EMU at 10: A Swedish Perspective

An Analysis of the Economic and Political Consequences of Being an 'Outsider'

Supervisor: C. Van Leeuwen

Julian Grosse
19-05-2009
Maastricht University
Bachelor Dossier

Table of content

1.Introduction

On January 1st, 1999, eleven Member States of the European Union decided to adopt the Euro as their common currency. At present, more than ten years later, they have been joined by five more EU members. The launch of the common currency marked the peak of the process of market unification that initially began with the formation of the customs union in 1957. Thus, one can easily state that the Economic and Monetary Union (EMU) can be considered as one of the most important projects in the process of European integration.

Although Sweden became a Member State of the European Union in 1995, the government decided not to enter the third stage EMU and to adopt the Euro as its currency. However, in contrast to Denmark and Great Britain, Sweden did not obtain a so called 'opt-out' clause and it is therefore officially required to enter the monetary union as soon as the convergence criteria specified in the Maastricht Treaty are fulfilled. Now, more than a decade after the launch of EMU, this paper sets out to assess the political and economic consequences of the initially adopted 'wait-and-see' strategy to remain a Euro outsider. In a nutshell it argues that the increasing politicisation of the highly emotional issue of EMU participation has led during the past years to a political deadlock.

In the first section, this paper illustrates a short historical overview which is necessary to comprehend the further decisions and reactions taken by the Swedish government and the Swedish public, respectively. The next part summarizes the main conclusions of the Swedish EMU Commission- a special government committee that was appointed to investigate the potential costs and benefits for Sweden of joining the monetary union. A majority of the Commission's arguments, both of political and economic nature, were rather critical against a potential membership. As described in this paper, many of its claims were based on the so-called theory of the optimum currency area (OCA). As outlined in section three, the OCA approach provides an indispensable theoretical framework in order to investigate under what circumstances a pooling of different currencies can outweigh possible negative implications by giving up monetary sovereignty. As described in OCA literature, when forming a monetary union, national governments have to accept a common interest- and exchange rate throughout the whole currency area. In the event of a country specific shock, it becomes therefore a pivotal precondition that only countries with high degree of business cycles synchronisation should form a monetary union. Without insufficient synchronisation, the monetary policy stance taken by the central authority would not be able to stabilise the particular economy.

Then, in the fourth part, this paper depicts in how far the initial objections and concerns by the EMU Commission were justified. By analysing both the economic and political consequences of being a Euro 'outsider', one can even investigate the resulting implications if Sweden had participated in EMU project in the first place. Finally, the last section provides a future outlook against the backdrop of the crisis on the financial markets which escalated massively in 2008. On the one hand, this part analyses the economic consequences for the Swedish economy and society as such. On the other hand, it highlights whether the EU Council Presidency in the second half of 2009 as well as the parliamentary elections in 2010 will affect the government's decision to put the issue of EMU participation on the political agenda.

2. Historical Outline

Since the Second World War, Sweden has traditionally been very cautious in regard to both military commitment as well as European economic and political integration. As pointed out by Lindahl & Naurin (2005), the two fundamental principles that underpin this reason were- with respect to the former- a traditional security policy of military non-alignment. Concerning the latter, one could state reluctance towards federalist developments ever since (p. 67). This combination of 'federo-scepticism’ and the preferred security policy stance was not only apparent among the political elite, but met also a large approval among the Swedish population (Miles, 2005, p. 7)

However, in the beginning of the 1990s, a considerable change in the government's policy decision regarding full EU membership was noticeable. Dramatic difficulties experienced in the economic and financial sector combined with the altered situation in the security policy field after the end of the Cold War, triggered this rapid change of policy (Lindahl & Naurin, 2005, p. 68). As a consequence, the Centre-Right government that entered into office in 1991 promoted a more Europeanised position in many policy areas and thus deeper engagement through full EU membership. At that point in time, Sweden already had implemented the First Stage of EMU- the abolition of foreign exchange controls- without any public debate (ibid.). Even though the Second Stage was shortly afterwards implemented, the Swedish delegation declared during the accession discussions that a separate decision on the Third Stage of EMU participation had to be taken by the *Riksdag* (Swedish Parliament). Yet, unlike Denmark and United Kingdom, this decision did not result in any formal opt-out clause in the accession agreement, but rather presented as a unilateral declaration (ibid.). Hence, up to this day Sweden is officially obliged to join EMU formally when qualified, since the common currency constitutes - according to the Maastricht Treaty- one of the most vital components of further EU integration (Söderström, 2008, p. 1).

As Kinnwall (1999) points out, the process leading up to EU in the middle of the 1990s was by Swedish standards extremely short: only four to five years after the initial debate, Sweden became a full EU Member State (p. 152). As highlighted in the following section, this relative speed was seen as an elitist movement by politicians who created a widespread feeling that EU membership was forced upon the Swedish people. Although the 1994 referendum on the EU accession did not focus on any EMU issue, the margin of victory that led to EU membership was rather small, which reflects the critical attitude of many Swedes towards European integration (Gottfries, 2002, p. 5). There is no doubt that this Euro-scepticism had played a major role in the highly emotional debate about EMU in the following years.

2.1 The Calmfors Commission on EMU

Since the Swedish public opinion was rather critical towards EMU, the governing Social Democrats decided not to risk upsetting the voters by pushing too hard in order to realise this project of monetary integration. Instead, the government argued that there was a need to further investigate whether there were aspects of EMU that might collide with 'Swedish values' such as transparency and low unemployment (Kinnwall, 1999, p. 154). Therefore, in the autumn of 1995, a special Government Commission- composed of five economists and three political scientists- was appointed in order to analyse the merits of full participation in EMU Third Stage. The so-called Calmfors [1] report on monetary union discussed various economic and political implications on EMU.

2.1.1 Political Aspects

The EMU Commission judgement about positive consequences towards a possible participation was mainly centred around political aspects. It was widely feared that by staying outside the Euro zone, it would be almost impossible to remain at the centre of European Union decision-making processes. This concerned not only economic policy issues, but also even other policy areas, in particular domains such as trade policy, foreign- and security policy and Common Agricultural Policy (Lindahl & Naurin, 2005, p. 78). Thus, it was widely held that by remaining an outsider, Sweden would be ejected from informal networks and, as a consequence, it would face considerable difficulties to find cooperative partners among 'Euro-insiders' (ibid.). This argument in terms of loss of influence was based on the so-called 'free-rider theory[2], stating that those remaining outside (who are not willing to pay the costs in terms of risks and efforts involved in the EMU project) will be marginalised by the participants. Therefore, in order to safeguard Swedish influence in EU decisions, the experts argued, Sweden should participate in EMU Third Stage right from the

[1] Under the leadership of Lars Calmfors, Professor of International Economics at Stockholm University's Institute for International Economic Studies

[2] The free-rider theory was written in a special report by two Swedish scientists: Gidlund & Jerneck (1996). *Svenskt EMU-medlemskap som proacitv stategi och integrations dilemma,* special report No.17, SOU 1996: 158. Stockholm: Fritzes

beginning.

However, the EMU Commission suggested that additional time for a broader public debate on EMU was needed in order to guarantee that any future decision would be perceived as legitimate. Among others, the Swedish Trade Union confederation (LO) claimed that participation in the monetary union had not been sufficiently discussed by the electorate and thus needed wider public endorsement to ensure legitimacy. Although there was a strong and stable in favour of entering EMU Third Stage among all major parties, the difference in views between the political representatives and the voters was significant. Indeed, one should not underestimate the value of this legitimacy argument. The decision to seek advice from the electorate on the EMU issue reflects to a high degree the sense of equality and democracy within the Swedish population. Hence, in order to avoid massive accusation of elite manipulation, the government bent public pressure that any decision on the adoption of the Euro would not suffer from limited legitimacy that could damage not only Swedish EMU participation, but also the country's EU membership profile (Lindahl & Naurin, 2005, p. 72).

2.1.2 Economic Aspects

There was large consensus among the experts of the Commission that the best way of analysing the economic consequences was to apply the theory of optimal currency areas (OCA) and thereby outweighing benefits and sacrifices against each other.[3] One of the most commonly cited fears when joining the single currency was the fact that it becomes impossible to use the exchange-rate as an instrument of stabilization policy. As explained in the next chapter in detail, this assumption is built on the premise of the OCA theory indicating that national governments are not longer able to adapt its own monetary policy. Hence, they have no option but accept the common exchange and interest rates throughout the currency area. In regard to this stabilisation issue, the Calmfors Commission considered that the loss of monetary policy independence would not *per se* create major difficulties (Gottfries, 2002, p. 3). However, given the fact that the Swedish economy seemed to be barely synchronised with its European counterparts, a common interest- and exchange rate could entail a significant destabilising effect (Verdun, 2008, p. 11). As Persson (2001) highlights, there might be the possibility that the Swedish economy could- for one reason or another- find itself out of synch with economic developments in the Euro zone, namely in the event of an asymmetric shock (p. 2). Consequently, OCA literature predicted that the costs of joining would become larger the lower the degree of commonality between the real shocks that may affect the Euro zone members and those

[3] The Theory of optimum currency area will be dealt with in the next section

that affect Sweden. Therefore, with insufficient synchronisation, the monetary policy stance taken by the European Central Bank (ECB) would not fit Sweden and thus provide a counter-cyclical buffer to Swedish shocks (Cukierman, 1997, p. 36). Besides the described loss of monetary sovereignty and the resulting concern that macroeconomic disturbances could lead to further increases in unemployment, several other aspects have also been frequently referred to in public discourse.

It was argued by the expert group that participation in EMU would entail great risks with regard to the *fiscal* situation in Sweden. Without monetary sovereignty and thus macroeconomic adjustments, the Calmfors Commission expected that automatic fiscal flexibility would remain the only effective mechanism of adjustment in case of large economic disturbances. Yet, as a result of the recession in the early 1990s, the fiscal situation in 1995 was quite problematic: the ratio of government debt to GDP was close to over 75 percent and the government deficit amounted to 7 percent. Thus, in order to satisfy the convergence criteria of the Stability and Growth Pact (GSP)[4], a deterioration of the government finances would have been inevitable (Söderström, 2008, p. 4). Consequently, the already precarious financial situation made membership risky, as fiscal measures had to carry a larger burden of stabilisation policy within the monetary union.

Another fear frequently cited was the presumption that EMU would not only affect Sweden's capacity to determine its own welfare policy, but also expose the welfare system as a whole at risk. As Lindahl (2005) describes, “this fear was especially expressed by employees in the public sector who were concerned about any incompatibility between the liberal principles underpinning the EMU system and Swedish attachments to generous welfare state provisions and welfare nationalism” (p. 75). These worries concerned particularly the assumption that there would be a 'race to the bottom' in terms of public expenditures on welfare states which would entail a significant reduction of financial resources for financing the public sector and thus providing a warranted social welfare system. Hence, it was predicted that EMU would lead in the long-run to welfare state retrenchment (Verdun, 2008, p. 9).

Furthermore, the Calmfors Commission assessed that several EU countries were likely to remain outside the monetary union, as they did not meet the convergence criteria. In 1996, many observers expected that only a small core of EU Member States[5] would be able to qualify for EMU membership. Therefore, it was argued that such a situation would reduce the political costs of remaining an outsider (Gottfries, 2002, p. 5). Said differently, the fact that only a small number of

[4] The 1992 Maastricht Treaty required applicant countries to have an inflation rate no higher than 1.5 percent above the three best performing members states, an annual budget deficit no more than 3 percent of GDP and finally accumulated public debt no larger than 60 percent of GDP

[5] Consisting of Germany, France, the Benelux countries, Austria and perhaps Finland

EU Member States were likely to join (in particular not Denmark and the UK) implied that the expected potential gains from joining the economic area seemed rather small (Söderström, 2008, p. 4).

Nonetheless, the Calmfors Commission recognised also possible gains from joining the monetary union. Reduced transaction costs, better price transparency, enhanced competition in the internal market (to the benefit of the consumer) as well as elimination of uncertainty caused by fluctuations in exchange-rates were considered as positive implications when joining the Euro zone. Yet, the experts favoured a "wait-and-see" strategy, at least in the short- and middle-term (Gottfries, 2002, p. 7). However, the Commission recommended that Sweden should make concerted efforts to prepare for joining at a later stage when its labour market and wage formation were to be sufficiently flexible to deal with serious macroeconomic disturbances, such as asymmetric shocks (Persson, 2002, p. 2).

The majority of the electorate favoured this stance, too. They would rather take the risk as a political 'outsider' than sacrifice more of Swedish sovereignty and thereby support the ECB which most of the voters regarded as an institution deficient in terms of democratic accountability (Lindahl & Naurin, 2005, p. 75). In essence, the transfer of control over monetary sovereignty to the ECB was widely seen as being detrimental in regard to economic aspects as well as to democratic values.

3. The Theory of Optimum Currency Areas (OCA)

In principle, a country's decision to fix its exchange rate may entail both benefits and sacrifices. In order to weigh economic costs of adopting a single currency against the advantages, a theoretical framework covering a systematic analysis of losses in monetary sovereignty and gains in efficiency, respectively, is needed. The initial formulation of a cost/benefit analysis from joining a fixed exchange rate area is widely attributed to a paper published in 1961 by Robert A. Mundell[6] and its theory of optimum currency area (OCA). Mundell's analysis was shortly afterwards further elaborated by McKinnon (1963) and his study about *product diversification* as well as Kenen (1969) with his criteria on the *degree of openness* of a economy, reflecting an increasing number of theoretical and empirical studies in this field of research (Peterson & Amati 1998).

3.1 The Benefits of a Fixed Exchange Rate Area: the GG Schedule

Krugman (2008) suggests that by developing a cost/benefit diagram, one can approach the decision of an individual country, whether to join an area of fixed exchange rates, in this case the Euro zone.

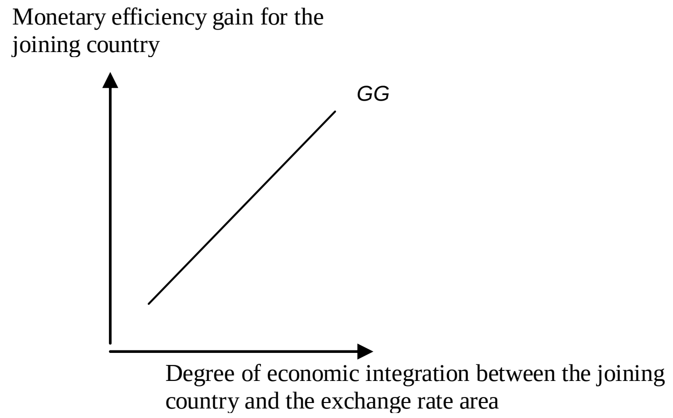
[6] Robert A. Mundell (1961). The Theory of Optimum Currency Areas. *American Economic Review,* 51, pp.717-725

The diagram of *Figure 1* outlines how the potential gain of Sweden joining this currency area depends on its trading links to other Euro Member States. Two of the major benefits of a fixed exchange-rate are reduced transaction costs as well as simplified economic calculations that provide a more predictable basis for day-to-day financial decisions.

Figure 1:

The *GG* Schedule

The upward- sloping GG schedule shows that a country's monetary efficiency gain from joining a fixed exchange rate area rises as the country's economic integration with the area rises



In practice, research shows that it is rather difficult to assess the precise number to the total monetary efficiency gain Sweden would enjoy as a result of pegging its currency to the Euro. Since, however, around 40 percent of Sweden's GDP is traded to Euro zone Member States, then, *ceteris paribus,* a fixed Krona/Euro exchange rate would entail a significant monetary efficiency gain (Flam, 2009, p. 90). Taken the fact into account that the Swedish economy can be characterised as relatively small and open to international trade, Zoubanov (n.d.) highlights the beneficial implications in terms of exchange rate stability. Indeed, one should not underestimate possible beneficial gains from avoiding exchange-rate uncertainty, especially in times of economic downturn and financial confusion that clearly entail negative consequences of exchange rate fluctuations[7] (Krugman, 2008, p. 575). As a consequence, one can generally state that the higher the degree of economic integration (i.e. extensive cross-border trade and factor movement) between a country and a fixed exchange area, the greater is the gain from a fixed border exchange rate. This principle is pointed out in *Figure 1* that provides an analysis of the relationship between the degree of economic integration (indicated by the horizontal axis) and the possible benefits from pegging to the Euro (vertical axis). Thereby, the positive slope of the GG schedule reflects the possible gains for a joining country as its economic integration with the area increases.

A final argument in favour of joining an OCA is price transparency. McDonald (2005) points outs that especially consumers are profiting to a large extent having a single currency throughout the OCA. This allows both consumers and corporate buyers to spot price differentials and thus to

[7] Since the fourth quarter of 2008, the Swedish Krona devaluated significantly against the Euro (around 12 percent)

exploit the potential gains from other international suppliers. As a consequence, adopting a common currency provides many consumers and industrial markets not only a more transparent pricing scheme, but also helps to become more competitive[8].

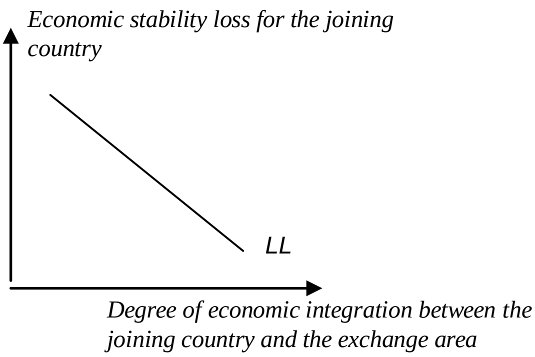
3.2 The Costs of a Fixed Exchange Rate Area: the LL Schedule

One of the main costs of participating in an OCA is to give up the ability to use monetary policy to stabilise national economies. In other words, a country that joins a single currency area cannot use any more its macro-economic instruments (i.e. exchange-rate and interest rate) for the purpose of stabilizing output and employment (McDonald, 2005, p. 110). This so-called economic stability loss from joining is always related to the country's economic integration with its OCA partners. Such a loss of economic stability can be illustrated with a second schedule, the *LL* schedule as shown in *Figure 2*. Whereas the figure's horizontal axis describes the degree of the newly joined member's economic integration with the fixed exchange rate area, the vertical axis measures the country's economic stability loss. This negative relationship between the two factors can be seen graphically: the *LL* schedule is downward-sloping because the economic stability loss from pegging to the area's currencies falls as the degree of independence rises (Krugman, 2008, p. 579).

Figure 2

The *LL* schedule

The downward- sloping LL schedule shows that a country's economic stability loss from joining a fixed exchange rate area falls as the country's economic integration with the area arises



The underlying principles of this negative impact are twofold. Firstly, one of the relative merits of a floating exchange-rate is the fact that it automatically cushions employment and the economy's output since it allows an immediate change in the relative price of both foreign and domestic goods. Secondly, if the exchange-rate is fixed, however, purposeful stabilization is extensively difficult, because monetary policy cannot any more affect domestic output. This fact becomes a decisive factor, when a country's economy is faced by an asymmetric shock. By becoming a member of a monetary union, the individual country can no longer decide on its currency exchange rate and set

[8] This aspect might constitute for the European Union an essential component in regard to the Lisbon targets

its interests rate independently. When facing an asymmetric shock, a country would normally either increase its interest rate to attract foreign capital investment in order to finance its current account deficit, or reduce its exchange rate to stimulate exports. Yet, since the country's currency is pegged to that of the monetary union, it experiences a significant loss of monetary sovereignty. It is no longer the domestic Central Bank that may decide over the appropriate measures to take, but instead one authority from the monetary union that takes the decision on behalf of *all* of its members (Zoubanov, p. 2).

However, what if the business cycles of all the members of the monetary union as well as the participating country are synchronised[9]? As outlined, asymmetric shocks and desynchronised business cycles are the most essential threats to the optimality of a single currency (ibid, p. 2). When the economies involved in the integration process appear to have similar business cycles (i.e. are well integrated in the monetary area), the effects of a common monetary policy made by the central authority are the same in each state and hence, there is not longer the need for country-specific adjustment policies (Pattersen, 1997, p. 46). Speaking differently, this 'one monetary policy fits all' approach entails that the monetary policy stance of the central authority would be as effective and identical, respectively, as the policy response that each national government would chosen in isolation (McDonald, 2005, p. 110). It becomes therefore a decisive factor to synchronise cyclical factors at the national level of members participating in the exchange-rate area in order to guarantee a smooth functioning.

3.3 The Decision to Join a Currency Area

By combining the *GG* and *LL* schedules together, one can estimate whether a country would fix its currency exchange rate and participate in the monetary union. The decision is dependent on the degree of economic integration between the participating country markets and those of the monetary union. It should do so, if the level of the two markets is at least θ, the integration level determined by the intersection of *GG* and *LL* at point 1. As indicated in *Figure 3*, for levels of economic integration below θ, the *GG* schedule is situated below the *LL* schedule. In such a situation, the country would be better off not to join the OCA, since it would clearly suffer from greater output and employment instability. In contrast, when the degree of economic integration is θ or higher, the participating country would benefit from its monetary efficiency gain GG which exceeds the stability sacrifice measured by LL. Hence, the intersection of *GG* and *LL* at point 1, determines the minimum level at which the member will consider whether to join or not. *Figure 3*

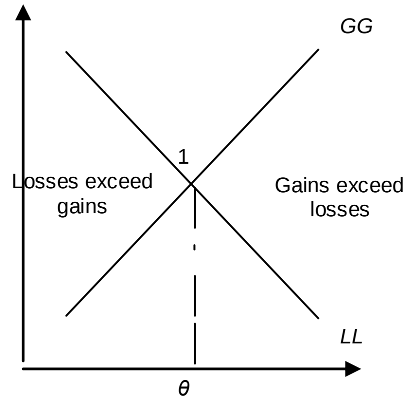
9 The question whether the EMU constitutes a perfect OCA has been subject to intensive debate among scholars. This paper will deal with this particular question in the next chapter.

provides therefore a useful summary of some of the leading issues. As integration proceeds, a monetary union that abolished its exchange-rate will become evermore desirable. This is especially the fact for smaller countries that are likely to find a single currency more compelling than larger countries. Thus, for some countries monetary integration is 'more obvious' in terms of higher trade integration and a lower frequency of asymmetric shocks.

Figure 3

Deciding When to Peg the Exchange Rate

The intersection of GG and LL at point 1 determines a critical level of economic integration θ between a fixed exchange rate area and a country considering to join. At any level of integration above θ, the decision to join yields positive net economic benefits to the joining country.



4. Ten Years EMU: An Analysis of the Arguments whether to join

4.1 Economic Arguments

In the planning phase of EMU, there had been a widely debate among scholars whether the potential Member States constituted an optimal currency area. As pointed out in the previous section, close economic integration, cyclical synchronisation of business cycles and a high degree of economic flexibility are listed as the necessary *sine qua non* (Bartholdy et al., 2008, p. 4). By evaluating the development of the last ten years, one can gain perspective on the most essential issues concerning Swedish EMU membership that were discussed by the Calmfors Commission.

Close economic integration

In 1995, the Calmfors Commission considered it rather doubtful whether a possible EMU participation would actually entail considerable gains in terms of trade. Other consequences, especially the loss of monetary sovereignty were held to be of greater importance. The fact that possible trade gains has not been part of the discussion in the public debate during the referendum in 2003, supports the presumption that this issue was rather perceived as to be of 'second order'. At present, one can analyse precisely in how far the introduction of the Euro has affected European trade. Flam & Nordström (2007) compared the data between ten Member states[10] that participated in EMU from the very beginning and a control group comprising of another ten countries, among others Sweden, Denmark and GB (p. 20)[11]. In their conclusion, they pointed out that trade within the Euro zone has increased by around 26 percent after the creation of EMU, whereas trade with non-EMU members has risen by 'only' 12 percent. Furthermore, the two researchers investigated that Sweden's export has not increased by an equivalent degree in this period of time. If Sweden had participated in the first place, the trade gains with Euro countries would have been on average 12-13 percent higher and with non-EMU countries around 11- 12 percent. These percentages reflect a yearly loss in profit of around 122 billion SEK in exports and 112 billion SEK in imports, respectively (Flam & Nordström, 2007, pp. 24- 25).

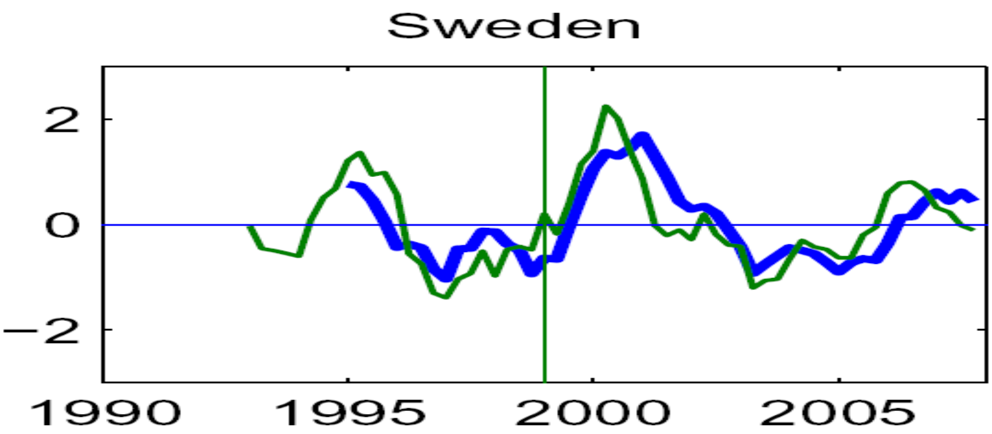
Business cycles

One of the major arguments against monetary union, described by both the Commission group experts and OCA literature, was the need for independent monetary policy. It was stated that in the event of asymmetric shocks (i.e. country-specific shocks), a 'one size fits all' monetary planning by the ECB would not stabilise the economy a single country adequately (Bartholdy et al., 2008, p. 8). In the case of Sweden, this argument was principally based on the premise that the Swedish business cycle was not sufficiently synchronised with its European counterparts. However, this prediction can be challenged on two grounds. Firstly, there is empirical evidence that only a small proportion of the shocks *hitherto* experienced by the European Union has been country-specific, while a significant proportion have been industry-specific (Patterson & Amanti, 2004, p. 16). Consequently, changes in monetary policy (e.g. exchange rate adjustments) would have affected the national economy as a whole, and are therefore the wrong instruments in order to counter a shock that affects only a region or industry sector.

Secondly, Söderström (2008) observed that there is a strong similarity of the Swedish and Euro area business cycles. As one can see on *Figure 4*, the Swedish GDP gap is indeed strongly correlated with that of other EMU countries. Although the Swedish business cycle correlation is weaker than the largest Euro zone members (e.g. Germany, France, and Italy), it is similar to that in Finland and Denmark (Söderström, 2008, p. 7). At the same time, as provided in *Figure 5*, Swedish interest rates have converged in the recent years strongly towards EMU rates. These small differences can be considered as another example that the business cycles of Sweden and the Euro zone are very similar (Flam, 2009, p. 105).

[10] Belgium and Luxembourg were treated as one country because of statistical reasons
[11] The trade effects had been measured within the period of 1999 until 2005.

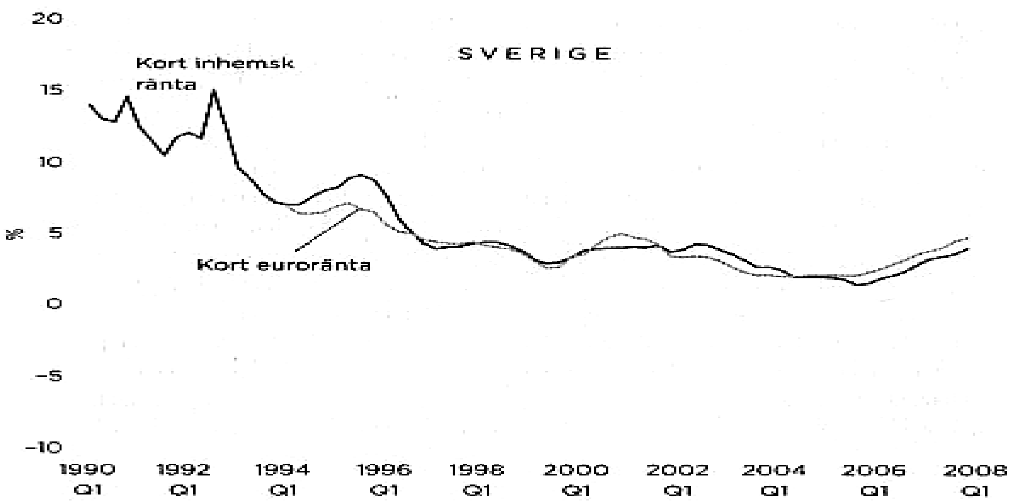
Figure 4: GDP gap in the Euro area and selected European economies, 1990- 2007[12]



Source: OECD

Hence, these two evidences suggest that the monetary stance chosen by the ECB is better suited to the economic positions of EMU Member States than initially expected. As a consequence, the gains from an independent monetary policy stance have been rather small. However, it remains to be seen whether an individual monetary-policy planning turn out to be of greater importance in times of global financial crisis.

Figure 5: Short-term Interest Rate of Sweden and Euro zone



Source: Harry Flam (2008). Konjunkturradets Rapport

[12] Note: Percent deviation of GDP from trend in Euro area (thick line) and selected European countries (thin line). The trend was calculated by the author using the *Hodrick-Prescot*t filter over the entire sample and a smoothing parameter of 1,600. The vertical line represents the launch of EMU in January 1999

Fiscal policy

Another reason not to join the single currency in the first place was the argument that EMU would entail great risks with regard to the *fiscal* situation in Sweden. It was widely held that without having the ability of macroeconomic adjustments, a high degree of fiscal flexibility becomes an issue of crucial importance (Gottfries, 2002, p. 7). Yet, the convergence criteria of the GSP were considered to be too rigid as to the extent that Sweden's ability to determine its fiscal policy would significantly constrained. However, according to *Eurostat*, Sweden performed remarkably well since 1999. In 2007, for instance, Sweden had a government surplus of 3.6 percent of GDP and a gross debt to ratio if 40.4 percent. According to the assessment of the EU Commission, Sweden has thus always fulfilled easily the criteria of fiscal sustainability (Söderström, 2008, p. 17). Consequently, the GSP would not have constrained Sweden's fiscal policy if the country had joined EMU at the outset in 1999.

The welfare state

Concerning the neo-liberal argument that EMU will lead to a 'race to the bottom' and thus cause welfare state retrenchment, several empirical studies point out that the amount of money spent on welfare state expenses has risen rather than decreased in the period since EMU started (Verdun, 2008, p. 22). Furthermore, it does not appear that the quality of the welfare state has been reduced. There have been some changes in the allocation of funds such as unemployment compensation (Bränström, 2009). Yet, these reallocations can been traced back to the global financial crisis on the one hand, and to an environment that requires higher expenditures due the ageing population, on the other hand (Verdun, 2008, p. 23). Moreover, as indicated in the example of Finland, Tiilikainen (2005) depicts that public fears about the future of Nordic Welfare societies are for the most part overvalued. The Finnish experience shows that many fears and concerns raised in public debate on the common currency are simply unwarranted (p. 40).

Amount of EMU Member States

In 1995, the Commission assessed that only a subset of EU Member States was likely to join in the first place. Further, the opt-out of Denmark and the United Kingdom- two of Sweden's larger trade partners- implied that potential economic gains seemed rather small. However, more than a decade after this judgement, the EMU project has to be deemed as a success (Söderström, 2008, p. 4). Although Denmark chose to remain outside EMU, it became part of the ERM II mechanism[13].

[13] In order to become a fully member of the EMU, applicant countries have to be for two years part of the so called Exchange rate mechanism II (ERM). It maintains a fixed exchange rate of its national currency against the Euro and thus, its national monetary policy shadows that of the ECB.

Additionally, in the beginning of 2009, Denmark's former Prime Minister Anders Fogh Rasmussen promised to hold a referendum before 2011 (Nordmark-Nilsson, 2009). At that point in time, Slovakia adopted the Euro as the 16th Member State which are far more countries than initially expected by the Calmfors Commission in 1995. The presence of a larger number can be traced back to the fact that the convergence criteria proceeded fast than many had expected. At present, over 330 million inhabitants using one single currency, making Europe the biggest single market in the world.

Advantages of a single currency

All in all, even though the topic of a possible EMU membership is not on the political agenda- as indicated in the following section- the Euro has become a substantial part of the Swedish economy. In 2007, around 39 percent of Sweden's export went to EU Member States and even 48 percent was imported from its European partners. Flam & Nordström (2007) predict that this number will rise remarkably in the years to come; it is expected that around the half of Swedish trade will be conducted with EU countries (p. 17)[14]. A second feature which indicates growing importance of the Euro is the fact that Swedish import- and export companies increasingly use the Euro as the saleable currency, both within and outside Europe. As a consequence, these companies do no longer need to change different currencies. This eliminates uncertainty caused by fluctuations in exchange rates while enhancing better price transparency. Whereas the initial years after the introduction of the Euro were coined by relative steady growth and solid currencies, the world financial crisis has changed this situation profoundly. Especially small- and medium sized enterprises experience these exchange rate uncertainties and thus rising transactions costs as the major difficulty at present (Nordmark-Nilsson, 2009). The EMU Commission's conclusion to regard these currency fluctuations rather as a minor issue, did only prove true in the first years after the launch of the Euro. However- as shown in the last section of this paper- the crisis on the financial markets triggered issues initially considered to be of minor importance (i.e. exchange rate fluctuations and transaction costs), into major ones.

4.2 Political Arguments

The arguments that were cited in the middle of the 1990s show that- apart from the dominating economic aspects highlighting the pros and cons of a possible participation in the EMU- even political arguments (e.g. “Sweden will be isolated"”) played a prominent role (Lindahl & Naurin, 2005, p. 72). As shown earlier, many feared that the chosen 'wait-and-see' strategy would put

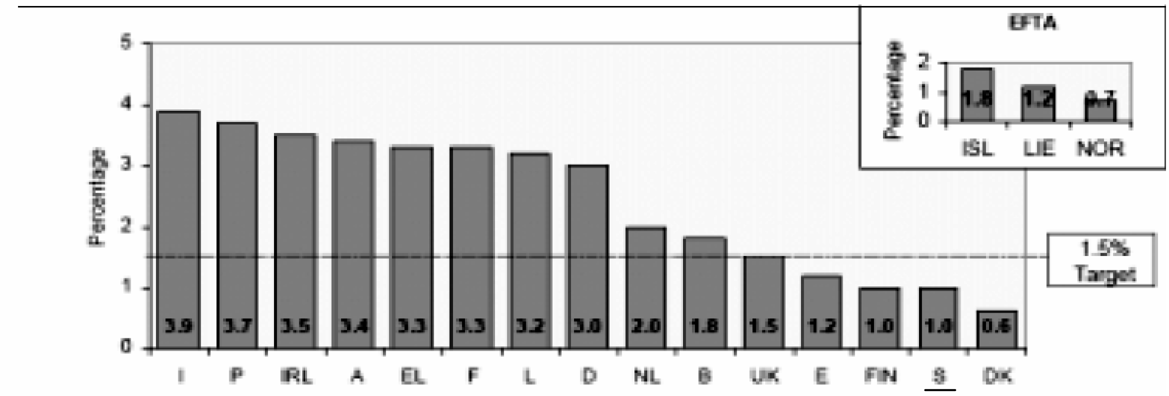
[14] Their research was conducted in 2007, thus before the entry of Cyprus, Malta and Slovakia.

Sweden at the periphery of EU decision-making, not only in the monetary policy field, but also through political spill-over in other EU policy sectors. This argument was based on the premise that the EU is a highly *norm-sensitive* co-operation, where norm violations would inevitably lead to a marginalisation of the Euro-outsider in regard to informal networks (Flam, 2009, p. 117). Although this theory was based on theoretical expectations rather than systematic empirical research, the EMU Commission did acknowledge it reasonable that there might be a real risk of such an effect. Hence, the Calmfors Committee considered in its conclusion especially *one* potential loss of political influence, namely the fact that the Finance Ministers of the Euro countries meet regularly on an informal basis before meetings of the ECOFIN Council, thereby discussing important issues without the Euro-outsiders (Söderström, 2008, p. 20).

When assessing the image of the Euro-outsider, it is important to bear in mind that the relationship of Sweden with the EU has been characterised by an ideological cleavage between the public opinion and most of the political representatives who favoured the continuing process for European integration. This persistent gap became most evident in the decision of the referendum on Swedish participation in the Third Stage of EMU held in 2003. Although there has been some slight changes in opinion polls during the last years, a decade of debate on the adoption of the single currency has not changed the fact that the majority of Swedes show a much lower degree of enthusiasm on EU-related issues than the political elite. The negative outcome of the referendum *not* to join the Euro zone and to adopt the single currency was among political commentators widely interpreted as a demonstration of public mistrust in the country's economic and political leadership. Lindahl & Naurin (2005) argue that this dichotomy can been described as “twin face” with respect to its relations towards the EU (p. 66). In order to cope with both sides of the scale, the Swedish position is divided into an *internal* political game (towards the EU and EMU in particular) on the one hand, and the *external* politics of positioning itself within the EU on the other hand (ibid.). However, a striking feature of this 'two-level game' is the fact that the Swedish position on EU policy matters cannot be regarded as obstructive, but rather as constructive. Indeed, there are several empirical objections that support this picture.

First and foremost, the last Swedish EU Council Presidency of 2001 can be considered as a success. Tallberg (2001) states that “Sweden's status as a Euro-outsider did not seem to have done any damage to the ability of Swedish policy makers to manage the Council Presidency successfully” (p. 231). It seems that the fact of not being a Euro zone member did not entail any negative political implications. Neither the alleged free rider status, nor a rather sceptical public had prevented the government from managing the political challenge more than satisfactory.

Figure 6: Implementation Deficit of the 15 EU Member States plus Iceland Liechtenstein and Norway



Number of outstanding directives	59	57	54	52	51	50	49	46	31	27	23	18	16	16	9

Source: European Commission (2003), p. 6.

Secondly, another objection challenging the claim of a reluctant outsider is the fact that Sweden has- in regard to EU Directives- one of the best implementation records of all EU Member States. *Figure 6* shows the scoreboard of May 2003 indicating that all of the three outsiders (i.e., UK, Denmark and Sweden) ranked among the five countries that met the Commission's target of less than 1.5 percent transposition failure. According to the Commission, such as high degree of compliance cannot merely be traced back to administrative efficiency, but it is rather a question of attitude: “political will seems to be a more important factor than organisation” (European Commission, 2003, p. 9). Thus, this “best-in-class” performance shows not only that Sweden is more willing to support the Union in terms of compliance, but illustrates also the ambition of the Swedish government to sustain a generally proactive position, rather than taking an obstructive stance (Lindahl & Naurin, 2005, p. 82)

A final observation challenging the argument of obstinate unwillingness is the study by Lindahl and Naurin (2003) on coalition building within the Council of Ministers. In particular, two decisive results from this study indicate that the free-rider theory does not correspond to reality. Firstly, Sweden ranked fourth place in the ranking of the most popular cooperation partners, significantly higher than the so-called than comparable Euro insiders. Hence, one cannot conclude that the fact of remaining an outsider preclude a central place inside the negotiation machinery of the EU (ibid.). As shown in *Table 1*, an overwhelming majority of 79 percent of the interviewed working group member do not bother the outsider status as a factor to be considered when choosing cooperation partners.

Table 1: Does Euro-Outsider Status affect Cooperation Patterns within Council Working Groups?

Answer	N	Per cent
Yes	9	7
Yes, but only regarding euro-issues	8	6
Yes, but only in economic-political issues	6	5
Yes, but only marginally	4	3
No	102	79
Total N	129	
Total per cent		100

Note: The question read: Some member states – Sweden, Denmark and the UK – do not participate in the third phase of the Economic and Monetary Union. Do you think that fact in any way affects the cooperation patterns within your policy field?

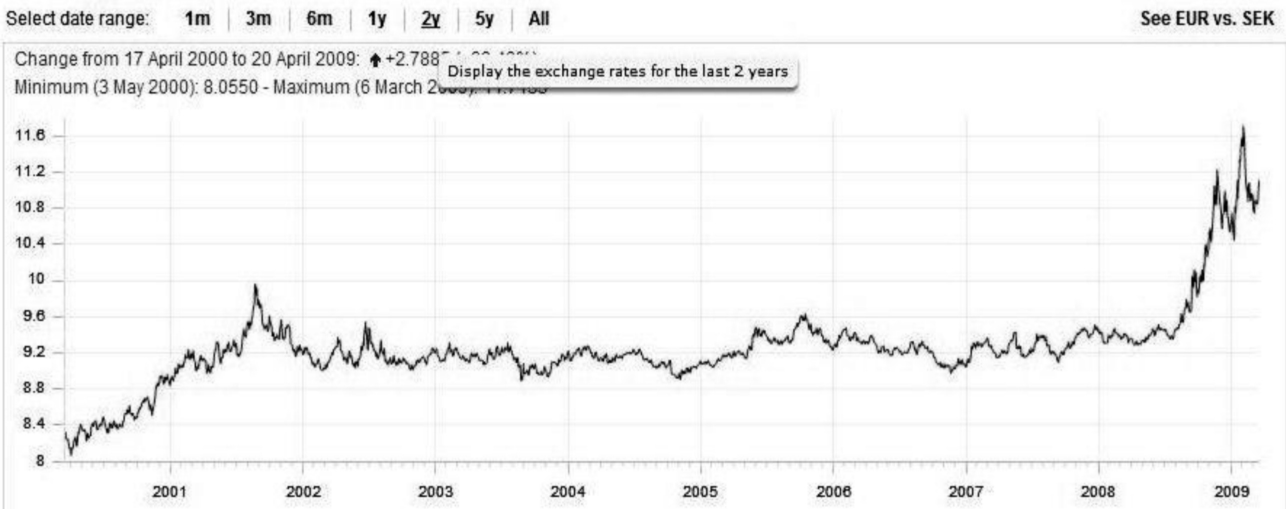
On a political dimension, it would therefore be misleading to claim the conduct of the Swedish policy towards the Union as a reluctant outsider. One has to bear in mind that the decision of the Swedish Parliament to refrain from participating in the monetary union was motivated by the lack of popular support, rather than any opposition from the majority of political parties. Therefore, in regard to the adoption of the single currency, Lindahl & Naurin (2005) point out that the position of the Swedish government can rather be considered as a 'conscious 'outsidership'. The Swedish government seeks to ensure maximum Swedish influence regarding EU and EMU related policies, while remaining reluctant to define precisely the goals of the Union to stringently for fear of domestic public opinion (ibid, p. 67). Consequently, it seems that the initial mistrusts and fears of EMU Commission were invalid and the strength of the free-rider theory clearly overestimated.

5.The economic implications of the world financial crisis

As almost every country inside and outside the European Union, Sweden has been hit considerably by the consequences of the crisis in the financial markets which began in summer 2007 and escalated massively in 2008. Sweden can be considered a rather small, but extremely open and export-oriented country that sells a significantly amount of its products to other countries. Since Sweden has both extensive foreign trade and a financial market that is well integrated in the international market, it is highly dependent on its export performance (Flam, 2009). Therefore, the global crises combined with a severe economic downturn have a substantial effect on the Swedish economy: many branches of the domestic economy are significantly affected by the instability in the financial sector. Especially the small and medium-sized enterprises (SME) experience the increasing unwillingness of banking institutions to invest money and to grant new credits, since larger companies are favoured when it comes to new capital investment (Bränstrom, 2009).

In addition, currency fluctuations between SEK/EUR are often larger than many SME's profit margins. Hence, these exchange rate uncertainties can amount to a significant financial loss (Nordmark-Nilsson, 2009). As indicated in *Figure 7*, the Swedish Krona (SEK) depreciated to the Euro notably since September 2008. Thus, theoretically speaking, Swedish products became cheaper, which in turn leads to more demand. However, it is doubtable whether this fact entails in reality remarkable positive implications. Due to the strong Euro, the Swedish import sector is suffering considerably, since products from EMU Member States are becoming more expensive[15], which diminish the purchasing power of Swedish consumers. Unsurprisingly, the Swedes are less willing to spend their money on expensive products and, as a consequence, the saving quota has risen to 16 percent (Bränström, 2009).

Figure 7: Exchange rate SEK- EUR from May 2000 until April 2009



Source: European Central Bank

In addition, it seems that the financial crisis share three common features in every country. Firstly, house and share prices will fall substantially and over a long period of time. Secondly, production and wages will decrease while unemployment will increase sharply in many European countries. And finally, government debt will rise as well due to falling tax revenues. Although these consequences will have a different impact in each country, there is nevertheless a tangible risk that this economic downturn will be more profound and prolonged than expected (Öberg, 2009, p. 8). Whereas the economic consequences such as falling stocks and negative economic growth were in many countries immediately noticeable, the social and psychological implications are until now hard to foresee.

Even though experts are rather confident that the Swedish economy will recover, it is by no

[15] In 2007, around 55 percent of all imports came from EMU countries (Flam & Nordström, 2007, p. 17)

means clear when such a recovery will happen. As Flam (2009) states, it is too early to draw any exact conclusions. Since Sweden is an exporting country, its recovery is dependent on the performance of its major trading partners such as other EU Member States and the United States (p. 91).

5.1 The Political Implications in the Future

When analysing possible challenges and priorities of the Swedish Government in the months to come, one of the most important aspects constitutes the EU Council Presidency, which Sweden will hold during the second half of 2009. Especially two aspects will affect the nature of the Presidency profoundly. Both the current world financial crisis and its consequences as well as uncertainties about the future of the Lisbon Treaty entail tremendous challenges and require effective endeavours from Swedish policy-makers. In the following section, a number of practical and political hurdles will be highlighted.

One of the major difficulties the Swedish Government has to face in the following sixth months is the current constitutional situation in the European Union. Within the framework of the political renewal that takes place every five years, the newly elected European Parliament elections and the new Commission will have undoubtedly a bearing on the Swedish Presidency. Especially concerning the former, a low voter turnout in the elections may constitute a new debate about the democratic legitimacy of the Union. This possibility can be cited as one example that factors exogenous to the Swedish political system can affect the planning, prioritising and the delivery of results. As shown during the former Presidencies of France and the Czech Republic, these unexpected situations are indeed able to turning even the most carefully planned agendas upside down (Langdahl & von Sydow, 2009, p. 2).

Furthermore, particularly the question whether the Lisbon Treaty will finally enter into force, cast a shadow of almost unprecedented institutional uncertainty over Sweden's Presidency. Under the *status quo,* Sweden will begin its leadership under the rules of the Nice Treaty. However, if the Irish referendum reverses the previous result, many current constitutional roles and tasks will change. As a consequence, Sweden has to pursue a two-sided policy. The government is forced to prepare informally a number of different scenarios entailing a long list of practical issues in order to be able to react adequately to every possible outcome.

To complicate matters even further, the present financial and economic crisis will indisputably have a considerable impact on the Swedish Presidency and constitute at the same time another pivotal challenge. More interesting in the face of its Council Presidency is the fact that Sweden is not part of the Euro zone. Therefore, the central question is whether Sweden can actually provide leadership in times of economic recession without being an integral part of the Economic and Monetary Union. Since the need of macroeconomic coordination is essential among the countries sharing the single currency, being an Euro 'outsider' will constitute most likely a constraining factor at the outset (Von Sydow, 2009). Thus, the possibility of being sidestepped by more influential Member States and its leaders can no longer be considered as unrealistic. Hence, it can be clearly stated that Sweden is in a very complicated situation. As other Council Presidencies, it will forward especially national priorities, while trying to avoid as much as possible to put serious financial and economic issues on the agenda. Yet, at the same time, Swedish policy makers have to act in the interests of the EU as a whole.

This attitude is reflected by almost all of the mainstream political parties, which are rather cautious towards economic issues, albeit in times of the global financial crisis. Consequently, they develop ideas and preferences very carefully as not to provoke internal disputes or even losses in the electoral arena. Especially in regard to the parliamentary elections in 2010, there is an increased reluctance on the part of the major Swedish parties to launch public discussion vis-à-vis economic issues, or even in regard to a possible participation in EMU (Optenhövel, 2009) [16]. Since Sweden already decided on this question in the referendum in 2003, it is highly doubtable that this topic will be dealt with in the political arena in the following years (Flam & Nordström, 2007, p. 16). As long as there is no imminent and pressing reason to re-launch such a referendum, it seems therefore very likely that the *status quo* will remain the same until the parliamentary elections in 2014 (Bränström, 2009). This fact is supported by one of the latest public opinion polls conducted by the *Synovate* and published by *Dagens Nyheter* in November 2008[17] . The results of these opinion polls indicate moderate, but slightly increasing enthusiasm towards EMU among the Swedish population. Yet, a majority of Swedish voters would still vote to retain the Krona if a referendum on the matter were held today. At that point in time, around 44 percent of the Swedes were in favour of adopting the Euro, whereas 48 percent would have voted against the single currency.

Unsurprisingly, other topics are therefore clearly advocated during the Presidency. A prime example of this kind of issue is environmental policy. The increasing prominence of climate change on the political agenda fostered by a strong cross-party consensus has prompted Swedish government to interpret its role as a leader particularly in the context of sustainable growth and climate, respectively. Thus, given these circumstances, it can be assumed that the Swedish government will first and foremost put emphasis on its leadership role in the negotiations leading up

[16] Commentary of the moderator Uwe Optenhögel during the discussion „Providing leadership in Turbulent Times? A Preview of the Swedish 2009 Presidency“ at the Friedrich Ebert Foundation, June 4, 2009.
[17] *More Swedes favourable towards the Euro*: *Poll*. Retrieved June 10, 2009, from http://www.thelocal.se/15884/20081124/

to the Post-Kyoto Climate Conference in Copenhagen in December 2009 (Langdahl & von Sydow, 2009, p. 9).

5.Conclusion

In order to determine whether the loss of independent monetary sovereignty to tackle asymmetric shocks would outbalance the possible gains of joining EMU, the OCA theory actually provides a helpful theoretical framework. Yet, some flaws in this approach can be detected. Although some issues that are regarded as decisive in the OCA literature were not given in the establishment of EMU (e.g. free movement of labour and wages as well as sufficient business cycles synchronisation), ten years after the launch of EMU, the Euro can nevertheless be deemed as a success. When analysing the arguments of the Calmfors Commission of 1995, one can argue that many of the concerns were highly unjustified, both politically and economic. Concerning the former, Sweden did not suffer politically of being an outsider at all. Although it did not take part in EMU, there is no evidence whatsoever that the fact of remaining outside Euro zone gave Sweden a disadvantageous negotiation position relating to other policy areas. In regard to the latter, it has been shown that the main argument that strengthened the need for an independent monetary policy was overvalued. The fact that there is a strong similarity in both the interest rates and business cycles synchronisation of Sweden and the Euro area, supports this claim. Additionally, the steady integration process with Member States of the Euro zone and the countries outside will most likely decrease the extent of asymmetric shocks which makes the loss of monetary sovereignty even more a less important issue. Furthermore, as indicated in this paper, the gains of a possible participation such as exchange rate stability as well as profits in terms of trade would have been remarkable if Sweden had participated in the first place.

Nonetheless, these results reflect to a large extent the relatively calm period for world economy without any larger disturbances- at least until the second quarter of 2007. Now, in the summer of 2009, the ten years anniversary of EMU is coined by the world financial crisis and the extensive increase in prises of foodstuffs. The phase of constant economic growth and prosperity without grand economic disturbances is now replaced by economic downturn. Triggered by the oil shocks in 2007 and 2008 combined with the instability in the financial sector, this period will certainly constitute a serious challenge especially in the years to come. It is, however, too early to evaluate the progress of this financial crisis and to draw a conclusion thereof, since this crisis will continue to develop in the next months or even next years. Yet, the final outcome could lead to sharper conclusions about the potential costs and benefit of EMU.

Moreover, one can clearly state- besides profound economic implications- a political dimension as well. It is highly interesting to notice that there has been a shift from economic mistrust, towards a political one. Whereas the major reason in the middle of the 1990s not to join the Euro was clearly based on economic arguments, one can see in the beginning of the Swedish Council Presidency solely political reasons not to put the issue of a possible EMU participation on the agenda. Although parliamentary elections will be held next year, none of the main political parties – neither the governing Christians democrats, nor the opposing Social democrats- dare to start a public debate as not to provoke losses within the electoral arena. The persistent ideological gap between most of the political representatives and the Swedish public can most likely be cited as the major reason for this cautious behaviour.

Especially the Social Democratic Party is highly divided even within its own party lines. This fact can be taken as an indicator that this topic has become a highly politicised one: it seems to concern rather national independence than taking a rational economic decision. Yet, without a political consensus, it becomes impossible to achieve a stabilising effect on Swedish public opinion towards the Euro, as illustrated in the fluctuating polls. Ultimately, it is therefore very unlikely that this question will be dealt with before 2014. Thus, neither the Council Presidency in the second half of 2009, nor the parliamentary elections in the middle of 2010 will probably change the current situation.

6.References:

Bartholdy, N. et al (2008).

The First 10 years of EMU. *Monetary Review, 2nd Quarter*. Retrieved February 24, 2009, www.nationalbanken.dk/C1256BE9004F6416/side/Monetary_Review_2008_3_Quarter/$file/kap06.htm

Bergman, U. et al. (1997)

Should Nordic countries join a European Monetary Union? UCSC Dept. Of Economics Working Paper No. 389. Retrieved February 22, 2009 from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=69000

Cukierman, A. (1997).

The credibility problem: EMU and Swedish monetary policy. *Swedish Economic Policy Review* (4), pp. 9-50.

European Commission (2003).

Internal Market Scoreboard No.12, 5 May

European Commission (2008) 238 (final) of 7 May 2008 . Retrieved February 24, 2009, from http://ec.europa.eu/economy_finance/emu10/reports_en.htm

Flam, H. & Calmfors, L. (1997).

The EMU and Sweden- an Introduction. *Swedish Economic Policy Review* (4), pp. 279-284.

Flam, H. & Nordström, H. (2007).

Euron och Utrikeshandeln: Hur mycket handel förlorar Sverige arligen? *Ekonomiskt Debat*, 35 (5), pp. 16- 30. Retrieved June 8, 2009, from http://www-2.iies.su.se/~flamh/35-5-hfhn.pdf

Flam, H. et al. (2009). Konjunkturradets Rapport: *EMU efter 10 ar- ska Danmark, Sverige och Storbritannien ansluta sig?* Stockholm: SNS Förlag

Gottfries, N. (2002).

Why is Sweden not in EMU? Swedish Institute, pp. 1-8. Retrieved February 22, 2009, from http://www.dallasfed.org/news/research/2004/04euro_gottfries2.pdf

Hallgren, M. (2009, January 27).

Kluvet om euro i Sverige. *Svenska Dagbladet*. Retrieved June 7, 2009, from http://www.svd.se/naringsliv/nyheter/artikel_2380101.svd

Heikensten, L. (1999).

Should Sweden join the Euro Area. Retrieved February 22, 2009 from http://www.riksbank.com/templates/speech.aspx?id=3288

Jansson, P. (1997).

How large is the risk of asymmetric shocks for Sweden. *Swedish Economic Policy Review* (4), pp. 447-386.

Krugman, P. & Obstfeld, M. (2009).

International Economics: Theory and Policy 8th ed. Boston: Pearson

Lane, P. (2006).

The Real Effects of European Monetary Union. Journal of Economic Perspectives. 20, (4), p- 47-66.

Langdahl, F. & von Sydow, G. (2009).

Providing Leadership in Turbulent Times? A Preview of the Swedish EU Presidency 2009. *Swedish Institute for European Policy Studies*, pp. 1- 13.

Lindahl, R. & Naurin, D. (2003).

Gemenskap, utanförskap och inflytande i EU:s Ministerrad Göteborg. CERGU Working Paper Series, 3, (2).

Lindahl, R. & Naurin, D. (2005).

Sweden: Twin Faces of a Euro Outsider. *European Integration*, 27 (1), pp. 65-87.

Kinnwall, M. (1999).

Swedish Monetary Policy: On the Road to EMU? In: Miles, L. (Ed.), S*weden and the European Union Evaluated.*(pp. 146- 166). London: Continuum

Miles, L. (2001).

Sweden and the European Union: Changing expectation? J*ournal of European Integration*, 23 (4), pp. 303- 333.

Miles, L. (2005).

Introduction: Euro-Outsiders and the Politics of Asymmetry. *European Integration*, 27 (1), pp. 3-23.

McDonald, F. & Dearden, S. (2005).

European Economic Integration. *The Foundations of the European Union*. 4th Ed. pp. 99-120 London: Pearson.

Nordmark, A. (2009, January 27).

Dags att tala klarsprak om euron. *Svenska Dagbladet.* Retrieved June 7, 2009 from http://www.svd.se/opinion/brannpunkt/artikel_2379617.svd

Öberg, S. (2009).

Sweden and the Financial Crisis. Retrieved January 20, 2009 from http://www.bis.org/review/r090128d.pdf

Patterson, B. & Amati, S. (1998).

Adjusting to Asymmetric Shocks, European Parliament, *DG Research Working Paper*, 09-98, pp. 5-50

Persson, K.(2001).

Sweden, EMU and the Krona. *BIS Review*, 92, pp. 1- 5. Retrieved February 22, 2009 from http://www.bis.org/review/r011120c.pdf

Söderström, U. (2008).

Re-evaluating Swedish Membership in EMU: Evidence from an Estimated Model. *National Bureau of Economic Research.* Working Paper 14529. Retrieved May 4, 2009 from http://www.nber.org/papers/w14519

Tallberg, J. (2001).

När Europa kom till Sverige. Stockholm: SNS Förlag

Tiilikainen, T. (2005).

Finland: Any Lessons for the Euro-Outsiders? *European Integration*, 27 (1), pp. 25-42.

Verdun, A. (2008).

Ten Years EMU (10 November 2008): An Assessment of Ten Critical Claims. Retrieved February 22, 2009 from https://segueuserfiles.middlebury.edu/econ0500m-f07/Amy_Verdun.pdf

Zoubanov, N. (n.d.).

How far can it be argued that the euro zone is an optimal currency area? Central European University, pp. 1-8.