability in the euro area as a whole. This time however, an actual rescue mechanism is agreed upon. According to the statement "Euro area member states are ready to contribute to coordinated bilateral loans." (European Council, 2010b). This mechanism is intended to be a last resort, meaning that market financing no longer is an option. The rescue mechanism consists of bilateral loans that are subject to strong conditionality and must be agreed upon unanimously by the euro area member states. The interest rates at which these loans are issued are "to set incentives to return to market financing as soon as possible" (European Council, 2010b).

Through this solution, Berlin attempts to meet both European and domestic concerns on a solution to the budgetary deficit crisis. The international community has the rescue plan it longed for and Merkel has room to 'sell' the agreement to the German electorate. Although she agreed that Greece can count on financial support, it is considered a final solution if all other options have failed. Moreover, Germany holds on to its veto power and the IMF finances a large portion of the mechanism – about one-third.

While most euro zone countries are relieved that a compromise has been reached, the difficult process raises questions about the EU's capabilities to cope with the crisis. The build-up to Greece's support package was riddled with inconsistency and the newspapers write: "Yes, no, yes, no, said

the politicians. Up, down, up, down, went the markets.” (Financial Times, 27 March 2010). This inconsistency is seen to be largely caused by Merkel, who had to perform her delicate balancing act between European and electoral interests. The impact this had on European policy making reconfirms Germany’s leading role in it. Almost everyone had a reason for permitting Greece to tap European funds, yet the German view on the matter largely prevailed.

The second topic of the 25th of March summit – revising the European monetary framework – is addressed only in vague terms: “We reaffirm our commitment to implement policies aimed at restoring sustainable and stable growth in order to foster job creation and social cohesion.” (European Council, 2010b). Although the heads of state promise to “commit to promote a strong coordination of economic policies in Europe”, no real decisions are made. Herman van Rompuy – President of the European Council – is to establish a taskforce in cooperation with the Commission. This Economic Governance Task Force is asked to present the Council with recommendations to reinforce the legal framework before the end of 2010. Revising the European monetary framework is thus being put on the long-term. This means that there is not enough common ground on the matter to make a decision at this point.

4.4 Greece’s plea: the euro under pressure and a German turnaround

On the 22th of April, Greece’s fiscal situation is worsening still, as Eurostat revises Greece’s budgetary deficit over 2009 once more, to 13,7 % of GDP (Financial Times, 23 April 2010; New York Times, 23th of April). This triggers Greek premier Papandreou to officially ask for financial support from the IMF and the euro area member states. Thereby, he launches the procedure described by the European last month (Financial Times, 26 April 2010). This procedure could take weeks, because the euro zone member states have to decide unanimously. In most euro area member states, the resolution has to pass parliament, which causes further delays.

German minister of Finance Schäuble emphasizes that Germany has not yet decided if it will give financial support to Greece (Financial Times, 26 April 2010). A few days later, in contrast, Chancellor Merkel stresses that “it is completely clear that the negotiations between the Greek government, the European Commission and the IMF need to be speeded up now.” (Financial Times, 29 April 2010). According to Merkel, the stability of the euro zone is at stake if the loan for Greece cannot be delivered quickly. This sudden change in Merkel’s policy is noticed by her European counterparts. After months of edging away from a European support package for Greece, her stance on speeding up the process now is received with skepticism.

Nonetheless, her request to speed up the debate on the loan package does help, as on the 3rd of May the euro zone member states ministers of finance agree on the matter (Financial Times, 3 May 2010). A support package for Greece is presented that includes bilateral loans up to €80 billion from other euro zone countries and €30 billion from the IMF. Merkel expresses confidence that the Greek package is both credible and sustainable. "I believe it is the only possibility we have to ensure the stability of the euro," she states in Bonn (Financial Times, 3 May 2010). On the 5th of May, Merkel's throws her full weight behind the loan package for Greece in front the German parliament, the Bundestag (Merkel, 2010a). According to the support package agreements, a euro zone member state's contribution to the loans is determined by their European Central Bank capital key. This ensures that all member states pay *relatively* the same. In absolute number though, Germany contributes more than a quarter of the €80 billion guaranteed by the euro zone countries. Their contribution amounts to €22.4 billion divided over three years (NRC Handelsblad, 6 May 2010).

4.5 Looking beyond Greece: the European Stabilisation Mechanism

The sense of urgency expressed by Angela Merkel early in May clearly remains throughout the rest of the month. At the next ECOFIN meeting, on the 9th and 10th of May, the Council decides on a mechanism to preserve financial stability in Europe over the medium-term. This European Stabilisation Mechanism (ESM) aims at deterring the markets from speculating on defaults of other euro zone countries. The Council and member states conclude that "the situation in financial markets is fragile and there was a risk of contagion which we needed to address." (ECOFIN, 2010c). The European Stabilisation Mechanism is divided into three parts.

First of all, the European Financial Stabilisation Mechanism (EFSM) which is controlled by the European Commission and has the authority to raise up to €60 billion. Its aim is to preserve financial stability by providing financial assistance to member states in economic difficulty. The second part is called the European Financial Stability Facility (EFSF) which is described as 'a special purpose vehicle' agreed by the 27 member states of the European Union. The EFSF can raise up to €440 billion by contributions from euro zone member states in accordance to their ECB capital key. For Germany, this sums up to almost €120 billion. The third part is the IMF's contribution. The IMF "is expected to provide at least half as much as the EU contribution" (ECOFIN, 2010c). The IMF guarantees up to €250 billion of loans.

Taken together, the ESM guarantees €750 billion for member states that cannot cope with economic and financial difficulties themselves. Using the ESM is not free: "its activation is subject to strong conditionality, in the context of a joint EU/IMF support, and will be on terms and conditions similar

to the IMF.” (ECOFIN, 2010c). In order to be eligible for the EMS, a member state must correct its budgetary and economic policy to the approval of the European commission and the IMF. With this ‘shock and awe’ strategy, Germany, France and the 14 other euro zone countries try to take away any remaining doubts in the financial markets about Europe’s financial stability. Financial markets respond positively to the ESM, as the euro gains in value for the first time since Greece revealed its budgetary problems (NRC Handelsblad, 10 May 2010).

The build-up to this temporary ESM wasn’t without tensions however. It has been reported that, in the hours before euro zone leaders put together the international rescue package, Angela Merkel received a phone call from José Manuel Barroso – president of the European Commission. “He told her it was a moment of truth. He said we had to decide. He said, ‘I’m asking you to save the euro’.” (Financial Times, 17 May 2010). Merkel agreed to the ESM only after having secured a number of German interests. The ESM can only be used as a last resort and its activation requires drastic budgetary cuts from the receiving member state. These strict rules are, for the major part, concessions made by the other member states to convince Germany. Merkel urged the need for stronger incentives to respect the Stability and Growth Pact and again, the other euro zone countries had to give in. Although no concrete measures are agreed upon at the 9th-10th May summit, the press release states that “the EU will urgently start working on necessary reforms to complement the existing framework to ensure fiscal sustainability in the euro area” (ECOFIN, 2010c). The member states emphasize the importance of fiscal discipline, which is a well-known showpiece of German Ordoliberalism and bargained for by Merkel.

Where the build-up to the summit was not without tension, the aftermath of the summit is not without ambiguity. Although the symptoms of the crisis are averted, it is argued that the underlying causes still have to be dispatched (Financial Times, 19 May 2010). The arduous process towards the summit has exposed “a rift in the economic philosophies” of Germany and France. This rift is problematic, as the EU can achieve very little if Merkel and Sarkozy don’t work together effectively (Financial Times, 19 May 2010). It is unclear whether the ESM solution mainly demonstrates euro zone members’ determination or their underlying disagreements.

The European Stabilisation Mechanism is ratified on the 7th of June. All 16 euro area member states sign an agreement that binds them the guarantee commitments of up to €440 billion (Eurogroup, 2010c). This ‘shock and awe’ tactic seems to have a positive effect on the financial markets for the time being. In addition, economic outlooks are improving, though not fast enough for some. Voices outside of Europe, mainly stemming from the United States, argue that Europe must invest more in the recovery of the world economy (Financial Times, 3 June 2010).

4.6 Home sweet home: German domestic measures

Merkel, in contrast, presents drastic austerity measures in Germany. The cuts, amounting over €80 billion, are expected to cause the loss of up to 15.000 jobs in Germany. It shows Berlin's commitment to curb the country's soaring budget deficit and to limit Germany's public debt. Although Merkel admits that other EU members as well as the US administration urged her to increase government spending to maintain the current economic recovery, she insists that "an exit plan from the present stimulus was reasonable and necessary from next year" (Financial Times, 8 June 2010). Moreover, Berlin presents plans to for a 'debt brake', allowing a maximum structural deficit of 0.35 per cent of GDP by 2016, a little more than one-tenth of the present level set by the SGP (Financial Times, 8 June 2010). It would seem Germany tries to lead by example, as initiatives to strengthen the SGP for all EU member failed a month ago. Pressure from Paris has stopped the German effort to export its 'Teutonic austerity' in its tracks (Financial Times, 22 May 2010).

The summer months are relatively tranquil. Some optimists report that the recession has left Europe for good (NRC Handelsblad, 14 August 2010). More skeptical voices claim that 'nothing has changed'; bankers and rating agencies are still in control (Financial Times, 20 July 2010). The promise of a European social market economy has remained a promise. In their eyes, Europe clearly lacks decisiveness, or rather, consensus.

The first noteworthy event after the 'summer break' is the revival of Berlin's initiative to make banks and other financial institutions 'pay the bill' for the economic crisis. During their summit on the 7th of September, the ECOFIN council "held an exchange of views on the coordination" of the variety of efforts that EU member states introduced (ECOFIN, 2010d). It is concluded that the ministers will further discuss the issue at "an informal meeting" later that month (ECOFIN, 2010d). The fact that no conclusions are drawn, illustrated how sensitive the topic is: no common ground can be found at this point. At the same time, the budgetary difficulties in Ireland are aggravating. The large Irish banking sector has felt the full force of the financial crisis, and the government had to step in to protect the financial stability. This led to an estimated Irish public debt of 125% of GDP (The economist, 13 January 2011) and a budgetary deficit of almost 15% of GDP (Irish Times, 22 October 2010). Moreover, the Irish deficit is thought to rise to an unprecedented 32% of GDP due to the costs associated with the bank bailouts (Irish Times, 22 October 2010). These worrying figures have caused rating agencies to downgrade Irish bonds, making it harder for the government to fill the gaps in its budgetary.

Mid-October, the Task Force of Van Rompuy is bound to deliver its much anticipated set of recommendations. The Task Force was created because of the disagreement on how the European

monetary framework should be revised. The European Council agreed on the 26th of March 2010 that the Task Force was to present to the council “the measures needed to reach the objective of an improved crisis resolution framework” and it urged Van Rompuy to explore “all options to reinforce the legal framework” (European Council, 2010b). Although Van Rompuy’s report was expected to break the stalemate in the EU, it is largely overshadowed by another development, three days he can present his recommendations.

4.7 Deauville Meeting: a Franco-German get-together

The meeting between Merkel and Sarkozy in Deauville on the 18th of October and its conclusions are, to put it mildly, controversial. The official reason for the meeting was to improve Europe’s relationship with Russia; Russian president Medvedev joined Merkel and Sarkozy on the 19th to discuss that issue. On the 18th however, instead of preparing the Franco-German-Russian meeting, Merkel and Sarkozy negotiated on precisely those issues that Van Rompuy was supposed to address later that week. Moreover, they make public a Franco-German declaration which states that “France and Germany agree that the economic governance needs to be reinforced” (Sarkozy, 2010). This conclusion is not controversial per se, but how to achieve this was the thorny question.

In the months before the Deauville-meeting, Paris and Berlin fundamentally disagreed on two issues: (1) whether the SGP should be reinforced with automatic sanctions for all who infringe the pact’s rules and; (2) whether the reinforcement of economic policy coordination should include changing European treaties. Both questions were answered with a German ‘*ja*’ and a French ‘*non*’. The disagreement was so intense, that it was thought to damage Franco-German relations (The Sunday Times, 12 November 2010). A third issue they disagreed on was the involvement of private creditors in financing the crisis resolution and crisis prevention programs. Berlin stressed the importance of ‘making private creditors financially responsible’ (Merkel, 2010b), but the French were not too keen on this either.

At the Deauville meeting, Merkel and Sarkozy intended to settle these differences in privacy and away from Brussels. With the will to compromise, they manage to agree on all the issues; they meet in the middle. Although the declaration states that “budgetary surveillance [...] procedures should be strengthened and accelerated”, no automatic sanctions are implemented (Sarkozy, 2010). The Council is empowered to decide whether a member state has infringed the SGP and should be punished. As to the amendment of the treaties; “France and Germany consider that an amendment of the Treaties is needed” to establish a robust crisis resolution framework (Sarkozy, 2010). This treaty change should be ratified before 2013 and consists of two major changes. Firstly, it should

provide the necessary arrangements for an “adequate participation of private creditors” to safeguard financial stability of the euro area as a whole (Sarkozy, 2010). Secondly, in the case of a serious violation of basic EMU principles, the voting rights of a member state can be suspended. This measure is aimed at strengthening the SGP. Both Merkel and Sarkozy are satisfied with this deal; Merkel has her treaty change and strengthened SGP and Sarkozy keeps the imposition of sanctions under his own control.

Others though, are less enthusiastic about this Franco-German get-together (EUinside, 22 October 2010). EMU members that shared the German desire for austerity and automatic sanctions respond bewildered. They feel betrayed by this sudden shift from Merkel. President of the ECB, Jean-Claude Trichet, is also unhappy with the lack of swift and severe penalties (Financial Times, 19 October 2010). The question raised by many is “why Germany, which insisted the most on earlier, more stringent and more automatic sanctions, is stepping back from its position” (EUinside, 19 October 2010). It would seem that foregoing automatic sanctions was the price Merkel had to pay to convince Sarkozy of the need to change the current treaties.

4.8 Van Rompuy's Task Force

The recommendations of Van Rompuy's Task Force are presented three days later on the 21st of October, but the bottlenecks – automatic sanctions and treaty change – have already been addressed in Deauville. Van Rompuy suggests the creation of automatic sanctions. But in light of the meeting three days earlier, this seems unlikely to happen. Hence, his Task Force appears to be the next in a long line of commissions installed to postpone decision making on ‘difficult topics’. After months of research and maneuvering by Van Rompuy, Merkel and Sarkozy agree on a course of action overnight and present their ‘recommendations’ a few days earlier.

The Irish predicament is not isolated from these developments in Deauville. The proposition to make private creditors accountable for resolving the crisis causes new turmoil on the, already unstable, financial markets. This increases the likelihood of an Irish application to the ESM (Financial Times, 22 November 2010). So much so, that the Financial Times later reports that “the final nail in Ireland's coffin was hammered in by Ms Merkel and Nicolas Sarkozy” (22 November 2010, page 11).

The Merkel's and Sarkozy's declaration in Deauville was, of course, no official EU statement. It recommended the European Council to decide in a certain direction. The European Council meeting of 28-29 October is the first official meeting since Deauville and the Task Force's report. That summit's conclusion states that “the European council endorsed the report of the Task Force on

economic governance” (European Council, 2010c). But on further examination, it is clear that the Franco-German proposals of Deauville overrule the Van Rompuy’s recommendations; there will be no automatic sanctions. Furthermore, the heads of state or government “invite the President of the European Council to undertake consultations [...] on a limited treaty change” (European Council, 2010c). The role that the private sector should have, according to the Council’s conclusions, reflects the propositions in the Franco-German declaration. The same applies to the period in which all this has to be ratified (mid-2013) and the possibility to suspend voting rights of member states that pose “a permanent threat to the stability of the euro area as a whole” (European Council, 2010c).

4.9 Solidarity to survive the crisis

A month later, on the 22nd of November, the fiscal problems of the Irish government run out of control. Newspapers report that Ireland will request an EU and IMF bailout up to €85 billion (The Telegraph, 22 November 2010). Later that day, the Irish authorities turn to the EMU for financial support (ECOFIN, 2010f). On the 28th of November, the Eurogroup and ECOFIN ministers agree to help Ireland (ECOFIN, 2010f). They concur with the Commission and ECB that providing a loan to Ireland is “warranted to safeguard financial stability in the euro area and the EU as a whole.” (ECOFIN, 2010f). The loan consists of €85 billion, of which €67.5 billion is paid by the IMF and Europe. The ESM will guarantee €45 billion. The money is needed to help the Irish pay the debt the financial crisis has brought on them via their large banking sector (ECOFIN, 2010f). These loans are, just as those to Greece, under strict conditionality. Ireland has to adopt stringent budgetary cuts and structural reforms. According to some, these sanctions are unfair, since it was “not the public but the private sector that went haywire in Ireland” (Financial Times, 24 November). Before the crisis, Ireland had one of the lowest public debt – 12 per cent of GDP – in the euro zone. The problem is not Ireland’s fiscal policy, so austerity programs and the restructuring of public debt – the measures Berlin has stressed – are not the sole solution. Stronger still, Germany is being accused of convening “a seminar on financial architecture in the midst of a raging house fire”, suggesting that the Ordoliberal stubbornness on ‘making the perpetrators pay’ forced Ireland to ask for help (Financial Times, 1 December 2010).

Amidst this turmoil, the plans for a permanent emergency fund continue. On the same day that the Irish bail-out is ratified, the Eurogroup agrees on the successor of the EFSF and EFSM. They agree “on the need to set up a permanent crisis mechanism to safeguard the financial stability of the euro area as a whole” (Eurogroup, 2010d). Like its predecessors, this measure will provide assistance to a euro area member state only if a stringent program of economic and fiscal adjustments is being met.

This permanent crisis mechanism, and the need to change European treaties to make it work, is reiterated by the European Council near the end of 2010 (European Council, 2010d). Besides this long-term solution to prevent future crises, Germany, with the backup of other northern, fiscally prudent countries blocks the creation of short-term solutions for the current problems.

An Italian-Luxembourg plan for Europe-wide bonds is put off; the “collectivization of risks would be a mistake” according to Merkel (New York Times, 15 December 2010). This led the initiators of the plans, notably Luxembourg, to suggest that Germany is turning its back on Europe (New York Times, 15 December 2010). Other proposals, like the Belgian advocacy for increasing the size of the current bail-out fund and Trichet’s suggestion to use the fund to buy bonds from countries at risk, do not find enough support either. It would seem that the EU will continue to cope with the crisis through the bail-out of troubled economies like it has done for Greece and Ireland. Rumor has it that Portugal and Spain are next in line (Financial Times, 17 December 2010). Only time will tell if Europe can bring about enough political will and solidarity to survive the budgetary deficit crisis and its consequences. According to Merkel it does; “The euro is our common fate and Europe is our common future” (New York Times, 15 December 2010).

5. Results: what was found?

As described in the previous chapter, the budgetary crisis had a clear impact on the social and economic world around us. It would seem almost impossible for policy makers to miss the consequences of this crisis. The theories addressed in chapter 2 however, articulate different expectations on whether this crisis will cause belief change and where within the belief system these changes will occur.

In this chapter, the empirical data will be used to test the hypotheses that were posited in chapter 2. It starts by giving an introduction of the decision makers under inquiry in this thesis: German chancellor Angela Merkel and Axel Weber, president of the Bundesbank. At the same time, the contents of their cognitive maps before and after the budgetary crisis will be described. This provides the necessary background information to interpret the changes and their meaning.

The second part of this chapter is devoted to the testing of hypotheses 1a and 1b. These hypotheses will be tested simultaneously, by comparing the contents of the cognitive maps over time. As table 5.1 shows, this is done using three different methods.

The final part presents the analysis on the second hypothesis: (2a) hypothesis 2a will be addressed by testing the *values* and *means* for stability over time; (2b) the test for hypothesis 2b compares the stability of *core-beliefs* and *peripheral-beliefs* over time; (2c) the number of *values* and *means* that are in the core of each belief system to test hypothesis 2c and finally; (2d) hypothesis 2d will be tested by comparing the use of *values* and *means* throughout the crisis.

Overview of the analyses done in this chapter

Aspects per test	Hypothesis 1a and 1b			Hypothesis 2a	Hypothesis 2b	Hypothesis 2c	Hypothesis 2d
	<i>Test 1</i>	<i>Test 2</i>	<i>Test 3</i>	<i>Test 1</i>	<i>Test 1</i>	<i>Test 1</i>	<i>Test 1</i>
Scale (What is the unit of analysis)	Single concepts	Dimensions	Dimensions	Hierarchic levels	Core-peripheral	Hierarchic level	Hierarchic levels
Locus (What is taken into account?)	Core	Core	Entire map	Entire map	Entire map	Core	Entire map
Focus (What is being tested?)	Stability	Stability	Stability	Inter-level stability	Inter-group stability	# of times present	Shift between levels
Name of the test	<i>Concept comparison of core</i>	<i>Dimension comparison of core</i>	<i>Dimension comparison of map</i>	<i>Hierarchical level comparison of map</i>	<i>Core-periphery comparison of map</i>	<i>Hierarchic level comparison of core</i>	<i>Hierarchic level comparison of map</i>

Table 5. 1

5.1 Merkel and Weber: background and beliefs

This section will provide a short introduction of both actors that are under inquiry in this thesis. The introduction focuses on their professional background and any other *trivia* that is as background information by which the results presented further on in this chapter can be understood. Firstly, Angela Merkel and her beliefs before and after the crisis will be addressed. Secondly, Axel Weber and his preference before and after the crisis are assessed.

5.1.1 Angela Merkel

Background

Angela Dorothea Merkel was born in 1954 in West Germany, but moved to the DDR at the age of one. After finishing high school, she studied Physics from 1973 to 1978 and was awarded a doctorate in 1986²⁰. After the fall of the Berlin Wall, Merkel got increasingly involved in politics and after reunification, she got elected in the Bundestag while her East German political party merged with the Christlich Demokratische Union (CDU). In 1991, she became minister of Women and Youth in Helmut Kohl's third cabinet. In 1994, she changed position to become Minister of the Environment and Nuclear Safety²¹. As one of Kohl's loyal followers and protégées, she was referred to by Kohl as "mein Mädchen" (Van Zoonen, 2006:295). When the CDU lost the 1998 general election, Merkel was appointed Secretary-General of the CDU. The CDU electoral successes under her supervision and a financing scandal – involving none other than Helmut Kohl -, led to the election of Merkel as chair of the CDU on the 10th of April 2000. 'Kohl's "Mädchen" openly criticized Kohl for his role in the financing scandal, a move which gave leeway to her own political career (Thompson & Lennartz, 2011: 104).

The 2002 general election was another pivotal moment in Merkel's political career; after being outmaneuvered by the Edmund Stoiber for the position of leader of the CDU, she saw Gerhard Schröder win the election and took a seat in the conservative opposition in the Bundestag. This gave Merkel the political arena to explicate manifest herself as a pro-market and pro-American politician. In September 2005, Merkel opposed Gerhard Schröder head-to-head in an election that resulted in a 'tie', with both parties claiming victory. On the 22nd of November 2005, after weeks of negotiating with Schröder, Merkel was elected Chancellor in the Bundestag. She was re-elected in 2009 with a large majority and was able to form a governing coalition with the Freie Demokratische Partei (FDP).

²⁰ <http://www.bundestkanzlerin.de>.

²¹ <http://www.angela-merkel.de>.

Preferences before the crisis

Merkel's childhood and education in the DDR were, in her own words "marked by a lack of freedom", which made her see "how inestimably precious freedom [...] is" (Merkel, 2010c). Nevertheless, it is clear that, in her opinion, freedom has to go hand-in-hand with responsibility²². The social market economy is, according to Merkel, based on this fundamental assumption, for she expresses to "want a social market economy with a human face" (Merkel, 2008). In accordance with Ordoliberalism, Merkel thinks that the German government should build towards this social market economy with sound public finances and low public debt. Moreover, the 'Bundesregierung' is, according to Merkel, living up to those expectations²³. The soundness of public finances is one of Merkel's strongest preferences and she thinks other EU members should aim at lowering public debt and prevent budgetary deficits as well²⁴. Binding rules, both globally and within the EMU, should commit governments to the moderating of public expenses and debt and, as Merkel puts it, choose for the 'third way'; *"a system which contrasts with unbridled capitalism involving great financial and other risks but has nothing to do with socialist command economy experiments."* (Merkel, 2009a)²⁵. This 'third way' is thus, a social market economy. Where the general – Ordoliberal – opinion in Germany is to be wary of economic stimulus policies, Merkel thinks they do serve the general interest²⁶. She doesn't break with German tradition entirely though, as in her eyes they also raise a country's public debt, which is bad²⁷. Overall, Merkel wants strong global and European rules to export 'teutonic soundness', for "the sick may contaminate the sound" (Röpke as cited in: Dyson 1999: 277). Another issue that is central to the Chancellor is *"do we live on what we have earned or do we constantly endeavor to live a little better than what we have earned?"* (Merkel, 2009a). She prefers to live on what we have earned and wants to confront other European nations with this dilemma²⁸.

²² This can be observed in her first cognitive map (appendix B). To circumvent the necessity to turn to the appendices on every statement, the relations are depicted as follows: "Freedom without responsibility → - → Good of all; Freedom in responsibility → + → Good of all". This means respectively a negative relation between 'Freedom without responsibility' and 'Good of all' and a positive link between 'Freedom in responsibility' and 'Good of all'. Normative relations can be recognized by the '→ norm →' figure.

²³ German government action → + → Sound public finances; German government action → + → Social market economy; German government action → - → Public debt.

²⁴ EU member states → norm - → Public debt; EU → norm + → SGP; International community → norm + → Sound public finances.

²⁵ International community → norm + → social market economy; International community → norm + → Global framework of rules; EU → + → global framework of rules.

²⁶ Economic stimulus → + → Good of all.

²⁷ Economic stimulus → + → Public debt → - → Good of all.

²⁸ Concepts: public debt, sustainable economic growth, sound public finances, sound financial system.

Preferences after the crisis

The budgetary crisis has strengthened Merkel's conviction that we cannot 'live beyond our means' even further. According to Merkel, the crisis has emphasized the need for a stronger Stability and Growth Pact to assure the functioning of the Economic and Monetary Union²⁹. She thinks the contemporary budgetary difficulties are partly caused by the bad public finances of members of EMU in the past³⁰. She believes that the budgetary problems have a negative influence on the stability of the Euro, which is essential to Europe³¹, or as she puts it: "If the euro fails, than Europe will fail!" (Merkel, 2010d). The survival and success of the European Union and EMU are essential to Merkel, for both concepts are situated in the core of her belief system. This can be secured by a large amount of 'European responsibility' in combination with the coordination of economic policy, which in turn is dependent on the level of agreement between Germany and France³². Merkel also wants to negotiate with France in order to change European treaties to enhance the EU's chances to overcome this crisis as well as preventing future ones³³. These treaty changes should strengthen the SGP and bind member states to a sustainable economic prospect. The SGP sanctions play a role in preventing future crisis and securing member states' commitment to sound public finances³⁴. Europe can solve the current financial and budgetary crisis if member states focus on their public finances and pick up their responsibility to the European project³⁵. This requires structural and painful reforms and strict austerity programs in EMU member states. Her belief in free capitalism has dwindled since the beginning of the budgetary crisis, as she accuses market excesses in other countries of causing the crisis³⁶.

²⁹ SGP-sanctions → + → Functioning of EMU; SGP-sanctions → + → Success of Europe; Member states ignoring SGP → - → Functioning of EMU

³⁰ Member states ignoring SGP → + → Budgetary crisis; Public debt → + → Budgetary problems of Greece; Public debt → + → Sovereign risk EMU members

³¹ Budgetary problems of Greece → - → Price stability; Help program Greece → + → Price stability; Price stability → + → Success of Europe

³² European responsibility → + → Success of Europe; European responsibility → + → Good of all; Franco-German agreement → + → Coordinated economic policy → + → Success of Europe; Coordinated economic policy → + → Good of all

³³ Franco-German agreement → + → Changing European treaties → + → Strong crisis management → + → Functioning of EMU; Franco-German agreement → + → Crisis prevention → + → Good of all

³⁴ EMU member states → norm + → sound public finances; SGP sanctions → + → Crisis prevention; Sound public finances → + → sustainable economic growth

³⁵ European responsibility → + → EU resolving crisis; European responsibility → + → Help program Greece → + → EU resolving crisis; Sound public finances → + → EU resolving crisis

³⁶ Freedom without responsibility → + → financial crisis; Freedom without responsibility → - → Social market economy

5.1.2 Axel Weber

Background

Axel Alfred Weber was born in 1957 in Kusel, near the border with France. He studied economics and public administration at the University of Konstanz from 1976 to 1982, graduating with a degree in economics. From that point on, he started working in the field of monetary economics; first as a research assistant, later, from 1994, as Professor of Economic Theory at the University of Bonn. When he was appointed Professor of Applied Monetary Economics at the Goethe University of Frankfurt in 1998, he also took a seat in the board of directors of the Center for Financial Studies in Frankfurt am Main. In 2001, he was appointed Professor of International Economics at the University of Cologne. Moreover, from 2002 to 2004, he was a member of the German Council of Economic Experts; a group of five economic experts, created to advise the German government on economic policy issues. This council has a very high status in Germany, and is often referred to as the 'Fünf Wirtschaftsweisen'.

At the same time, Weber became a member of the expert advisory panel to the Bundesbank. In April 2004, he gave up this function to become President of the Deutsche Bundesbank, which also made him a member of the Governing Council of the European Central Bank (ECB)³⁷. He was president of the Bundesbank until he, suddenly, tendered his resignation in February 2011. He resigned in April this year.

Preferences before the crisis

Axel Weber's education and professional background is reflected in his belief system. With price stability clearly as the most salient and central concept. In his eyes, monetary policy should be rigged towards price stability, and price stability alone³⁸. Weber thinks that both the EMU in general as well as the European Central Bank (ECB) in particular contribute to price stability, which is in turn responsible for sustainable economic growth, employment and economic stability³⁹. This illustrates his belief in the *"sound economic principle that there is no principal conflict between price stability and economic stabilization."*, one of Ordoliberalism's fundamental assumptions (Weber, 2008a).

As an economic expert, he also has strong convictions about what measures a central bank should focus on in order to achieve its primary goal of price stability⁴⁰. For example; Weber thinks a broad range of variables should be taken into account. Furthermore, all collected data should be made

³⁷ <http://www.bundesbank.de>

³⁸ Sound monetary policy → norm + → Price stability; Central bank policy → norm + → Price stability; EMU → norm + → Price stability

³⁹ ECB policy → + → Price stability → + → Sustainable economic growth; EMU → + → Price stability → + → Employment

⁴⁰ Central bank policy → norm + → Central banks analyzing financial stability; Central bank policy → norm + → analysis of price stability risks; Central bank policy → norm + → Central banks using monetary analysis

public as soon as possible to maximize central bank transparency and credibility⁴¹. He relates to Keynesian economic policy negatively, linking economic growth to a loss of stability. However, Weber does think that the economic stimuli – that national governments planned in reaction of the crisis – helped the EMU to withstand the first shocks of the financial crisis⁴². Nonetheless, it is clear to Weber that a global economy needs global supervision and austere rules to temper economic fluctuations. While maintaining central bank independence, he wants to coordinate monetary and economic policy at a higher level⁴³. What caused the crisis is not entirely clear to Weber, but he is “extremely skeptical of monocausal explanations”, making not one problem ultimately responsible for the financial troubles (Weber, 2008c). The financial crisis does however, have certain implications for central bankers. According to Weber, it shows that if the objective of price stability is to be realized, the analysis of financial stability is crucial for determining monetary policy⁴⁴.

Preferences after the crisis

Weber is an expert in the field of (monetary) economics. Nevertheless, the budgetary crisis has clearly influenced him. This is against the expectations of Cognitive Theory scholars, who argue that experts have extremely stable beliefs (Van Esch, 2007). After the crisis however, he is primarily concerned with the functioning of the EMU. He recognizes several new threats to the EMU, which are, among others: public debt, unsustainable public finances and the risk of EMU member states to default⁴⁵. Weber further notices the divergences among EMU members when it comes to: export-import, surplus-deficit and overall prosperity. These divergences among EMU members, which are frequently put forward as one of the causes of the budgetary problems, are created by the deficit countries. In his eyes, they use the capital imported from surplus countries inefficiently, thereby widening the gap between the two and putting pressure on EMU⁴⁶. He wants these countries to adjust their policy (towards a German, austere policy) by stronger regulations and structural reforms⁴⁷.

According to Weber, the German government sets the example, but stronger SGP sanctions are necessary. These should aim at forcing member states to lower their public debt and get their public

⁴¹ Monetary policy transparency → + → Price stability; Monetary policy transparency → + → Monetary policy effectiveness; Central bank credibility → + → Functioning of EMU

⁴² Financial crisis → + → national governments acting to counter crisis → + → Economic stimulus → + → Functioning of EMU

⁴³ Financial crisis → norm + → global framework of rules → + → coordinated supervision; EMU → norm + → Coordinated supervision

⁴⁴ Financial crisis → norm + → Central banks analyzing financial stability; Financial crisis → + → Central banks adjusting their policy

⁴⁵ Public debt → - → Functioning of EMU; unsustainable public finances → - → Functioning of EMU; Sovereign risk EMU members → - → Functioning of EMU

⁴⁶ Inefficient use of capital in deficit countries → - → Functioning of EMU; Inefficient use of capital in deficit countries → + → divergences among EMU members; Inefficient use of capital in deficit countries

⁴⁷ EMU members → norm + → Structural reforms → - → Structural economic problems → - → Good of all

finances in order⁴⁸. Weber has mixed feelings towards the fiscal support packages that have been distributed to Greece and Ireland; on the one hand, they are necessary to assure the functioning of EMU, on the other, they pose a serious threat to the fiscal stability of countries that were previously sound⁴⁹. An issue that is clear to Weber is the desirability of sustainable economic growth. He thinks the financial crisis proves that we need to move towards a more tempered, long-term growth, wherein continuous borrowing has no place⁵⁰. This has to be achieved by stronger European institutions which supervise EMU members and reduces the divergences among EMU members by forcing the deficit countries to adjust their policy. All in all, since the budgetary crisis, public finances of member states is now one of Weber's main concerns, as he sees them as a direct threat to the existence and functioning of EMU. Austerity packages and structural reforms, enforced by binding European agreements, are necessary to promote sound public finances and reduce public debt.

5.2 Belief change through the budgetary crisis: the tests

The budgetary crisis is in many ways the ultimate test for the stability of core beliefs, as "people are necessarily profoundly changed by participating in terrifying crises." (Blight, 1990: 7). Crises are thus expected to cause a radical reframing of ideas and, potentially, heightened insight. In this light, it would seem impossible to ignore the crisis and its consequences. But it is exactly that obstinacy and blindness that literature on Cognitive Theory expects to find (Van Esch, 2007). Moreover, literature on the interface of crisis and learning argues that conditions associated with crisis experience "often result in poor task performance and a tendency to persevere in well-learned courses of action" (Staw, Sandelands and Dutton, 1981: 507). Both propositions will be tested simultaneously in this section. More specifically, this section will test hypotheses 1a and 1b in three ways. The hypotheses state that:

- a. The budgetary crisis will cause a rigidity in response, leading to stable or strengthening beliefs.
- b. The budgetary crisis will have a profound impact, leading to belief change in the system as well as the core.

The first method, called *single concept comparison*, will investigate how stable the core beliefs of Merkel and Weber are. A belief is considered stable if it is present in the core of both the first and

⁴⁸ EMU member states → norm - → Public debt; SGP sanctions → - → Public debt

⁴⁹ Fiscal support package EMU → + → Functioning of EMU; Fiscal support package EMU → - → Sound public finances → + → Functioning of EMU

⁵⁰ Financial crisis → norm + → Sustainable economic growth; Public debt → - → Sustainable economic growth; Sound public finances → + → Sustainable economic growth

second map⁵¹. Subsequently, the core beliefs are arranged in the dimensions *Ordoliberalism* – *Keynesianism* and *Fiscal policy* – *Monetary policy*. This *dimension comparison* of the core allows for the testing of core stability on a higher scale of abstraction. In order to determine the stability of the entire map, the method of *dimension comparison* is applied to the map as a whole.

5.2.1 Test 1: single concept comparison

The comparison of single concepts is a good way to measure the stability of concrete beliefs over time. It gives a clear indication whether certain beliefs are continuous throughout the crisis or not.

Merkel

When looking at the core beliefs of Merkel, the crisis has unmistakably changed the concrete beliefs. There are clear differences between her first and second map. Merkel's system core shows 20% stability over time. The 'Good of all', a very general, high-end value is the only concept that is present in the core of both maps. Moreover, the crisis seems to confront Merkel with trade-offs. Her overall goal of doing the right thing for everyone in the first map (Good of all, 48 saliency) has made room for more delineated goals as the success of Europe and, more specific, the functioning of EMU⁵². Crisis experience is thought to cause people to see their objectives more clearly through the process of trade-offs (Stern, 1997: 74). The concepts of public debt and sound public finances seem to have disappeared altogether. Overall, it can be concluded that the core of Merkel's belief system – on the scale of single concepts – did not remain stable throughout the crisis.

Merkel: stability of core concepts	
Concept	Stability
Good of all	Stable
Public debt	Unstable
German government action	Unstable
Global framework of rules	Unstable
Sound public finances	Unstable

Stability rate 20%

Weber

Weber's core beliefs do not seem to be much more adequately prepared to withstand the crisis. His single concept stability rate is 33%. Before and during the early stages of the crisis, he focused mainly on central bank policy, strongly preferring 'sound' monetary policy and the use of monetary analysis by central banks. These concepts are not present in the core of his second map. After the crisis, he focuses on the 'soundness' of public finances and the risk of public debt. The functioning of EMU is in the core of both maps, although it is more salient and central after the crisis. The sustainability of economic growth remains an important preference for Weber throughout the crisis; it is present in the core of both maps. The most remarkable shift that can be observed in the core of

⁵¹ For the operationalisation of 'core beliefs', see section 3.3.2.

⁵² Success of Europe, saliency 22; Functioning of EMU, saliency 22.

Weber's belief system is the instability of his preference for price stability. Where, in his first map, this is by far the most salient and central concept, it is not even close to the core in the second map. The huge difference in saliency and centrality⁵³ is especially noteworthy because price stability is a typical Ordoliberal policy objective. Overall, the comparison of single concepts concludes that Weber's core beliefs are only partly stable.

Weber: stability of core concepts	
<i>Concept</i>	<i>Stability</i>
Price stability	Unstable
Sound monetary policy	Unstable
Central bank policy	Unstable
Central banks using monetary analysis	Unstable
Functioning of EMU	Stable
Sustainable economic growth	Stable

Stability rate 33%

Conclusion

The budgetary crisis seems to have had a profound impact on both Merkel and Weber. Although Weber is very experienced in the field of monetary economics, concrete beliefs in the core of his belief system are influenced almost as easy as those of the Chancellor⁵⁴. The method of single concept comparison confirms what Merkel has stated more than once; "The crisis has deeply shaken us" (Merkel, 2010b). As described in the subsection 3.3.1, this method alone cannot falsify hypotheses concerning changes in core beliefs. It is susceptible to various external influences that might compromise the accuracy of its findings. Therefore, it is necessary to test whether the fundamental ideas that underlie these concrete concepts have indeed changed. In other words; if Merkel and Weber are rather shaken superficially than 'deeply'!

5.2.2 Test 2: dimension comparison of core

In addition to comparing single concept stability of core beliefs in the first map, the stability of the belief system's core is tested on a higher scale of abstraction. This is done by assembling concepts in various dimensions. As explained in chapter 3, this study distinguishes two spectra: (1) the dimensions *Ordoliberalism* and *Keynesianism* compose the spectrum of 'ideas on economic policy' and; (2) the dimensions *Monetary policy* and *Fiscal policy* compose the spectrum of 'ways to influence the economy'⁵⁵. The core beliefs in each map will be placed (if possible) in a dimension on each spectrum. This way, the core of each map can be characterized on each spectrum: either *Ordoliberal* or *Keynesian* and *Monetary* or *Fiscal*⁵⁶. By comparing the cores of map one and map two,

⁵³ Respectively 60 and 24 in the first map and 8 and 6 in the second.

⁵⁴ In comparison, Van Esch examined the stability of single concepts in the core of belief systems of German and French policymakers. The mean *single concept stability-rate* of all decision makers under inquiry was 50% (Van Esch, 2007: 377-9). Although Van Esch defined the core of a belief system slightly different, the difference between Merkel and Weber's stability in the core and the stability found by Van Esch is remarkable.

⁵⁵ For an exact list of concepts used for each dimension, see appendix C.

⁵⁶ The dimension that contains the most core concepts is characteristic for the core.

it is possible to determine the core's stability on the scale of dimensions. This supplements the method of *single concept comparison* as it is less susceptible to various contextual factors⁵⁷.

Merkel

Merkel's core is more stable on the scale of dimensions than on the scale of single concepts. Her preference for *Ordoliberal* ideas is continuous throughout the crisis, and her initial preference for *Fiscal* policy is partially preserved. In Merkel's second map, most concepts cannot be placed in a

		Merkel: number of concepts in the core per dimension		
		Map 1	Map 2	Stability
Ideas on economic policy	Ordoliberal	3	2	66%
	Keynesian	0	0	-
Ways to influence economy	Monetary	0	0	-
	Fiscal	3	1	33%

dimension. This is noteworthy, because in section 5.2.1, a tendency towards more delineated objectives was observed. The same tendency would be expected here, but Merkel starts to use less substantive concepts throughout the crisis. In the core of her pre-crisis belief system, four out of five concepts implied a preference towards a dimension. In her second map however, only two concepts can be placed in any dimension⁵⁸. Merkel's core stability rate on the spectrum of ideas on economic policy is 66%. On the spectrum of 'ways to influence the economy', her core is 33% stable.

Weber

Looking at Weber's core beliefs, it is clear that the *Ordoliberal* concept of price stability is replaced by other *Ordoliberal* concepts throughout the crisis, (see appendix C). In the core of his belief system, the preference for *Ordoliberal* ideas is continuous. The emphasis on monetary or fiscal policy, however, has

		Weber: number of concepts in the core per dimension		
		Map 1	Map 2	Stability
Ideas on economic policy	Ordoliberal	5	3	60%
	Keynesian	0	0	-
Spectrum of ways to influence economy	Monetary	3	0	0%
	Fiscal	1	3	33%

shifted rigorously. In the first map, three concepts could be characterized as *monetary* policy. After the crisis, no concepts are *monetary*, and three concepts can be characterized as *fiscal*. This shift is remarkable, as monetary policy is Weber's field of expertise. The overall stability of Weber's core on the spectrum of ideas on economic policy is 60%⁵⁹. On the spectrum of ways to influence the economy, a shift can be observed. Thus, the stability rate on this spectrum is low; 17%⁶⁰.

⁵⁷ See section 3.3.1

⁵⁸ Neither 'Good of all', 'Success of Europe' or 'Functioning of EMU' can be specified on a spectrum.

⁵⁹ The size of the cores in the first and second map vary; respectively 6 and 4 concepts. This is an important note when interpreting the stability ratings. The overall tendency of Weber's core towards *Ordoliberalism* is

Conclusion

Overall, the results from this *core dimension comparison* contrast those from the *single concept comparison* method. The average stability rate for both actors is higher, especially on the spectrum of ideas on economic policy. With the exception of Weber's preference towards the way to influence the economy, the decision makers seem to be stable in their beliefs. This implies Merkel and Weber might not have experienced radical belief change.

5.2.3 Test 3: dimension comparison of map

Hypotheses 1a and 1b advance expectations on the likeliness of change in the entire map as well. The flexibility of the belief systems as whole are tested with the use of *dimension comparison*. This is done in roughly the same manner that was used to determine the core's stability on the scale of spectra, though this time, all concepts are considered. Moreover, the stability of the spectra is calculated as the percentage of change within that spectrum⁶¹.

Merkel

Merkel's first map shows some conflict on the spectrum of economic ideas. It is typical that a German chancellor fosters so much belief in *Keynesianism*. Nonetheless, she shows a preference for *Ordoliberal* ideas, and this inclination increases throughout the crisis with 13%. On the spectrum of ways to influence the economy, Merkel's preference is clear-cut: *Fiscal*. She doesn't mention monetary policies once. On first sight, this appears to be unrealistic, but can be explained by the political arena in Germany; there is a strong division between the responsibilities of politicians and the German financial elite – such as Weber. The politicians are in no way allowed to meddle in monetary affairs. The Ordoliberal preference to central bank independence is testimony to this containment of political power. The division is honored by Merkel throughout the crisis and by doing so, she underlines her belief in Ordoliberalism. The spectrum of 'ways' thus remains stable during the crisis.

Merkel: Stability of spectra in the map

		Map 1	Map 2	Stability in %
Ideas	Ordoliberal	68%	81%	87%
	Keynesian	32%	19%	
Ways	Monetary	0%	0%	100%
	Fiscal	100%	100%	

somewhat stronger if presented as percentages instead of absolute figures – 83% in the first map, 75% in the second.

⁶⁰ This is the average of the stability on the dimensions *Monetary* and *Fiscal*.

⁶¹ This foregoes the comparison of each dimension with the total amount of concepts used in the map and focuses solely on the spectrum under inquiry and its internal stability over time.

Weber

The Bundesbank's president is, as can be expected, a champion of *Ordoliberalism*. Before the crisis, he favors those ideas with 93% over 7% for *Keynesian* ideas. This shows how firmly the German financial elite beliefs in their way of running an economy (Van Esch, forthcoming in German Politics). The policies by which he hopes to achieve this are, no more surprising, *Monetary*. Although he doesn't respect the separation as zealously as Merkel, his position as president of the Bundesbank make monetary policy a natural interest of his.

Weber's belief system might be a textbook example of the German financial elite, the budgetary crisis changes it almost beyond recognition. Firstly, the 'apostle of Ordoliberalism' loses faith during the crisis, turning a slight bit towards the *Keynesian* camp.

Weber: Stability of spectra in the map

		Map 1	Map 2	Stability in %
<i>Ideas</i>	Ordoliberal	93%	85%	92%
	Keynesian	7%	15%	
<i>Ways</i>	Monetary	85%	22%	37%
	Fiscal	15%	78%	

Although he still favors Ordoliberal ideas heavily, the 8% shift is remarkable. A strengthening of Ordoliberal beliefs was, given Weber's expertise and conviction, the most apparent prediction. Scholars that are optimistic about the likeliness of belief change due to crisis experience could have predicted a radical change. But this slight turn away from Ordoliberalism defies all theory. As it turns out, Weber is full of surprises, for his preference for *Monetary* policies has made room for a strong focus on *Fiscal* policy throughout the crisis. As president of Germany's Central Bank, this is unorthodox to say the least. Apparently, the budgetary crisis was a strong enough incentive for Weber to abandon the traditional division between monetary and fiscal policy. Weber's preferences on the spectrum of ways to influence the economy have changed 63%.

Conclusion

In three out of four instances, the belief systems of Merkel and Weber showed great stability on the level of spectra. The exception is Weber's spectrum of ways to influence the economic situation.

5.3 Belief system structure: change, but where?

Most of the hypotheses of this thesis concern the structure of belief systems. It is argued, by some students of Cognitive Theory and belief systems, that these are structured hierarchically. The apex of a belief system – fundamental values and policy objectives – are more resistant to change than lower levels in the hierarchy – like strategic and tactical beliefs (Tetlock, 1991: 28). Others however, claim that belief systems have a *core-peripheral* structure and that centrality and saliency determine the stability of a belief (Rosati, 2000: 64). As explained in chapter 2, the literature on belief system structure is not exhaustive though, and therefore, the following hypotheses were put forward:

- a. Beliefs that are at the apex of a belief system are more stable than beliefs at lower levels.
- b. Beliefs that are in the core of a belief system are more stable than beliefs in the periphery.
- c. The most salient and central beliefs are at the apex of a belief system.
- d. When confronted by a crisis, actors will focus more on tactical and strategic beliefs than on policy objectives.

In this section, these propositions will be tested by using the empirical data collected in this study. To analyze hypothesis 2a, the hierarchical structure is operationalised into the levels of *Values* and *Means*⁶². The core-periphery structure mentioned in hypothesis 2b is operationalised into a *Core* and *Periphery*⁶³. Subsequently, the overlap between the core and the apex is measured. This is done by comparing the amount of *core-values* and *core-means*. This section will conclude with the testing of hypothesis 2d; the effect of crisis on the overall hierarchy in belief systems.

5.3.1 Belief system structure: stability of hierarchical levels

Most of the concepts used in every map can be aggregated in hierarchical levels. The level representing fundamental values and policy objectives in this thesis is *values*. The strategic and tactical levels are combined into the level of *means*⁶⁴. By using *level comparison*, all *value*-beliefs and *means*-beliefs of the first map are tested for stability⁶⁵. This way, the inter-level stability rate can be determined for both levels. When compared, these rates show whether hypothesis 2a is supported or falsified.

⁶² For further explanation, see chapter 3.

⁶³ The operationalisation of the 'Core' is identical to the one used in *single concept comparison*. The 'Periphery' consists of all concepts except the 'Core'. For further details on the operationalisation of the core, see section 3.3.2.

⁶⁴ For methodological reasons. See section 3.3.3.

⁶⁵ As explained in chapter 2, this is done by investigating if a certain concept is present in both the first and second map: if it is, it is stable, if it is not, it is unstable.

Merkel

Angela Merkel's cognitive maps contain 13 concepts that are present in both of them. As the table shows, seven of those are labeled *Values*. In Merkel's first map, 12 concepts were labeled *Values* in total. This means that the inter-level stability rate of the level of *Values* is 58%. Out of the 17 *Means*-concepts identified in the first map, only three remained stable. The level of *Means* is therefore 18% stable. The three remaining concepts that are present in the first and the second map do not belong to any of these levels⁶⁶. It

can thus be concluded that the level of *Values* remains more stable throughout the crisis than the level of *Means*.

Merkel: Stable concepts per level and inter-level stability rating		
	rating	
	VALUES	MEANS
	<i>Competitiveness</i>	<i>Coordinated economic policy</i>
	<i>Crisis prevention</i>	<i>Public debt</i>
	<i>Freedom without responsibility</i>	<i>Sound public finances</i>
	<i>Functioning of EMU</i>	
	<i>Good of all</i>	
	<i>Social market economy</i>	
	<i>Sustainable economic growth</i>	
# of stable concepts	7	3
Total # of concepts	12	17
Stability rate	58%	18%

Weber

16 concepts of Weber's first map reappear in his second map. Out of these 16, five are *Values* and nine are *Means*⁶⁷. In his first belief system, Weber uses nine *Values* in total, making the inter-level stability rate of this level 55%. On the level of *Means*, nine out of 27 concepts remain stable during the crisis. The inter-level stability rating of this level is therefore, 33%⁶⁸. Although not as apparent as with Merkel, the level of *Values* is more resistant to change than the level of *Means* in Weber's belief system.

⁶⁶ These are 'Ageing population', 'Budgetary crisis' and 'Financial crisis'. Concepts that cannot be identified as a specific level are put in the aggregate of *Miscellaneous*. In Merkel's first map, ten of these concepts were identified, which brings the stability rate of this group to 30%.

⁶⁷ Two concepts do not belong to an hierarchical level.

⁶⁸ The remaining two stable concepts belong are labeled *Miscellaneous*. This group consists of eight concepts total in Weber's first map, its stability rating is thus: 25%.

Conclusion

Hypothesis 2a seems to be supported by the belief systems of Weber and Merkel. The level of *Values* shows greater continuity throughout the crisis than the level of *Means*. In the case of Merkel, the stability rating is more than twice as high. As for Weber, the stability rating of the level of *Values* is almost double the rating of *Means*.

Weber: Stable concepts per level and inter-level stability

	rating	
	VALUES	MEANS
	Employment	Central bank independence
	Functioning of EMU	Central bank policy
	Good of all	Coordinated supervision
	Price stability	ECB-policy
	Sustainable economic growth	Economic stimulus
		Saving banks
		Sound financial system
		Sound monetary policy
		Sound public finances
# of stable concepts	5	9
Total # of concepts	9	27
Stability rate	55%	33%

5.3.2 Belief system structure: stability of core and periphery

The counterpart of the hierarchical structure proposition is the *core-periphery* structure. This structure has been operationalised into the groups *Core* and *Periphery*. Concepts that score in the top ten per cent of either saliency or centrality are labeled *Core*. All other concepts are labeled *Periphery*. By applying the same techniques as in the previous section, the inter-group stability of both groups can be assessed. For both the *Core* and the *Periphery* though, two stability ratings will be measured. The first stability rating – called *Narrow stability* – is determined by the amount of concepts that reappears in the core of the second map⁶⁹. The second stability rating – called *Wide stability* – is determined by the amount of concepts that is present in the entire second map. By comparing these stability ratings, it is possible to determine whether hypothesis 2b is supported or falsified by the empirical data.

Merkel

The *Core* of Merkel's first map consists of five concepts. One out of these five concepts is also present in the core of her second map, so the *Core's* narrow stability rating is 20%. Out of the 34 *peripheral* beliefs in the first map, only one belief can be found in the core of the second map. Therefore, the narrow stability rating of the *Periphery* is 3%. As to the wide stability rating, three out of the five *Core* beliefs are reflected in Merkel's belief system after the crisis. The wide stability

⁶⁹ The *Narrow stability* rating for the *Core* is identical to the stability rating measured in section 5.2.1.

rating is of the Core is 60%. The wide stability rating of the Periphery is 29%, as ten out of 34 peripheral concepts remain stable throughout the crisis. Merkel's Core-beliefs are more continuous during the crisis. Its narrow stability rating, as well as its wide stability rating is much higher than those of the Periphery.

Merkel: stability rating of core and periphery

Stability	Group	Core	Periphery
Narrow stability		20%	3%
Wide stability		60%	29%

Weber

Weber's core-periphery structure shows the same trends as Merkel's. The narrow stability rating of the *Periphery* is also 3%, as only one out of the 38 peripheral concepts is present in the core of the second map. The narrow stability rating for the *Core* is slightly higher than that of Merkel: 33%. From the six core beliefs in Weber's first map, two remain in the core of the second. When looking at the wide stability rating, the 38 *Periphery* concepts are 29% stable. For eleven of the concept are present

Weber: stability rating of core and periphery

Stability	Group	Core	Periphery
Narrow stability		33%	3%
Wide stability		83%	29%

in the second map as well. Weber's *Core* stability rating is very high if measured *widely*. Five out of his six *Core* beliefs can be found again in the second map, thus the wide stability rating is 83%. It is clear that Weber's *Core* shows much greater continuity than his *Periphery*. The *Core* is ten times as stable when measured *narrowly* and the wide stability rating is more than two times as high.

Conclusion

Overall, it can be concluded that hypothesis 2b - *Beliefs that are in the core of a belief system are more stable than beliefs in the periphery* – is supported by the results from this analysis. Both actors' Core shows greater continuity than their Peripheral beliefs. The manner in which this is measured does not change the outcome, as both methods used in this section show the tendency that *Core* beliefs are more stable.

5.3.3 Belief system structure: the apex and the core

Both structures, and their propositions about stability, have been examined. The next step is to determine to what extent the most central beliefs are also the hierarchically highest beliefs. This encompasses the testing of hypothesis 2c – *The most salient and central beliefs are at the apex of a belief system*. The apex and the core of belief systems have already been operationalised; the apex is represented by the level of *Values*, and the Core consists of those beliefs that score in the top ten percent on either saliency or centrality⁷⁰. By applying the hierarchical levels to the core of each of

⁷⁰ For further details on this, see section 3.3.

the four cognitive maps, it is possible to determine till what extent the core and the apex overlap. More specifically, this analysis yields two different types of results; (1) the amount of core concepts that belongs to a hierarchical level and; (2) the percentage of concepts of a hierarchical level that has place in the core of a map. This allows for the conclusion whether values are indeed more salient and central.

Merkel

The application of hierarchical levels on the core of Merkel's maps yields some interesting results. The amount of Value and Means concepts used in the core turns throughout the crisis⁷¹. Before the crisis, the distribution of Merkel's most salient and central beliefs is not suggesting a hierarchical structure. In this case, four out of five concepts are Means and just one concept is labeled Values. In total, she uses 12 unique Value-concepts and 17 unique Means-concepts in her first map. Therefore, the percentages of Values and Means used in the core are respectively 8% and 23%. In this case, the core and the apex do not seem to overlap.

Merkel 1: overlap of core and apex

	Values	Means
Good of all	✓	
Public debt		✓
German government action		✓
Global framework of rules		✓
Sound public finances		✓
# of concepts per level	1	4
% of total # of core concepts	20%	80%

Merkel 2: overlap of core and apex

	Values	Means
SGP sanctions		✓
Success of Europe	✓	
Functioning of EMU	✓	
Price stability	✓	
Good of all	✓	
# of concepts per level	4	1
% of total # of core concepts	80%	20%

The amount of values that are in the core of Merkel's belief system after the crisis is higher though. Now, four out of five concepts are Values and only one is considered a Means. This is reflected by the percentage of values that is found in the core of the map; out of the 11 Values, four are in the core – 36%. Merkel uses 16 unique Means-concepts, of which 6% is present in her core. So, although in absolute numbers the most salient and central concepts are evenly distributed among Values and Means, a higher percentage of Values can be found in the core of a belief system.

⁷¹ A possible explanation for this lies in the saliency and centrality of the only value in the core of the first map; Good of all. This concept has a saliency of 48 and a centrality of 21. As pointed out in section 5.2.1, this value could have been divided into more delineated values throughout the crisis by its effect to confront decision makers with trade-offs (Stern, 1997: 74).

Weber

By applying the hierarchical levels to the core of Weber's belief systems – both before and after the crisis –, the overlap of the core and 'apex' can be determined. The core of Weber's first cognitive map is neatly divided into three *Value*-concepts and three *Means*-concepts. In the core of Weber's second cognitive map, there are two *Value*-concepts and two *Means*-concepts. In both cases, the ten percent most salient and central concepts in Weber's maps are distributed evenly among the hierarchical levels. In this respect, no significant link exists between the hierarchical and core-peripheral structure. If however, the total amount of *Values* and *Means* that Weber uses in each of these maps is taken into account, this conclusion is put in a different perspective. Before the crisis, Weber uses 9 unique *Values*-concepts and 27 unique *Means*-concepts. This means that 33% of all *Values* in Weber's first belief system are in its core. Only 11% of all *Means* are in the core of his first cognitive map. After the crisis, Weber still uses 9 unique *Value*-concepts but he uses less *Means*-concepts; 22. The percentages in Weber's second map are smaller, as its core consists out of four concepts; 22% of the *Value*-concepts and 9% of the *Means*-concepts used are represented in the core.

Conclusion

It can be concluded that the results from this analysis are contradictory. On the one hand, the accumulated cores contain the same amount of *Values* as *Means*. In this light, hypothesis 2c seems to be falsified by the empirical data. On the other hand, a higher percentage of *Values* is represented in the core of the belief systems⁷². This suggests that there is a link between the hierarchical level of a belief and the chance that it will be found in the map's core.

Weber 1: overlap of core and apex

	Values	Means
Price stability	✓	
Sound monetary policy		✓
Central bank policy		✓
Central banks using monetary analysis		✓
Sustainable economic growth	✓	
Functioning of EMU	✓	
# of concepts per level	3	3
% of total # of core concepts	50	50%

Weber 2: overlap of core and apex

	Values	Means
Functioning of EMU	✓	
Sound public finances		✓
Public debt		✓
Sustainable economic growth	✓	
# of concepts per level	2	2
% of total # of core concepts	50%	50%

⁷²For the level of *Values*: 8% and 36% for Merkel and 33% and 22% for Weber; against the level of *Means*: 23% and 6% for Merkel and 11% and 9% for Weber

5.3.4 Belief system structure: change in the structure itself

The last hypothesis that is tested in this chapter is hypothesis 2d: *when confronted by a crisis, actors will focus more on tactical and strategic beliefs than on policy objectives*. As before in this thesis, the tactical and strategic beliefs are represented by the level of Means. The policy objectives are represented by the level of Values. By comparing the use of Values and Means before and after the crisis, this hypothesis can be tested. The comparison in this section is twofold. To start with, the amount of unique Value-concepts and Means-concepts that are used will be compared over time. In addition, change in the accumulated saliency of Value-concepts and Means-concepts will be under inquiry⁷³. Both results will be presented as a percentage of, respectively, the total amount of concepts and saliency.

Merkel

The use of Values and Means by Merkel throughout the crisis is fairly stable. The amount of unique concepts that she uses on the level of Values is stable. The same continuity can be seen on the level of Means.

Merkel: use of values and means over time

		Map 1	Map 2	Stability ⁷⁴
Values	% of unique concepts	31%	29%	Stable
	% of total uses	42%	50%	Increasing
Means	% of unique concepts	44%	42%	Stable
	% of total uses	39%	37%	Stable

Moreover, the actual times that Merkel uses 'Means' in her speeches and interviews, has remained stable during the crisis⁷⁵. The only change that occurs is the increase in the use of Values. Because the number of unique Value-concepts she uses stays stable⁷⁶, this means that Values-concepts in the second map are, on average, used more often than those in the first map. Another fact that stands out in these results is the difference between values and means when comparing the two parameters. Although there are less unique Value-concepts than Means-concepts, they are mentioned more often than the latter⁷⁷. Overall, it can be concluded that the empirical data gathered on Merkel falsifies hypothesis 2d.

⁷³ This is relevant, for it shows how often an actor actually mentions Values and Means.

⁷⁴ A change in the use of Means and Values up to 3% is deemed insignificant. Therefore, aspects with change percentages up to 3% will be rated stable.

⁷⁵ Since the cognitive maps are constructed out of these speeches, the total saliency of a certain level represents how often someone mentioned this level in his/her speeches.

⁷⁶ Actually, it even drops by 2%, which amounts to one concept.

⁷⁷ This difference is so strong, that the level of Means scores higher on the percentage of unique concepts in the total map and the level of Values scores higher on the percentages of saliency in the total map.

Weber

The use of Values and Means by Weber remains, just as that of Merkel, relatively stable during the budgetary crisis. On the level of values, both the amount of unique concepts and their total usage show consistency during the crisis. On the level of Means, the amount of concepts used by Weber drops by 10%. This is the opposite of what was expected. The times Weber uses the level of Means in his cognitive map remains the same though. But the most interesting result is rather the amount of unique concepts that is used on the level of Values and Means. Weber uses three times as many different Means-concepts than he has policy objectives. Notwithstanding the drop this parameter experiences during the crisis, Weber still uses much more unique strategic and tactical beliefs. All in all, Weber's use of Values remains stable and, although he does not use as many different Means-concepts after the crisis, he still uses them as often as before the crisis.

Weber: use of values and means over time

		Map 1	Map 2	Stability
Values	% of unique concepts	20%	21%	Stable ⁷⁸
	% of total uses	34%	31%	Stable
Means	% of unique concepts	61%	51%	Decreasing
	% of total uses	56%	55%	Stable

Conclusion

Hypothesis 2d is obviously falsified by the analysis conducted in this subsection. While Merkel's use of Means remains stable during the crisis, she shows an increase in the use of Values. This is directly opposite of the advanced expectations. Weber's use of Means drops throughout the crisis. His use of Value-concepts is unaltered.

⁷⁸ A change in the use of Means and Values up to 3% is deemed insignificant. Therefore, aspects with change percentages up to 3% will be rated stable.

6. Conclusion: what to make of this?

The goal of this chapter is threefold. It starts by giving a brief summary of the results presented in the previous chapter and uses these results to draw overall conclusions on the plausibility of the hypotheses. In order to do so, it will assess each hypothesis in a concise manner and determine whether it is falsified or supported by the empirical data acquired in this study.

Subsequently, in the second part, these hypotheses will be merged to draw conclusions on a broader level. In doing so, this section will determine whether hypothesis 1a or 1b seems more appropriate for describing the influence of crisis experience on Merkel and Weber's belief system. In addition, the hypotheses concerning the structure of belief systems will be compared to analyze possible connections and overlap.

The third part of this chapter will answer the central question raised in this thesis by applying the conclusions from the first two sections in a way that is relevant to the question. Furthermore, it will address both sub questions to vindicate the answer on the central question.

It is important to note that although, throughout this chapter there will be some attention for the possible implications for the literature, the next chapter will be partially devoted to highlight those implications that are of extraordinary interest.

6.1 Hypotheses revisited: an outline

As the last chapter was rather extensive, it is prudent to give a compact outline of its conclusions. This outline will address every hypothesis individually.

Hypothesis 1a: *The budgetary crisis will cause a rigidity in response, leading to stable or strengthening beliefs.*

Hypothesis 1a was tested with the use of three different methods: (1) *single concept comparison of the core*; (2) *dimension comparison of the core* and; (3) *dimension comparison of the map*. The results from each of these tests vary significantly. Through the method of single concept comparison, it can be concluded that Merkel and Weber's core are not stable throughout the crisis; they show respectively 20% and 33% stability. These results are not in accordance with hypothesis 1a. Results from the second method are ambiguous; although in three out of four instances the core showed continuity in its preference for a dimension⁷⁹, the stability ratings are not exceptionally

⁷⁹ To wit: Merkel preferred *Ordoliberalism* on the spectrum of 'ideas on economic policy' and *Fiscal* policy on the spectrum of 'ways to influence the economy'. Weber's preference for *Ordoliberalism* was maintained but his preference on the spectrum of 'ways to influence the economy' shifted from *Monetary* to *Fiscal*.

high⁸⁰. Nonetheless, these results are, on average, in accordance with hypothesis 1a. The third test measured the stability of dimensions within the entire map over time. Its conclusions are, for the most part, in accordance with hypothesis 1a: In three out of four instances, the initial inclination towards a dimension was continuous throughout the crisis. Moreover, in these cases, the stability rating of these dimensions was very high⁸¹. In accordance with the results from test two, this method shows that Weber's preference for *Monetary* policies faded throughout the crisis. After the crisis, he was primarily concerned with *Fiscal* policies.

It can be concluded that hypothesis 1a is falsified on the scale of single concepts. The results from the tests on the scale of dimensions are, in general, supportive of hypothesis 1a. This discrepancy will be discussed further on in this chapter.

Hypothesis 1b: *The budgetary crisis will have a profound impact, leading to belief change in the system as well as the core.*

Hypothesis 1b was tested simultaneously with its counterpart 1a. The test – on the scale of single concepts – is in accordance with the hypothesis. It shows that individual beliefs are, even in the core of a belief system, largely instable. So much so, that the impact of the crisis on the core beliefs might well be 'profound'⁸². The results from the *dimension comparison of the core* method leave room – and the need – for interpretation. A preference for a specific dimension was continuous in three out of four instances, which suggest that they are stable⁸³. The internal stability rating of each dimension was not very high however. Therefore, the second method used in this thesis can falsify nor support hypothesis 1b. The results from the third method on the other hand, are clearly in conflict with the hypothesis. The three cases in which the preference for a dimension was stable also show extremely high stability ratings. Only in the case of Weber's preference on the spectrum of 'ways to influence the economy' could a shift be observed. For the major part, the third method's results are not in accordance with the hypothesis.

It can be concluded that hypothesis 1b is supported by the results from the first method – *single concept comparison of the core*. The second and especially the third method provide evidence that falsifies hypothesis 1b. The discrepancy between the results will be discussed later on.

⁸⁰ For Merkel 66% and 33%, for Weber 60% and 17%.

⁸¹⁸¹ Namely: 87%, 100% and 92%.

⁸² For the single concept stability ratings are significantly lower than those observed in a comparable study by Van Esch (2007: 377-9).

⁸³ For comparison, in the same study by Van Esch, the method of dimension comparison was used as well. The stability rating of all dimensions throughout the crisis is 75% (3/4) in this thesis. In the research conducted by Van Esch, the average stability rating of dimensions was 85%. The 10% difference cannot be considered 'profound'. Therefore, the dimensions in this thesis are, overall, stable.

Hypothesis 2a: *Beliefs that are at the apex of a belief system are more stable than beliefs at lower levels.*

Hypothesis 2a was tested by comparing the *inter-level stability rate* of the level of Values to the level of Means. The evidence from this analysis shows a significant difference in stability between Values and Means. Of the Value-concepts that were present in the first map of Merkel, 58% sustained throughout the crisis. For Weber, the inter-level stability rating of Values was 55%. In contrast, Merkel's means-concept in the first map showed only 18% continuity during the crisis. Weber's Means were 33% stable.

It can be concluded that the results from this analysis supports hypothesis 2a. The level of Values is more stable than the level of Means.

Hypothesis 2b: *Beliefs that are in the core of a belief system are more stable than beliefs in the periphery.*

The core-peripheral structure of belief systems and its propositions on the stability of core and peripheral beliefs are tested in much the same way as hypothesis 2a. This time though, the analysis is twofold: a distinction was made between *narrow stability* and *wide stability*. In the case of Merkel, the results are clearly in accordance with the hypothesis⁸⁴. Core beliefs are more stable than peripheral beliefs. The results from the analysis of Weber's beliefs support the hypothesis even stronger⁸⁵.

It can be concluded that the outcome of this analysis strongly support hypothesis 2b. Core beliefs are more stable than peripheral beliefs.

Hypothesis 2c: *The most salient and central beliefs are at the apex of a belief system.*

This hypothesis states that the core of the core-periphery structure overlaps with the apex of the hierarchical structure. This was tested by applying the hierarchical levels to the core of each belief system. This provided two kinds of results: (1) the amount of Values and Means present in the core is identical⁸⁶; (2) the percentage of Values present in the core is higher than the percentage of Means present in the core⁸⁷. These results are clearly contradictory.

⁸⁴ The narrow stability rating of the Core and Periphery is, respectively 20% and 3%. The wide stability rating is 60% and 29%.

⁸⁵ His narrow stability rating of the Core and Periphery is, respectively 33% and 3%. The wide stability rating is 83% and 29%.

⁸⁶ Out of the total of 20 identified core-concepts, 10 were Values and 10 were Means.

⁸⁷ On average 25% of the Values in a map were found in its core and 12% of the Means in a map were found in the core. This is caused by the difference in unique Value-concepts and Means-concepts

It can be concluded that the empirical evidence is too discrepant to falsify or support hypothesis 2c. It does leave a lot of room for discussion however. This will take place in the next section of this chapter.

Hypothesis 2d: *When confronted by a crisis, actors will focus more on tactical and strategic beliefs than on policy objectives.*

Hypothesis 2d was tested by the comparison over time of two parameters: (1) the number of unique concepts used on each level and (2) the number of uses of the concepts at that level. Although in a different way, the results from both Merkel and Weber's maps are conflicting with the hypothesis. While Merkel's use of means is stable throughout the crisis⁸⁸, she uses more values after the crisis than before. Weber's starts to use less unique means-concepts during the crisis⁸⁹. The evidence does not only fail to support the hypothesis, it shows a trend opposite of the expectations. There is a slight increase in the use of values throughout the crisis in comparison with the use of means. It can be concluded that the results from this test falsify hypothesis 2d. Actors will rather focus *less* on means when confronted by crisis than *more*.

The tests used in this thesis and their outcomes in relation to the hypothesis can be presented in the following overview:

Overview of the analyses done in this thesis

Aspects per test	Hypothesis 1a and 1b			Hypothesis 2a	Hypothesis 2b	Hypothesis 2c	Hypothesis 2d
	Test 1	Test 2	Test 3	Test 1	Test 1	Test 1	Test 1
Name of the test	Concept comparison of core	Dimension comparison of core	Dimension comparison of map	Hierarchical level comparison of map	Core-periphery comparison of map	Hierarchic level comparison of core	Hierarchic level comparison of map
Result (Falsified or supported)	Falsifies 1a and supports 1a	Contradictory	Supports 1a and falsifies 1b	Supported	Supported	Contradictory	Falsified

⁸⁸ Both the number of unique concepts used and the amount of times they are used in total show a slight decrease. This decrease is so small that is deemed insignificant. Therefore, the level is thought to be stable.

⁸⁹ The number of times he mentions means stays stable though.

6.2 Hypotheses revisited: integrating conclusion

The summary in the previous section has provided an overview on all individual hypotheses. This section will integrate these hypotheses as most of them are interrelated. Hypotheses 1a and 1b posit rivaling expectations on the influence of crisis on the likeliness of belief change. The contradictory evidence that was advanced in chapter 5 will be interpreted, in order to give meaning to the inconsistency. Hypothesis 2a and 2b contest each other, as both insist that belief systems are structured in a particular way. Results of the analyses of each of these hypotheses will be compared to explore which one is more credible. Subsequently, by bringing in hypothesis 2c, the similarities between hypothesis 2a and 2b will be assessed. Because hypothesis 2d is not related to the other hypotheses, it will be neglected by this section.

Hypotheses 1a and 1b: rigidity and change?

As was pointed out in the previous section, the three methods that were used to test hypotheses 1a and 1b yielded inconsistent results. Notwithstanding the fact that methodological defects might be the source of these discrepancies⁹⁰, this section will compare the results for both hypothesis and point out the one most adequate to explain the empirical evidence. The biggest inconsistency in the results is clearly caused by the use of different scales of abstraction⁹¹. When looking at individual beliefs, hypothesis 1a seems to explain their flexibility more adequately⁹². After the crisis, less than one third of all beliefs remain stable.

On the scale of dimensions however, hypothesis 1b is in accordance with the results. Both in the core and the entire maps 75% of the dimensions are stable⁹³. One dimension has shifted, both in the core and the entire map. This raises the following question: what scale of abstraction is most appropriate when measuring belief change? As hypothesis 1b was derived from literature that insisted that crisis experience causes a 'profound' and radical change rather than superficial, these effects should be noticeable on the scale of dimensions as well. With the exception of Weber's shift from monetary to fiscal policy, this is not the case. Therefore, hypothesis 1a appears to be more in accordance with the evidence⁹⁴. As the graph on the next page shows, overall, the beliefs of Merkel and Weber remained relatively stable.

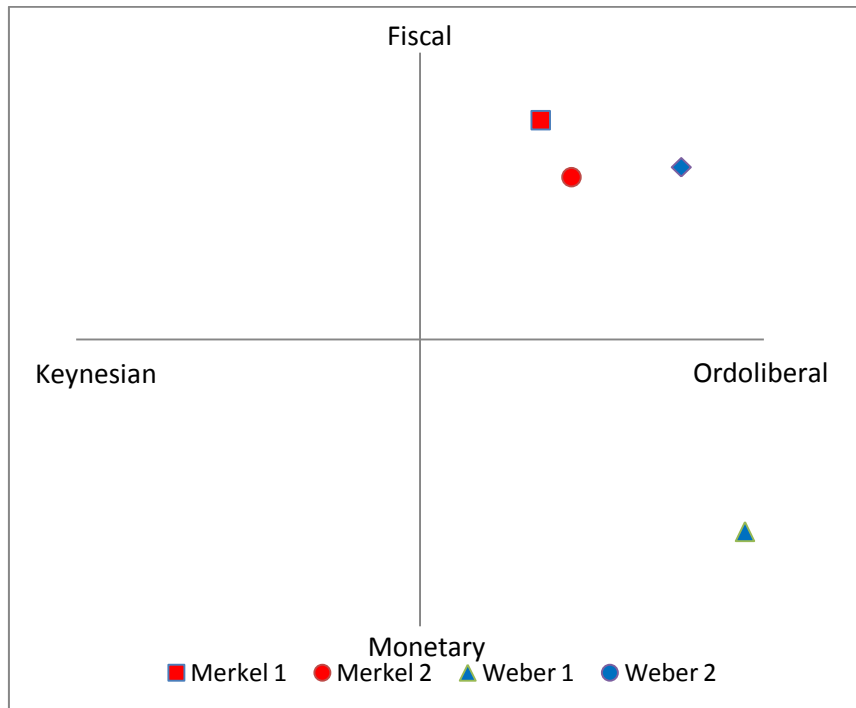
⁹⁰ As will be explained in chapter 7, the source of these discrepancies is probably not methodological of nature. It lies elsewhere.

⁹¹ Again, the source of this inconsistency might be methodological: low construct validity. And again, it will be argued this is not the case.

⁹² This is also true for the single concept stability rate in the entire map; 29% for both Merkel and Weber.

⁹³ These dimensions show mediocre internal stability in the core (43% on average) and high internal stability in the map (93% on average).

⁹⁴ This might be considered 'a choice between two evils' as neither hypothesis can convincingly explain all the evidence.

Merkel & Weber: Dimension Stability in the map***Hypotheses 2a and 2b: imposing a structure?***

As hypotheses 2a and 2b both have the pretention of explaining belief system structure, they are in contention. Moreover, they both posit expectations about the stability of beliefs determined by the beliefs location in their structure⁹⁵. These second expectations were tested in this thesis. On the basis of these results, it will be determined which of the two hypotheses is more plausible. The analysis of empirical data showed that values are 57% stable and means are 26% stable all the way through the crisis⁹⁶. In comparison, core beliefs have a stability rating of 72% and peripheral beliefs have a stability rating of 29%⁹⁷. The analysis done in this thesis thus supports both hypothesis 2a and 2b. The difference between core and peripheral beliefs however, is evidently larger than that between values and means. This suggests that the core-peripheral structure and its prospect on the stability of beliefs is more accurate than the hierarchical structure hypothesis⁹⁸⁹⁹.

⁹⁵ Literature supporting the core-periphery structure also suggests that core-beliefs are more stable than peripheral beliefs (Rosati, 2000: 64). Literature supporting the hierarchical structure has corresponding expectations; beliefs that are higher in the hierarchy are more stable than beliefs that are lower in the hierarchy (Levy, 1994: 286).

⁹⁶ Merkel's values are 58% stable and her means are 18% stable. Weber's values are 55% stable and his means are 33% stable.

⁹⁷ These are the ratings for 'wide' stability, as this rating measures stability in the entire map just like the hierarchical structure analysis and therefore is more appropriate for comparison.

⁹⁸ The rationale behind this, is that the 'core-ness' of a belief is more important than the level of a belief if you want to determine whether a certain belief is stable or not. Therefore, the core is a better variable when posing expectations on the stability of beliefs.

Bringing in hypothesis 2c: rivals or relatives?

Hypotheses 2a and 2b have thus far been viewed upon as rivaling. Although they clearly differ on how exactly a belief system might be structured, their expectations on the flexibility or stability of beliefs originate from the same body of literature. Both the core-periphery's and hierarchy's assumptions on belief stability rely on an important principle of cognitive theory: When confronted with discrepancies between internal beliefs and the external reality, the mind tries to solve the discrepancy with the least possible effort (Tetlock, 1991: 28; Rosati, 2000: 75). Where the core-peripheral structure argues that 'core beliefs' take the most effort to change, literature supporting the hierarchical structure states that beliefs at the apex of the structure are resistant to change for this reason¹⁰⁰. In this respect, the different structures might very well be two 'branches of the same tree' instead of contrasting theories. This assumption underlies hypothesis 2c, which was tested in the previous chapter.

The results from this test though, were twofold: core beliefs were not more likely to be at the apex of a belief system, but as the apex is smaller than the rest of the hierarchical structure, a higher percentage of policy objectives can be found in the core than strategic and tactical beliefs¹⁰¹. While these results suggest some overlap between the core and the apex exists, the evidence is so meager that the only possible conclusion can be that more research is needed to determine whether the core-peripheral and the hierarchical structure are rivals or relatives¹⁰².

⁹⁹ Other evidence (related to hypothesis 1a and 1b) does support the hierarchical structure propositions: the fact that Weber's preference on the spectrum of 'ways to influence the economy' shifted radically, while the spectrum of 'ideas on economic policy' remained practically unaltered, strongly points towards a division between the two that is in line with the hierarchical structure. Moreover, as the shift was obvious in both the core and periphery, this structure fails to explain the observed results. Due to methodological concerns, the spectra have not been integrated with the hierarchical levels. Further research on this is desired.

¹⁰⁰ Thus, when confronted with inconsistencies, actors prefer changing peripheral or hierarchically lower beliefs instead of core and hierarchically higher beliefs.

¹⁰¹ The core was divided evenly: 10 values and 10 means. But 25% of the Values in a map were found in its core and 12% of the Means in a map were found in the core

¹⁰² One point of interest: all concepts that were in the core of both the first and second map, and thus the most stable, were Value-concepts: 'Good of all', 'Functioning of EMU' and 'Sustainable economic growth'.

6.3 Central question: belief change, does it occur?

Does the financial and budgetary deficit crisis cause German decision makers to experience belief change on the topic of European monetary and fiscal policy?

This question was central as a point of departure for this study. By using the conclusions drawn on the hypotheses, it is now possible to answer this question:

The budgetary deficit crisis does cause German decision makers to experience belief change on the topic of European monetary and fiscal policy.

An answer can hardly be more straightforward than the 'yes' stated above. Although it might suffice as a conclusion, its value is determined by the reasons behind this conclusion. Therefore, the answering of the sub questions will closely examine how and where this change has occurred.

6.3.1 Sub question 1: belief change, how does it occur?

How does the budgetary deficit crisis cause belief change? This study suggests it does in at least two ways. The first way in which it changes beliefs is related to hypothesis 1a and also the most subtle: a rigidity in response. Chancellor Merkel has gained increased confidence in Ordoliberalism throughout the crisis. As to why the crisis might have triggered the strengthening of Ordoliberal ideas, the literature suggests several possibilities. One explanation follows the crisis-learning literature (Stern, 1997: 74). This suggests that the crisis has forced Merkel to confront a trade-off, with Keynesian policy goals on the one hand, and Ordoliberal objectives on the other. If this is the case, the new 'hierarchy' in policy objectives will remain stable after the crisis is completely over.

Another explanation can be found in the stress, uncertainty and time pressure that are associated with crisis situations (Staw, Sandelands and Dutton, 1981: 506). These are thought to cause involved actors to rely on their most trusted and well-known beliefs and responses. Merkel showed a reasonable preference for Ordoliberalism before the crisis. It is likely that these beliefs are best known by her and therefore, she relies on them in these times of threat. After the crisis is over, she would be expected to return to her more moderate view on Ordoliberal – Keynesian policy beliefs. Whether the change is temporary or structural, it is clear that the budgetary crisis has strengthened Merkel's Ordoliberal ideas. Although this form of belief change is often neglected, scholars point out that it indeed is *belief change* (Levy, 1994).

The second way the budgetary crisis changed the beliefs of German decision makers, is closely related with hypothesis 1b and more straightforward: it has a profound impact on Weber. Although Weber's policy ideas remained strictly Ordoliberal, the ways by which he wanted to realize his ideas underwent a massive shift. The crisis showed the threat that *bad* fiscal policies poses for Ordoliberal

ideas and Weber responded. He clearly reevaluated the importance of fiscal policies for achieving his ideas and therefore, he stresses the importance of fiscal austerity – an issue that was in the periphery of his belief system before the start of the crisis.

Again, literature suggests two possible conditions that may have triggered this rigorous restructuring of Weber's belief system. As literature on learning suggests, people will try to solve discrepancies between their belief system and reality in a way that requires the least cognitive effort; in the periphery or lowest hierarchical level (Tetlock, 1991: 28; Rosati, 2000: 75). From this perspective, Weber evaluated his own ways (monetary policies) for achieving his ideas (Ordoliberalism) and concluded that they were no longer adequate. Thus, being the *cognitive miser*, the literature suggests, he changed his ways (to fiscal policies). A second possible trigger for the change in Weber's beliefs lies in the effect of crisis experience to challenge tacit or explicit beliefs about "the character of the environment and the adequacy of existing organizational and political arrangements designed to cope with that environment" (Stern, 1997: 73). This effect suggests that Weber, rather than doubting his own strategies, concluded that the current institutional structure of EU and EMU was insufficient to cope with the 'the character of the environment' – the public finances of member states. Therefore he moved his attention to the field of fiscal policy. In any case, Weber's strategic preferences experienced a major restructuring throughout the budgetary deficit crisis.

It can be concluded that both the budgetary crisis caused both rigidity in response and a profound impact. How is this possible? Although they are not completely satisfying, these results find support in the literature on the interface of crisis and learning. Stern and Sundelius used both the threat-rigidity hypothesis and the crisis-learning hypothesis¹⁰³ and concluded that: "*Somewhat counter intuitively, both propositions proved useful in interpreting the empirical record*" (1997: 37). It is argued that different actors are unevenly sensitive to environmental changes. In this thesis, as well as in the study of Stern and Sundelius, the multiple actors that were under scrutiny responded in a different way to the same changes in the physical and social world around them (Stern and Sundelius, 1997: 38).

6.3.2 Sub question 2: belief change, where does it occur?

Where in the belief systems of the German decision makers does this belief change take place? This second sub question was developed into hypothesis in chapter 2. These hypotheses have been tested and their conclusions integrated. It is clear that most of the change caused by the crisis takes place in the periphery and lower levels. Both hypotheses on the structure of belief systems have found support in this thesis; beliefs in the core and at the apex of a belief system demonstrate

¹⁰³ Their study is devoted to explaining decision makers' behavior in the monetary crisis that held Swede in its grip in 1992. For details, see Stern and Sundelius, 1997.

enhanced stability throughout the crisis. Of the two ways in which the crisis has triggered belief change, the first one – Merkel's strengthening of Ordoliberal ideas – takes place in the periphery/lower levels. The amount of core beliefs that can be labeled 'Ordoliberal' has not increased throughout the crisis¹⁰⁴. As was observed in section 5.2.2, the only case in which a preference on the scale of dimensions changed in the core of a belief system was with Weber. The shift from monetary policy to fiscal policy that Weber experienced was so radical, that the very core of his belief system has altered on this issue.

¹⁰⁴ In fact, it has dropped from 3 to 2 (see section 5.2.2), although a possible explanation for this observation is also put forward in that section.

7. Discussion: what is left?

In this final chapter, three remaining issues of interest will be addressed: (1) the topics of *validity* and *reliability* are reassessed to point out possible methodological concerns; (2) the implications this thesis has for the literature are explored and, closely related; (3) some recommendations for future research are made.

7.1 Reflecting on the methods: validity and reliability

The issues of validity and reliability have been addressed in chapter 3, but it is prudent to reflect on the decisions made in this study and highlight possible concerns. Despite the ample attention for the issues of validity and reliability, the study encountered some methodological obstacles. The most important problems are summarized below.

Construct validity when testing stability on multiple scales of abstraction

The first thing that should be addressed is a concern on *construct validity*. As was pointed out in chapter 6, the analysis of hypothesis 1a and 1b yielded contradictory results. It was opted to use different methods to secure the construct validity. If however, the results differ per test, the construct validity becomes jeopardized. Notwithstanding the fact that this is problematic, it is likely that the source of these discrepancies is not of methodological nature per se. The point is that the stability of beliefs varies greatly if looked upon on a larger scale. It would seem that, how stable someone's belief system is, is influenced as much by the scale at which it is looked at, as by someone's expertise or the centrality of certain beliefs.

This is in accordance with the belief system stability throughout this study. Core beliefs are more stable, as they are used more often and in different respects. Values are more stable because they are on a higher hierarchical level, i.e., on a higher scale of abstraction that means¹⁰⁵. The dimensions that were used in this thesis are on a higher scale of abstraction and very salient and central. The fact that they show enhanced stability is thus it is in line with the literature on belief systems. Concluding, these inconsistencies in with the findings hint that a belief's stability over time is not only "*a function of the age of a belief and the frequency of its use as an organizing concept*" as Steinbruner (1974, 114) suggested, but is also in some way related to the level of abstraction. Though it can be argued that these are two sides of the same coin.

¹⁰⁵ Moreover, in this study, a value-concepts is, on average, used 11 times in a belief system and a means-concepts only 6 times. Their mean saliency is almost twice as high.

Construct validity and the technique of cognitive mapping

The second defect also regards construct validity. The use of the cognitive mapping technique is not without methodological risks for the validity¹⁰⁶. As explained in chapter 3, this study tried to circumnavigate these risks, but has not overcome them completely. Although most of the techniques described by Axelrod (1976) were followed, some operationalisations are erroneous. All concepts need to be *variables*, i.e., they need to be able to move along a certain scale¹⁰⁷. When inspecting the concept lists in appendix C, it is clear that not all concepts meet this requirement. This impedes the validity of the research conducted in this thesis for not all concepts are equally appropriate for interpretation.

Reliability and the technique of cognitive mapping

The third issue is more of a concern than it is an actual problem. It is closely related with the second problem posed, but it is directed at the reliability of this thesis. The use of content analysis and cognitive mapping is subject to strict coding rules to guarantee *inter-coder reliability*¹⁰⁸. As all the coding in this study was done by one scholar, the inter-coder reliability has not been tested. This is however, important for the value of this thesis. The guidelines in the literature have, for the major part, been applied to the gathering of empirical data in this thesis. It is important to point out that the level of inter-coder reliability is uncertain for this thesis.

External validity of this study

The final issue that is assessed is the external validity, which can be devised into quantitative validity and analytical validity (Yin, 2009). The quantitative validity is, for obvious reasons, low in case studies in general and in this thesis in particular¹⁰⁹. The analytical validity is higher in this thesis. As has been argued in chapter 3, this thesis uses a least likely case for Cognitive Theory. Cognitive Theory's assumption that belief change in general is difficult and unlikely is not being tested however, because this study tested different hypothesis which all resided inside the Cognitive Theory paradigm and were specific on the influence of crisis experience on belief change¹¹⁰. The external validity of this thesis is therefore, mostly limited to the interface of literature on crisis and belief change. The case study approach conducted in this study is a contribution to the knowledge in the relation between crisis and belief change.

¹⁰⁶ For the concepts of interest cannot be observed directly, and thus have to be derived from texts.

¹⁰⁷ For example: the concept 'German government action' is incorrect for it cannot be influenced, the concept should have been 'capacity of German government to act' which can increase and decrease (Axelrod, 1976: 291- 332).

¹⁰⁸ See Axelrod (1976: 291 -332) for an example of such rules.

¹⁰⁹ For only two 'cases' of belief change caused by external changes have been studied: Angela Merkel and Axel Weber.

¹¹⁰ Crisis experience clearly is extraordinary and thus cannot be 'general'.

7.2 Back to the drawing board: revisiting the literature

This thesis has examined two distinct but inter-related aspects of the wide variety of literature on Cognitive Theory, learning, crisis and the interface of these fields. First of all, the influence of crisis experience on the contents of belief systems was under inquiry¹¹¹. Secondly, this study explored the niche on belief system structure that exists in the literature¹¹². The consequences of the findings presented in this thesis will be addressed briefly.

As regards the influence of crisis experience on the contents of belief systems, the findings are self-contradictory. This does not mean that they are irrelevant to the theoretical debate though. On the contrary, the inconsistency of the results among the different actors is an important contribution to this deliberation. It is a testimony to the subjectivity and context-relatedness of learning from crisis experience and, as such, is a strong support for the use of the Cognitive Theory paradigm in the field of political science. It underlines the importance of cognitive and psychological factors in the change of beliefs and 'learning' that the Rational Actor Theory ignores. Due to the limits in time and resources, this study has not tried to explain actual decision making and behavior with the help of belief systems. Other studies though, have done exactly that and yielded interesting results (Van Esch, 2007; Stern and Sundelius, 1997). Inside the cognitive paradigm, this study has limited implications for the theory. There is not enough support for either of the two hypotheses to determine which one best explains the influence of crisis experience on belief system content. The suggestion by Stern and Sundelius that both propositions are useful alongside each other is supported by the findings in this study.

Four out of the six hypotheses in this thesis were concerned with belief system structure. When studying the broad variety of literature, it was concluded that the literature on belief system structure is incomplete. Although the research conducted on belief system structure in this thesis is a modest start, it covers a lot of ground. First of all, hypothesis 2a as well as hypothesis 2b is supported by the results presented in this study; both the core-periphery structure and the hierarchical structure explicate significant differences in belief stability¹¹³. Secondly, the belief systems of Merkel and Weber seem to be structured core-peripheral rather than hierarchical¹¹⁴. The core-peripheral structure is better suited to point out differences in stability than the hierarchical structure. Thirdly, the overlap of these two structures is a subject of special interest. Though the findings presented in this study cannot 'prove' how the two structures are related, it suggests

¹¹¹ Hypotheses 1a and 1b are devoted to this aspect.

¹¹² Using hypotheses 2a, 2b and 2c. Hypothesis 2d has tried to integrate the two aspects by exploring the influence of crisis on belief system structure.

¹¹³ The core and apex of belief systems were significantly more stable than the periphery and lower levels of the belief systems.

¹¹⁴ For explanation on this, see chapter 6

something along these lines: Both the hierarchical and core-peripheral structure are based on the abstraction, salience and centrality of beliefs¹¹⁵. In respect of belief system structure, his thesis has, raised more new questions than that it has answered existing ones.

7.3 Mapping the road ahead: recommendations for future research

The possibilities for future research arising from this study are immense, and immensely varied. This section will discuss but a small selection out of this large variety. The most logical continuation of this thesis lies clearly in the link between belief system content – and change therein – and decision making itself. Looking at other studies devoted to this link, the analysis of belief system content in order to explain or predict decision making may yield interesting results.

Another point of interest lies in the structure of belief systems. Much is still uncertain about this structure itself, let alone, how it influences decision making. This thesis is can be used as a point of departure for further research devoted to belief system structure. The overlap and underlying assumptions of the two proposed, distinct structures is particularly intriguing. When examining belief system structure, it is expedient to enlarge the number of actors under inquiry. Notwithstanding the importance of contextual factors, belief system structure is less influenced by these factors, as Steinbruner stated: *“In these terms, human beings seem to differ much less markedly”* (1974: 95). Statistical research on the relation between centrality, saliency and abstraction and their influence on stability over time would be a logical next step.

The value of case studies cannot be overestimated though. When looking at the answer to the central question of this thesis, several suggestions have been put forward on what exactly caused the observed changes. Further investigation into these mechanisms through which belief change occurs requires ‘small-n’ studies. For sensitivity for contextual factors and a close examination are crucial in studying such elusive concepts.

These three examples are illustrative of the amount and variety of future research that is possible and needed. In other words:

The more you know, the more you know you don't know – Aristotle

¹¹⁵ It is important to note that the abstraction, salience and centrality might well overlap themselves. In accordance with the observations by Van Esch (2007: 133), the most salient concepts in this study are oftentimes the most central as well. Moreover, the ‘level of abstraction’ is likely to be linked to saliency and centrality. The Values-concepts in this thesis were more salient and central than the Means-concepts (on average; 11 and 6 saliency).

Appendices

Appendix A *List of speeches, interviews and policy statements used in the cognitive maps*

Angela Merkel

Case 1, before the 1st of February 2010

- A) Speech delivered at the World Economic Forum on 24 January 2007.
- B) Speech delivered at the Conference of Community and European Affairs Committees of the National Parliaments of the European Union and the European Parliament on 14 May 2007.
- C) Speech delivered at the American Academy, marking the 60th anniversary of the Marshall Plan on 19 November 2007.
- D) Policy statement before the German 'Bundestag' on 7 October 2008.
- E) Speech delivered at the World Economic Forum on 30 January 2009.
- F) Interview with the New York Times on 29 March 2009.
- G) Interview with Der Spiegel on 30 May 2009.
- H) Speech before the US Congress on 3 November 2009.

Case 2, after the 1st of February 2010

- A) Speech before the German 'Bundestag' on 5 May 2010.
- B) Interview with Der Spiegel on 1 November 2010.
- C) Speech delivered at the Opening Ceremony of the College of Europe on 2 November 2010.
- D) Interview with Financial Times on 9 November 2010.

Axel Weber

Case 1, before the 1st of February 2010

- A) 'The role of money in the monetary policy of the Eurosystem'. Speech delivered at ECB colloquium held in honour of Otmar Issing on 16-17 March 2006.
- B) 'Forecasting in Eurosystem Central Banks – Overview and Challenges'. Speech delivered at the Bundesbank Spring Conference on 5 May 2006.
- C) Interview with The International Economy in December 2007.
- D) 'Globalisation, Monetary Policy and the Euro'. Speech delivered at the Norges Bank Conference on Monetary Policy on 7 March 2008.
- E) 'Monetary Policy in the Eurosystem'. Speech delivered as part of the Ken Dixon public lecture series at the University of York on 10 June 2008.
- F) Speech held as introductory remarks at the CFS Research Conference "A New Supervisory Architecture for Europe's Banking System" on 5 June 2009.

Case 2, after the 1st of February 2010

- A) 'The Reform of Financial Supervision and Regulation in Europe'. Speech delivered at the Institute of International and European Affairs on 10 March 2010.
- B) 'Germany and the financial crisis: challenges and opportunities'. Speech delivered at the American Council on Germany in New York on 26 April 2010.
- C) 'The Euro: Opportunities and Challenges'. Speech delivered at the Ragnar Nurkse-Lecture on 7 February 2011.
- D) Interview with Der Spiegel on 14 February 2011.

Appendix B *Cognitive maps*

Merkel, before the crisis.

Merkel, after the crisis.

Weber, before the crisis.

Weber, after the crisis.

Appendix C *Concepts used in the cognitive maps and their saliency and centrality*

---	Separation core/non-core beliefs
S	Saliency
C	Centrality

Merkel 1

<i>Concept</i>	<i>S</i>
Good of all	48
Public debt	19
German government action	18
Sound public finances	16
Sustainable economic growth	16
Global framework of rules	15
Social market economy	14
Governments saving banks	13
Confidence in market	13
International community	13
Economic growth	12
Economic stimulus	10
Financial crisis	9
EU	8
Functioning of EMU	7
Freedom without responsibility	6
Structural reforms	5
Free market forces	5
Globalization	5
Coordinated economic policy	5
EU member states	5
Freedom in responsibility	5
SGP	4
Sound financial system	4
Possible collapse of banks	4
Freedom	3
Ageing population	3
Employment	3
Coordinated response to crisis	3
EU integration	2
Competitiveness	2
Strong institutional framework	2
EU safety net	2
Crisis prevention	2
Short-term programs	1
Government action	1
Protectionism	1
Financial market transparency	1
Budgetary crisis	1

<i>Concept</i>	<i>C</i>
Good of all	21
Global framework of rules	10
German government action	9
Public debt	8
International community	8
Governments saving banks	8
EU	8
Sustainable economic growth	7
Sound public finances	7
Economic growth	7
Confidence in market	6
Financial crisis	6
Economic stimulus	5
Social market economy	4
Free market forces	4
Coordinated economic policy	4
EU member state	4
Functioning of EMU	4
Globalization	4
Sound financial system	3
SGP	3
Coordinated response to crisis	3
Possible collapse of banks	3
Freedom without responsibility	3
Ageing population	3
Freedom	3
Structural reforms	3
Employment	2
Freedom in responsibility	2
Competitiveness	2
Crisis prevention	2
Strong institutional framework	2
Short-term programs	1
Protectionism	1
Government action	1
Financial market transparency	1
EU safety net	1
EU integration	1
Budgetary crisis	1

Merkel 2

Concept	S
SGP sanctions	22
Success of Europe	22
Functioning of EMU	22
Price stability	19
European responsibility	13
Good of all	13
Member states ignoring SGP	12
Coordinated economic policy	12
Crisis prevention	12
Help program Greece	11
EU resolving crisis	11
Competitiveness	8
Franco-German agreement	8
Changing European treaties	7
Sound public finances	6
Budgetary problems of Greece	5
Helping Greece while respecting EU and	5
Financial crisis	5
Structural reforms EMU	4
Social market economy	4
Unsustainable economic growth	4
Strong crisis management	3
Financial market regulations	3
Private creditors paying for financial crisis	3
Financial aid Greece alone	3
Sustainable economic growth	3
Budgetary crisis	3
European treaties	2
Freedom without responsibility	2
East-European countries joining EMU	2
Sovereign risk EMU members	2
EU member state policy	1
Crisis management system	1
Strong public debate	1
Merkel being criticized	1
EMU member states	1
Ageing population	1
Taxpayers paying for financial crisis	1

Concept	C
Functioning of EMU	14
Success of Europe	11
Price stability	10
Good of all	10
European responsibility	9
Crisis prevention	8
EU resolving crisis	8
SGP sanctions	8
Help program Greece	7
Sound public finances	6
Coordinated economic policy	6
Changing European treaties	6
Competitiveness	5
Public debt	4
Budgetary problems of Greece	4
Financial crisis	4
Member states ignoring SGP	4
Social market economy	4
Sustainable economic growth	3
Structural reforms EMU	3
Private creditors paying for financial crisis	3
Franco-German-agreement	3
Financial aid Greece alone	3
Strong crisis management	3
Sovereign risk EMU members	2
Helping Greece while respecting EU and	2
Freedom without responsibility	2
European treaties	2
Budgetary crisis	2
Taxpayers paying for financial crisis	1
Strong public debate	1
Merkel being criticized	1
Financial market regulations	1
EU member state policy	1
EMU member states	1
East-European countries joining EMU	1
Crisis management system	1
Ageing population	1

Weber 1

Concept	S
Price stability	60
Sound monetary policy	25
Central bank policy	20
Central banks using monetary analysis	13
Sustainable economic growth	13
Functioning of EMU	11
Sound financial system	10
ECB policy	9
Central bank independence	9
Central banks using economic analysis	8
Monetary integration	7
Coordinated supervision	7
EMU	7
Cooperative supervisory model of EMU	7
Financial crisis	6
Globalization	5
Monetary policy effectiveness	5
Global framework of rules	5
Globalization-inflation hypothesis	4
Governments printing money	4
Central banks analyzing financial stability	4
Monetary policy transparency	4
Forecasting economic situation	4
EMU member states	4
Inflation	4
Wide range of economic indicators	3
Economic growth	3
Central banks adjusting their policy	3
Analysis of price stability risks	3
National governments acting to counter crisis	3
Relative prices	3
Employment	3
Emergence EMU	2
Sound public finances	2
Economic stimulus	2
New-Keynesian framework	2
Wide range of monetary indicators	2
Saving banks	2
Good of all	2
Central bank credibility	2
Financial integration	2
Economic stability	2
Expanding euro zone	1
Current price stability	1

Concept	C
Price stability	24
Sound monetary policy	14
Central bank policy	12
Functioning of EMU	8
Central banks using monetary analysis	7
Sound financial system	5
Financial crisis	5
Central bank independence	5
Central banks using economic analysis	5
Cooperative supervisory model of EMU	5
Sustainable economic growth	4
Globalization	4
Coordinated supervision	4
EMU	4
Forecasting economic situation	4
Monetary integration	4
Global framework of rules	3
central banks analyzing financial stability	3
Analysis of price stability risks	3
ECB policy	3
Economic growth	3
Employment	3
Monetary policy effectiveness	3
National governments acting to counter crisis	3
Saving banks	2
New-Keynesian framework	2
Central banks adjusting their policy	2
Central bank credibility	2
Economic stimulus	2
EMU member states	2
Globalization-inflation hypothesis	2
Inflation	2
Monetary policy transparency	2
Relative prices	2
Wide range of monetary indicators	1
Wide range of economic indicators	1
Sound public finances	1
Governments printing money	1
Good of all	1
Financial integration	1
Expanding euro zone	1
Emergence EMU	1
Economic stability	1
Current price stability	1

Weber 2

Concept	S
Functioning of EMU	33
Sound public finances	30
Public debt	28
Sustainable economic growth	20
Monetary integration of EU	11
SGP sanctions	10
Strong institutional framework	10
Divergences among EMU members	9
Stable EMU members	9
Financial crisis	9
Competitiveness	8
Central bank policy	8
Price stability	8
ECB policy	7
Good of all	7
Inefficient use of capital in deficit countries	7
EMU member states	7
Structural reforms	6
Sovereign risk EMU members	6
Sound financial system	6
EU resolving crisis	6
Fiscal support package EMU	4
Unsustainable public finances	3
Unsustainable economic growth	3
Domestic demand	3
Coordinated supervision	3
Saving banks	3
European integration	3
Budgetary crisis	3
Structural economic problems	2
Instable financial system	2
German public finances	2
German government action	2
Crisis prevention	2
EMU monetary policy	1
Monetary policy	1
Economic stimulus	1
Minority opinion ECB president	1
Unemployment	1
Central bank independence	1
Economic benefits	1
Employment	1
Export	1
Sound monetary policy	1

Concept	C
Sound public finances	20
Functioning of EMU	18
Public debt	16
Sustainable economic growth	14
Monetary integration of EU	8
Competitiveness	8
Strong institutional framework	6
Stable EMU members	6
Divergences among EMU members	6
Price stability	6
Sovereign risk EMU members	5
Financial crisis	5
Central bank policy	5
Structural reforms	5
Sound financial system	4
SGP sanctions	4
EMU member states	4
EU resolving crisis	4
Fiscal support package EMU	4
Good of all	4
ECB policy	3
Inefficient use of capital in deficit countries	3
Unsustainable public finances	3
Structural economic problems	2
Saving banks	2
Instable financial system	2
German public finances	2
German government action	2
European integration	2
Budgetary crisis	2
Domestic demand	2
Unsustainable economic growth	1
Unemployment	1
Sound monetary policy	1
Monetary policy	1
Minority opinion ECB president	1
Export	1
EMU monetary policy	1
Employment	1
Economic stimulus	1
Economic benefits	1
Crisis prevention	1
Coordinated supervision	1
Central bank independence	1

Appendix D *List of the used concepts per hierarchical level*

Concepts used per Level		
VALUES	MEANS	MISCELLANEOUS
competitiveness	European integration	ACTORS
confidence in market	European treaties	EMU
Crisis prevention	expanding euro zone	EMU member states
economic benefits	Export	EU
economic growth	financial aid Greece alone	EU member states
economic stability	financial integration	international community
employment	financial market regulations	MISC
EU resolving crisis	financial market transparency	domestic demand
European responsibility	fiscal support package EMU	east European countries joining EMU
freedom	forecasting economic situation	emergence EMU
freedom in responsibility	Franco German agreement	globalization
freedom without responsibility	German government action	Merkel being criticized
functioning of EMU	German public finances	relative prices
Good of all	global framework of rules	strong public debate
inflation	government action	domestic demand
new Keynesian framework	Governments printing money	east European countries joining EMU
Price stability	governments saving banks	emergence EMU
social market economy	help program Greece	globalization
success of Europe	Helping Greece while respecting EU and German laws	Merkel being criticized
Sustainable economic growth	monetary integration	relative prices
Total: 20	monetary integration of EU	strong public debate
MEANS	monetary policy	THREATS
analysis of price stability risks	monetary policy effectiveness	Ageing population
central bank credibility	monetary policy transparency	budgetary crisis
central bank independence	national governments acting to counter crisis	Budgetary problems of Greece
central bank policy	private creditors paying for financial crisis	divergences among EMU members
Central banks adjusting their policy	public debt	financial crisis
central banks analyzing financial stability	saving banks	free market forces
central banks using economic analysis	SGP	globalization inflation hypothesis
central banks using monetary analysis	SGP sanctions	inefficient use of capital in deficit countries
changing European treaties	short term programs	instable financial system
cooperative supervisory model of EMU	sound financial system	Member states ignoring SGP
coordinated economic policy	sound monetary policy	minority opinion ECB president
coordinated response to crisis	Sound public finances	possible collapse of banks
coordinated supervision	stable EMU members	protectionism
crisismanagement system	strong crisismanagement	sovereign risk EMU members
current price stability	strong institutional framework	structural economic problems
ECB policy	structural reforms	unemployment
economic stimulus	Structural reforms EMU	unsustainable economic growth
EMU monetary policy	Taxpayers paying for financial crisis	unsustainable public finances
EU integration	wide range of economic indicators	Total: 37
EU memberstate policy	wide range of monetary indicators	
EU safety net	Total: 63	

Appendix E *List of the used concepts per dimension*

Fiscal means	Monetary means
Budgetary crisis	analysis of price stability risks
Budgetary problems of Greece	central bank credibility
Coordinated economic policy	central bank independence
Divergences among EMU members	central bank policy
domestic demand	Central banks adjusting their policy
economic benefits	central banks analyzing financial stability
economic growth	central banks using economic analysis
economic stimulus	central banks using monetary analysis
EU member states	current price stability
EU memberstate policy	ECB policy
fiscal support package EMU	EMU monetary policy
German government action	forecasting economic situation
German public finances	globalization inflation hypothesis
government action	minority opinion ECB president
governments saving banks	monetary integration
help program Greece	monetary integration of EU
Helping Greece while respecting EU and German laws	monetary policy
inefficient use of capital in deficit countries	monetary policy effectiveness
Member states ignoring SGP	monetary policy transparency
public debt	new Keynesian framework
SGP	relative prices
SGP SANCTIONS	sound monetary policy
Sound public finances	wide range of economic indicators
stable EMU members	wide range of monetary indicators
Sustainable economic growth	
Unsustainable economic growth	

Keynesian	Ordoliberal
competitiveness	analysis of price stability risks
confidence in market	central bank credibility
domestic demand	central bank independence
economic benefits	central bank policy
economic growth	central banks analyzing financial stability
economic stimulus	current price stability
employment	economic stability
fiscal support package EMU	financial aid Greece alone
free market forces	financial market regulations
freedom	financial market transparency
help program Greece	freedom in responsibility
new Keynesian framework	freedom without responsibility
short term programs	global framework of rules
unemployment	Governments printing money
	inefficient use of capital in deficit countries
	inflation
	Member states ignoring SGP
	Price stability
	private creditors paying for financial crisis
	public debt
	relative prices
	SGP
	SGP sanctions
	social market economy
	sound financial system
	sound monetary policy
	sound public finances
	stable EMU members
	strong institutional framework
	sustainable economic growth
	sustainable public finances
	Taxpayers paying for financial crisis
	unsustainable economic growth
	unsustainable public finances

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