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Second (monetary) pillar of the European Central Bank's monetary policy – history of its genesis, characteristics and its relevance to the ECB's monetary policy

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Introduction

The European Central Bank (ECB) has been in operation since January 1999, when the euro area was created. In January 1999 the Governing Council of the ECB introduced its monetary policy strategy which was to conduct the monetary policy in the Monetary Union. To conduct monetary policy means also to conduct lives of millions Monetary Union inhabitants.

Therefore, it was needed to consider every single fact, not to omit anything, to gain the credibility right from the beginning and not to make any mistake.

The Monetary Union itself was a big challenge, the historical phenomenon which touched every single life. Having this responsibility, the monetary policy strategy chosen by the ECB, introduced as a "two-pillar approach", was rather different from the standard and thus triggered a debate. The Governing Council of the ECB, especially the first chief economist of the ECB, Otmar Issing, did not want to go the conventional way as those starting conditions were everything but conventional.

The Czech Republic joined the European Union in 2004 and it is a matter of time when it joins also the Monetary Union. Then there will be affected also lives of us – inhabitants of the Czech Republic. This was the main reason why I have chosen this topic, to get familiar with the monetary policy which was created in such an uncertainty and which will – sooner or later – also part of our lives.

This bachelor paper is dedicated to this unconventional monetary policy strategy, trying to make clear why and in what aspects this monetary policy strategy is out of way.

Section one is describing the circumstances under which this strategy was created, trying to show that the decision was not made easy, as well as to show how big will it was given to make it work. This section includes the components of the monetary policy strategy as well as its introduction to the public. This section is focused on general information whereas the second part focuses mainly on the monetary pillar – the topic of this bachelor paper. In section two it is explained how the monetary pillar was created. The main components of this pillar: the monetary aggregate M3 and announcement of the reference value, its derivation and all the factors that were taken into consideration. Finally, it describes how it should work.

After these rather descriptive parts there is a section three which is trying to evaluate the relevance of this monetary pillar for the real functioning of the ECB monetary policy. The theoretical points discussing how this monetary pillar should work is far away from the

reality. And this part using many charts to demonstrate and support this view is trying to clarify the main role of the monetary pillar in the ECB two-pillar approach.

This paper as a whole is intended to make a brief excursion to the creating of monetary policy strategy in the conditions where nothing could have been taken for granted where deliberation was the leader of the Governing Council. It tries to discuss, however, if this was a right decision, to choose as a strategy the two-pillar approach, and to discuss the merit of the unconventional part of this strategy – the merit of monetary pillar for the goal set by the ECB.

1. History of genesis of the monetary pillar

Otmar Issing¹ was the first chief economist of the European Central Bank (ECB) which has been in operation since June 1998. It means that only seven months were left to start monetary policy for the euro area by a brand new institution. Only seven months were left for the ECB to get its face in the eyes of the public. To gain the credibility in those eyes means to take the right decisions from the very beginning. And all the decisions, which were so important for the future of the ECB, were taken under the conditions of extreme uncertainty.

1.1. The situation of extreme uncertainty

All the central banks face to some level of uncertainty. But what faced ECB was mainly caused by the transition to Stage Three of EMU. The situation, where there was a terrible need to adopt the right strategy for the monetary policy of the euro area, and where nothing could be taken for granted, Otmar Issing described this way: "*Never have I felt the impact of uncertainty so acutely as in the weeks that preceded and followed the introduction of the euro and the birth of the single monetary policy.*" (Issing 1999, 1)

First, being successful in conducting monetary policy means to have qualitative as well as quantitative information about lags and magnitudes. In those days it was difficult to identify the nature as well as the possible persistence of potential shocks as there was an uncertainty about the state of economy caused by the lack of the data at the beginning of January 1999. Monetary Union created a brand new economic area, for which no comprehensive and harmonized data were collected in the past.

Second, there was a question of a right choice of models which would be appropriate for the assessment of the current state of the functioning of the economy and a question of the link between them. And there was also a question of stability among those countries which underwent a preparation – structural changes for the EMU membership.

¹ Issing was born in Würzburg, Germany in 1936. Before becoming a central banker, he spent more than 30 years in academia doing various researches. In 1988, he became a member of wise men advising the government – expert for the assessment of the economic trends. In 1990, he became a member of the board of the Bundesbank.

Otmar Issing was a chief economist of the ECB in 1998 – 2006. After retirement from this function, he accepted a position in Goldman Sachs, the U.S. private investment bank as an international advisor.

Last but not least was the question of the impact of monetary policy provided by the ECB. How will private agents such as investors, markets, households react to the disappearance of their national currency? This hinged on the ability of the ECB to master the situation but in these conditions any conducting of macroeconomic analyses or forecasts might have been complicated.

All this elements contributed to the uncertain situation in which the monetary policy of the ECB was to be born. Probably this uncertainty caused that the Executive Board of the ECB led by Otmar Issing chose as a strategy of the monetary policy a very unusual and in the eyes of the public very controversial approach.

1.2. A strategy was needed

In the situation described above, it was highly important to maintain the credibility of the ECB for achieving its main target – price stability as it was a new institution lacking a good reputation of its own. There was a chance to transfer the credibility from the previous central banks, that were components of the Euro system, to the new one, but it was not a question of simple promise to do their best to maintain price stability.

Credibility of the monetary policy is closely accompanied by its discretion as well as by clarity in communication.

A strategy, that could be able to maintain famous three Cs of central banking: credibility, consistency and continuity, was needed.

1.2.1. The choice of a strategy

The question was what kind of strategy. The regime in which the monetary policy of the ECB was to be adopted could be described at least as unique according to all the above mentioned factors.

When creating the strategy, the chief economist Otmar Issing knew that for every mistake made would be paid a lot. To quote his words: "As an academic, you can write a new paper if the first one is badly received. As a central banker, one misguided decision may have an impact on millions of people." (Issing, 2006, 2)

1.2.1.1. The process of adopting the right strategy

Those factors or worries were not the only roadblock when implementing the strategy. According to Goodhart, not only economics in general, also macro-economic views and even Central Banking are subjects to fashion.

Monetarism became somewhat unfashionable and the main stream, neokeynesian approach, claimed that there was no need of monetary crosschecking and that the monetary analysis by itself is good for nothing and what is more, it is superfluous. Deviate from this stream automatically meant to be out of "in crowd". (Goodhart, 2006)

Nevertheless, Issing was convinced that the customary inflation forecast and economic analyses alone could not be sufficient basis for decision-making as these have a time horizon usually one to two years and it is inevitable for such a decision making not to ignore longer-term developments. (Issing, 2006).

Moreover, as it was already mentioned, the data situation around the start of Monetary Union was more than unsatisfactory. The estimation of the output gap, which plays a central role in the "fashionable" neo - keynesian approach, is based exclusively on the reliability of data.

Relying on the data coming from different institutions varying widely would be more than doubtful. It is obvious, that the reliability of this approach stemmed from the reliability on the inflation forecast.

The ECB came to the conclusion that relying on the single forecast would not be wise, considering all the uncertainties as well as considering the fact that this approach would not be able to involve the information coming from the monetary developments to identify risks to the main target over the medium- to long-term.

On the other hand, he also knew that it would not be advisable just simply to emulate the Bundesbank's monetary policy strategy of monetary targeting² from several reasons: as a central banker in the Bundesbank, he experienced a wild volatility of monetary aggregates. Also in those days it was difficult to

² The alternative monetary policy strategies are clearly described in Appendix 1.

explain this to the public and even to persuade that despite this the Bundesbank should be stick to its monetary targeting.

It is easy now to imagine how difficult it would be to explain such volatility to the "Monetary Union public" even when it was more than sure that the Monetary Union money aggregate could experience a similar volatility considering the institutional and behavioural changes linked to the transition to Monetary Union. The risk that the ECB had to abandon its strategy soon after its adopting would mean that this brand new institution would lose the credibility for years.

Furthermore, also the existence of non-monetary information vital to decisionmaking aimed at price stability contributed to the fact, that monetary targeting was excluded as an option.

All the above mentioned reasons of course do not imply the denying of the fact that there is a long-run relation between price and money.

Despite all the above mentioned objections against the inflation targeting, it is definitely useful for central bank's policy analysis. But according to Issing, including the monetary analysis in the strategy is vital to central bank's the decision-making process. (Issing, 2006)

1.2.1.2. The adoption of the right strategy

Having considered the uncertainty surrounding monetary policy in general as well as the uncertainty linked to the introduction of euro in particular, the ECB chose a strategy that was prepared to face these unique circumstances.

Keeping on mind, that: "Inflation is always and everywhere a monetary phenomenon in the sense that it is and can be produced only by a more rapid increase in the quantity of money than in output... A steady rate of monetary growth at a moderate level can provide a framework under which a country can have little inflation and much growth. It will not produce perfect stability; it will not produce heaven on earth; but it can make an important contribution to a stable economic society..." (Friedman, 1970), there was not a question whether to or not to include a monetary analysis in the strategy but how to create a comprehensive assessment of the risks to price stability. Firstly, coming to the conclusion that inflation has ultimately a monetary nature, the ECB assigned the money a prominent role when formulating the monetary policy decisions aiming at the main target. This prominence of money was labelled as the first pillar of the ECB's monetary policy strategy.

Secondly, recognising the important information coming from non-monetary factors relevant for the monetary policy decisions, the ECB also announced, that in addition to the thorough analysis of monetary developments, there will be also a broadly based assessment concentrating on the wide range of other economic indicators. This assessment was labelled as the second pillar.

Finally, the ECB adopted a credible, consistent and continuous strategy – at least they believed so - framework based on the two pillars for structuring and analysing all the data relevant for decision making that combines both economic and monetary analysis in order to achieve the price stability.

1.2.2. The introducing of the monetary policy strategy of the ECB

The main elements of this strategy were introduced to the public at the press conference held on 13 October 1998 by the president of the ECB Willem F. Duisenberg who communicated the adoption of "A stability-oriented monetary policy strategy for the ESCB".

As Issing mentioned in his text, initially, there were identified three pillars of the strategy (the third one was regarded as a quantitative definition of price stability). The much debated term two-pillar approach of the monetary policy as we know it today has its roots at this conference (in spite of the fact that this term was officially adopted by the ECB in January 1999), where a journalist asked the president about monetary policy strategy regarding dual pillars of the strategy. His question was a sign of good communication of the ECB. (Issing, 2006)

The term of dual-pillars strategy was officially adopted by the ECB in January 1999.

The first decision Otmar Issing as a chief economist had to make to fulfil the ECB's mandate was to create an all – encompassing monetary policy strategy where no relevant information could be overlooked and simultaneously all the information is arranged so as to be able to identify all the possible risks to price stability on time and in consistent manner. (See Chart 1)

1.2.3. The main elements of the monetary policy strategy of the ECB

As this deliberation was guided through transparency about the strategy, the article published by the ECB in the first Monthly Bulletin (ECB, 1999) explains the adopted strategy in detail. This strategy consists of the three main elements: quantitative definition of the main target of the monetary policy - the price stability and the two pillars of the strategy which are used to achieve this target.

1.2.3.1. Quantitative definition of price stability

The term price stability as the primary objective of the ECB's monetary policy does not give a precise definition what is meant by that price stability. In order to clarify that, the Governing Council of the ECB announced in the ECB Monthly Bulletin in 1999 the following definition known as the quantitative definition of price stability:

"Price stability shall be defined as a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2%.³ " (ECB, 1999, 46)

The harmonisation of HICPs is based on several guidelines and EC Regulations and consists of selected calculation. It is a calculation of consumer spending, which is reached by the combination of central collection (via e-mail, mail, internet...) and visits to local retailers, quality adjustment – because it is important to recognise how the price rose according to the higher quality, weighting of the goods and services basket – the HICP respect the fact, that the distribution and nature of goods and services is different within the countries and thus it is based on the prices which are representative in each country, this means, that there is no uniform "eurobasket"

The MUICP is calculated as a weighted average of the eurozone countries whereby more than million of price observations is made every month when calculating the HICP. (Eurostat, 2004)

³ The HICP for the Euro area was compiled in 1995 by European Commission (Eurostat) in close cooperation with its main users: European Monetary Institute (EMI) and later the ECB3.

In fact, the HICP is a set of several indices calculated on the basis of harmonisation: The Monetary Union Index of Consumer Prices (MUICP), which aggregate indices of the eurozone countries, The European Index of Consumer Prices (EICP), that is for eurozone countries and the other EU countries and the national HICPs which is for each of the member state, as it is described in a short guide published by Eurostat. (Eurostat, 2004)

Due to the above mentioned definition the price stability is to be maintained over the medium term⁴.

This quantitative definition of price stability was announced by the Governing Council for several reasons.

Firstly, it can help to make the policy more transparent as the main goal of the strategy is clearly defined.

Secondly, the clear definition of the goal provides a measurable yardstick against which the ECB can face questions when the prices deviate from the definition.

Finally, the definition provides a guidance when forming expectations.

1.2.3.2. First pillar⁵ – an assessment of the outlook for price developments

The first pillar – the economic analysis makes sure, that the interplay between supply and demand is taken into consideration when evaluating the risks and shocks to price stability. For the decisions made by the monetary policy it is very important to know, whether the shocks coming are from demand or supply side, from domestic or external source whether they are of permanent or temporal character.

The economic and financial variables included into this analysis: developments in overall output, aggregate demand and its components (expenditures, net export, savings), broad range of various price indicators, developments in

⁴ For the reasons of medium term orientation of the ECB's monetary policy strategy, see Appendix 2.

⁵ In 1999 money were given a prominent role, that is why the monetary pillar used to be the first one of the two-pillars strategy. At the ECB ´ press conference on May 8, 2003, Duisenberg with Issing confirmed the two-pillars strategy, by reducing the prominence of money, because, according to the Issing ´s presentation, the monetary phenomena were not fully captured in conventional forecasting models (Issing, 2003). The first pillar became the second and was also relabeled "monetary analysis". The broadly based assessment was also relabeled "economic analysis". Discussing the monetary analysis as the second one was taken as a mean of cross-checking the economic analysis. More details about these changes can be read in the further text.

exchange rate, the global economy, financial markets – stock prices as well as development of unit labour cost, wages or fiscal policy statistics.

This analysis enables to focus on the effect on price developments coming from the cost pressures; it is also useful when assessing the dynamics of real activity.

1.2.3.3. Second (monetary) pillar – a prominent role of money

A very brief description of this pillar says that the monetary analysis pillar comprises all the information from various monetary and credit aggregates, exploiting the long-run link between money and prices. It serves to figure out the risks to price stability as a means of cross-checking over the medium to long term.

As it was already mentioned, the ECB needed an all-encompassing strategy, where no relevant information could be overlooked and simultaneously all the relevant data were arranged in the consistent manner.

The cross-check as it can be seen from the Chart 1 below is that tool that ensures that all the information is arranged in the required way.

This two pillar approach constitutes a framework for cross-checking indications from the shorter-term economic analysis to the longer-term monetary analysis which guarantees that the decision making will avoid the over-reliance on a single factor or forecast thanks to what the monetary policy strategy aims at adopting a robust monetary policy in an uncertain environment.

Chart 1: The stability-oriented monetary policy strategy of the ECB

Source: ECB, 2004

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The ECB decided for its own diversified approach (in the world, there was not any strategy combining both monetary and non-monetary elements into a consistent forecast of inflation) which is neither monetary targeting nor inflation targeting or even a mixture of these two. It is a brand new strategy designed as an answer to the unique situation which the ECB was confronted with.

As this bachelor paper is concentrated on the monetary analysis, all the following pages are going to be dedicated to the features and functioning of this pillar as well as to the controversial points of view regarding its merit to the price stability.

2. Characteristics of monetary pillar

The Governing Council of the ECB gave the money a prominent role in the Eurozone's monetary policy strategy having considered that monetary data are collected in a timely manner and in more consistent way that any other indicators. Especially this fact gives money and its development an ability to constitute a natural and reliable "nominal anchor" for monetary policy aiming at its main target – price stability.

Indeed, the monetary policy decision making based not only on standard economic and financial forecasts but also based on the money, enables to see beyond those shocks that have just a transient character and impact on price stability and not to yield the temptation to take an activist course, because as Friedman says, it does not pay off to be too activist in the world full of uncertainty. (Friedman, 1970)

Thus, the main challenge of the monetary pillar is to see through short-term disturbances, in order to extract those which could have a longer-term impact on the price stability in the future.

The monetary policy strategy of the ECB recognises this task by assigning a prominent role to money, having announced a benchmark for the assessment of the monetary development - a quantitative reference value for the growth of the monetary aggregate M3. The reference value constantly reminds that besides the responding to economic developments, the rate of money growth must be always consistent with the price stability objective.

2.1. M3 – monetary aggregate compatible with price stability

In the line with international practice, the ECB identified narrow (M1), intermediate (M2) and broad money (M3) aggregate. (See Chart 2)

The decision to identify M3 as the key indicator used for setting the reference value was based on its favourable empirical properties, namely: stability and ability to indicate the price level as it is clearly explained in ECB Monthly Bulletin.

Source: ECB, 1999b

An answer for the question why it was M3 chosen to identify the reference value and not any other monetary aggregate and what the above mentioned favourable properties were can be easily found in the

Chart 3.

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Chart 3: Monetary aggregates for the euro area

Source: ECB, 1999b

In the period of 1987 – 1993, there was a rather rapid growth rate in comparison with M2. This was caused by growing volume of MMF shares/units and money market papers (ECB, 1999b), which is with its 7% a reasonably big component of M3. (See Chart 4) These components have high potential to lead to instabilities in money demand, thus M3 can show a stable relationship with the price level.

Since 1990 the growth of broad monetary aggregate slowed down (bringing the future inflation reduction in euro area) and since the end of 1996 it keeps a stabilised rate between

3, 5 – 5%.

Moreover, the chart also illustrates that the movements in aggregate M1 are rather volatile, sensitive to changes in interest rates – what is one of those reason why this indicator could not be used when identifying the reference value.

Chart 4: Percentage shares of the components of M3.

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Source: ECB, 1999b

Another important indicator for assessing the behaviour over long periods is their velocity of circulation⁶. As it can be seen from the Chart 5, the velocity of M3 slowed down in the period of 1993 and immediately increased sharply in the period of 1994 – 1995. This was caused

⁶ The income velocity of M3 is defined as follows: nominal GDP/nominal M3 (ECB, 1999)

mainly by changes in the fiscal policies across the euro countries – changes as well as by the exchange rate crisis (ECB, 1999b).

In spite of these persistent volatilities in the period of mid-1990s, the econometric analysis concentrating on monetary aggregates in euro area support M3 as the holder of long-run stability of money demand in euro area. Furthermore, according to these analyses the M1 does not appear to have any long-run stability. (ECB, 1999b)

Chart 5: M3 velocity trends for the euro area



Source: ECB, 1999b

2.2. The reference value – representative of the monetary pillar

The reference value for broad monetary growth is designed to help the Governing Council to evaluate the behaviour of M3 in such a way that it will guide them when making decisions aimed at price stability.

In order to fulfil this task there are two features essential for the derivation of the reference value.

Firstly, the monetary aggregate used for defining the reference value should prove a stable relationship with price level (chapter 2.1. was dedicated to this relationship) as the derivation of the reference value should be consistent with price stability.

Secondly, the monetary aggregate should contain information about future price developments as there is an assumption that longer deviations of the monetary aggregate from the reference value should indicate risks to price stability.

The derivation of the reference value is based on medium-term orientation which is more stable than the short-term one, thus the monetary aggregate for which the reference value was designated (M3) does not need to be controllable in the short run what means that the concept of the reference value is not obliged to correct deviations of M3 from the reference value over the short-term. (See Appendix 3)

2.2.1 The derivation of the reference value

In a view of the medium-term orientation and according to the quantitative price stability definition, the reference value was derived on the basis of assumptions about medium term developments in all of the parts included in the well known quantity equation which says that the change in money is identical with the change in nominal transactions (approximated by the changes in inflation).

This is a relationship between changes in monetary growth (ΔM) on one side and changes in developments in the price level (ΔP), real GDP (ΔYR) and income velocity of circulation (ΔV) on the other side as it is shown below (ECB, 2001, 128):

$$(\Delta M) = (\Delta YR) + (\Delta P) - (\Delta V).$$

The Governing Council of the ECB announced the first reference value on December 1, 1998 which was set at an annual rate of 4, 5%.

How did they come to this result? The answer comes from the Tools and Application published by the ECB:

As it was already said the derivation of the reference value is based on:

• Definition of price stability:

"Price stability shall be defined as a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2%." (*ECB*, 1999a)

• Potential output growth – the trend in real potential GDP growth was in 1998 set as

2-2, 5% per annum⁷.

Trend in the velocity of circulation of M3 – the decline of M3 velocity in the range of 0, 5 – 1% per annum was a result of various complex money demand models.

Taken together all the upper bound limits they would come to the result of 5, 5%. But because the quantitative definition of price stability says "below 2%" and because the trend decline lies rather under its upper bound, the first reference value was set at an annual growth rate of 4, 5%. (Klockers, Willeke, ECB, 2001)

This reference value was constant in the period of 1999 - 2002 as there was no evidence of changes in the included assumptions, thus no reason for changing it. During this period, the Governing Council reviewed the trend in GDP as well as in the trend of velocity at the end of each year.

In May 8, 2003 at Press seminar on the evaluation of the ECB's monetary policy held in Frankfurt, the Governing Council announced, that there won't be any other reviews of the reference value on the annual basis as they cannot be expected to change frequently. (ECB, 2003)

According to Issing, these reviews led also to confusion, as there was a misconception that the yearly reviews led to a yearly reference value as to some kind of money development indicator which it was not intended to be. It does not mean that they will skip it, they will monitor it and if there is any relevant change, it will of course have consequences for the reference value. (Issing, ECB, 2003)

⁷ This assumption was based on the behaviour of GDP in past decades as well as on the estimations made by various international organisations and ECB. Regarding to the past behaviour, in 1999, there was no evidence showing that the real GDP should deviate from the range.

2.3. How the monetary pillar works

The main idea of the mechanism of monetary pillar's functioning is to compare the reference value, which was derived in order to be consistent with the price stability, with the actual money growth represented by the money aggregate M3.

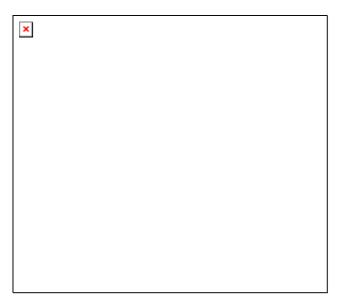
The monetary analysis includes discussion of components and counterparts of M3 in order to determine the monetary impulses in the economy.

The Governing Council decided to analyse developments of M3 in relation to the reference value on the basis of 3-months moving average of the twelve monthly annualized growth rates – this was to smooth out the rather volatile monthly fluctuations. (See

Chart 6)

Deviations of the actual monetary growth M3 from the reference value, under normal circumstances, mean an emergency to price stability. These differences are processed by the ECB alongside other information and are not corrected mechanistically, in other words, the difference between the reference value and the monetary growth do not induce any automatic reaction. (ECB, 2000)

Chart 6: M3 growth and the reference value



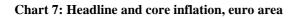
Source: ECB, 2001

The monetary pillar of the ECB's monetary policy was said to work in this way. If it really works in this way, the question of its effectiveness and its relevance to the maintaining of the price stability, if any, is going to be discussed in the following chapter.

3. The relevance of the monetary pillar

As it can be seen from the

Chart 7, the monetary policy of the ECB is relatively successful with respect to its main goal – the pursuit of the price stability. The question is whether this price stability is also a merit of the monetary pillar and if, how much the monetary pillar contributed to the price stability in the euro area.



Source: ECB, 2006

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The concept of monetary pillar was under a subject of intense debate from the very beginning⁸.

⁸ Begg et al. (2002), Svensson (2003)

The opinions about the contribution of monetary pillar to price stability as well as its interpretation were rather sceptical from many points of view.

3.1. The lack of transparency

The fact that the ECB at the start of its turn needed a credible monetary policy was already mentioned on the page 5 of this paper. It was necessary to maintain those three famous Cs: credibility, consistency and continuity.

However, and it is paradox, regarding the monetary pillar, on one hand the continuity of the ECB's monetary policy is the only C that was maintained by the monetary policy on the other hand it is just the continuity of the two-pillar approach of the ECB monetary policy that is still under the intense criticism⁹.

Other Cs: credibility and consistency are questioned. The monetary policy of the ECB as a whole is definitely credible and consistent with respect to the maintenance of the price stability. The question is what role the monetary pillar plays in the monetary policy framework and in what range the monetary pillar has contributed to the two Cs.

Above all, the ECB gave the money a prominent role when inducing the monetary policy, but has never explained satisfactorily its real contribution to maintaining the price stability, what has led to the doubts about the sense of the monetary pillar. In addition, it seems as if they left the ambiguity on purpose, as if they wanted to have enough room to interpret the monetary pillar according to the current situation.

This opinion is strongly supported by the statement in ECB Monthly Bulletin. On one hand, the Governing Council announced the reference value in order to get useful information flowing from the monetary developments in credible and coherent way (ECB, 1999) on the other hand; they did not do enough to make the concept of the reference value more transparent and thereby credible. This transparency would be higher if there was stated which movements of the monetary growth are dangerous to the price stability.

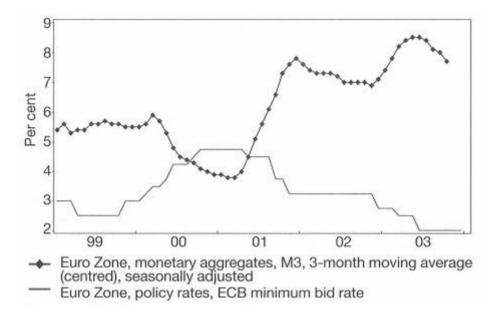
Instead of such a clear statement, they left a "loop-hole" from the exact attitude by setting the condition for the functioning of the monetary pillar: "*However, the concept of a reference value does not entail a commitment on the part of the Eurosystem to correct deviations of*

^{9 &}quot;The reduction of the prominence of monetary aggregates is in the right direction, but it would be better to combine the two pillars to one and explicitly adopt flexible inflation targeting." (Svensson, 2003, 1)

monetary growth from the reference value over the short term. Interest rates will not be changed mechanistically in response to such deviations in an attempt to return monetary growth to the reference value." (ECB, 1999, 48)

This statement itself contributes to big ambiguity regarding the clarity of the monetary pillar. As it will be described in the following text, the Governing Council strictly abides by the statement above when making monetary policy decisions. The interest rates were never changed mechanistically as a response to the excess of M3 above the reference value; on the contrary, they were set exactly in the opposite direction of the monetary growth. (See Chart 8)





Source: Eijffinger, 2004

What is then the main idea of the monetary pillar? What role does it play when providing the monetary policy decisions? Does it make sense that in the period of increasing money growth (in fact, this occurs almost since the beginning of euro area) the interest rates are lowered by the monetary policy decisions made by the Governing Council? What transparency here can be discussed?

Another point, in the period of the last eight years, since the beginning of the ECB's monetary policy the monetary growth represented by M3 aggregate exceeded the reference value by rather big margins (See Chyba! Nenalezen zdroj odkazů.), but despite this M3 growth and especially its deviations from the reference value, this did not have any considerable effect on the inflation in euro area. (See

Source: own construction from the ECB data

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Chart 10Chyba! Nenalezen zdroj odkazů.)

This is little bit unexpected and controversial element in the monetary policy decisions when the deviation of the M3 from the reference value is said to contain information about possible risks to the price stability. As it can be seen from the **Chart 10** even the extremely excessive growth of M3 in the period of 2001 - 2003 did not have any particular impact to the price stability.

If it contained information about possible risk to price stability, why the inflation remained almost constant even in the period of 2001 - 2003, when there were rather violent upward deviations of M3 from the reference value? Is it by effective monetary policy decision? If so, why then the interest rates set by the ECB went in the opposite direction? (See **Chyba**! **Nenalezen zdroj odkazů.**)¹⁰

¹⁰ The monetary policy of the ECB is conducted via transmission mechanism, by which the economy is influenced generally and price level particularly. The ECB, having the monopoly power over issuing money can fully decide about interest rates of funds that the ECB provide to the banking system. These interest rates affect the money market interest rates directly and lending and deposit rates which are set by banks to their customers indirectly. (ECB, 1999)

Chart 9: M3 growth

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Source: own construction from the ECB data

Generally when there are risks to price stability, the ECB raises the interest rates in order to restrict the amount of money and vice versa.

Chart 10: Euro area inflation, growth in the money stock and the reference value of ECB

Source: Rich, 2007

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The criticism from both academic and non-academic ground was not cut dead by the ECB. In 2003 the monetary policy of the ECB underwent an internal revision which, to disappointment to those who hoped for more transparent monetary policy regime, led to the confirmation of the two-pillar strategy including some more "clarification".

These changes were published at the press seminar in Frankfurt in 2003 and it is a question if this was really clarification, because after the presentation led by Otmar Issing there were raised some question that really did not prove that the ECB was successful in the communication of this clarification.¹¹

However, the ECB monetary policy continued in its controversial two-pillar approach and at the conference "The ECB and Its Watchers VII" held on 3^{rd} June 2005; Otmar Issing again confirmed the importance of the monetary pillar for the ECB monetary policy decisions: "...we rely and we will continue to rely – on the monetary pillar of our strategy." (Issing, 2005)

¹¹ ,... what does ,,close to 2% " mean in the definition of price stability? Is it a little bit less than 2%, on average, in the medium term or is it a pure inflation target now?" (ECB, 2003, 1)

How can the Governing Council claim that the presence of monetary pillar is inevitable when making monetary policy decisions in the situation of relatively stable inflation rate accompanied by rather considerable fluctuations in money growth, when there is no evident stable relationship between monetary growth and the rate of inflation?

3.2. Monetary policy decision in contrast with the monetary pillar

Let 's have a look at the time period in which there were first considerable deviations of M3 from the reference value. It was the period of 2001 - 2003. The ambiguity can be easily read from the Table 1 and Chart 9, where lowered interest rates on the main refinancing operations¹² were accompanied by the rise in M3 growth.

Da	ate (1)	Deposit facility	N	lain refinancing operations	Marginal lending faciliy
with e	ffect from	Level	te	Variable rate enders Minimim bid rate Level	Level
2001	11 May	3,5		4,5	5,5
	31 Aug	3,25		4,25	5,25
	18 Sep	2,75		3,75	4,75
	9 Nov	2,25		3,25	4,25
2002	6 Dec	1,75		2,75	3,75
2003	7 Mar	1,5		2,5	3,5

Table 1: The Key ECB interest rate	1: The Key ECB i	interest rates	
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Source: own construction from the ECB data

The monetary pillar thus seems to be confusing as it does not react to the growth rate of M3, which is permanently higher than the reference value.

At the times of creating the monetary policy for the euro area, it was said that the two pillars will have approximately the same weight when evaluating possible risks to the price stability.

The fact that it is not clear what weight is given to the both pillars and which prevail when making the monetary policy decisions contributes to the further confusion.

¹² MRO provide the bulk of liquidity to the banking system.

However, according to the growth rate of M3, the monetary policy decision taken by the ECB (see Chart 11) clearly show that the Governing Council made little account of the monetary pillar when making monetary policy decisions. It seems as if they followed the economic analysis only.

Not only have the charts above confirmed this attitude. At the 4th ECB Central Banking Conference held in Frankfurt am Main in November 2006, there were presented similar opinions¹³.

Chart 11: The key ECB interest rates

Source: own construction from the ECB data

13 "Finally, to evaluate the role of monetary policy analysis in interest rate decisions, we distinguish between phases in which the signal from monetary analysis was in line with that from economic analysis from those in which it was not...Moreover, we try to assess the degree of clarity of the two respective signals over time and link it to the policy decision. We conclude that, although, in general, there was a broad correspondence between the two analyses and it is therefore difficult to assess their separate role, it appears that the economic pillar prevailed in influencing the decision when the monetary pillar gave a blurred signal." (Fischer et al, 2006, 35)

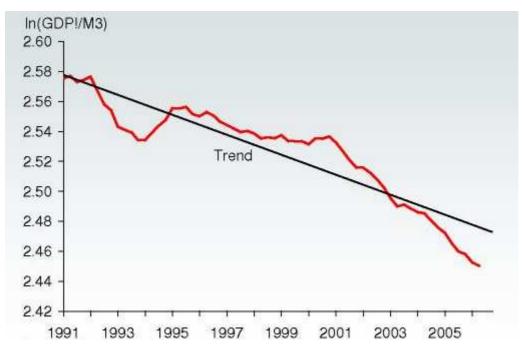
The question is why there is the two-pillar approach when the second one obviously does not serve as an emergency indicator?

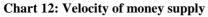
The reason why the monetary pillar does not fulfil its task is maybe in the derivation of its main component: the reference value. This process has been described in the section on page 16.

The main assumption there is that the relationship between all those variables is more or less constant, but actually, these variables change and there is no guarantee that the pattern valid in the time of creating the reference value will be valid in the future.

The anonymous author dedicated to this topic in the paper published in Eurozone Weekly in 2006.

As it can be seen from the Chart 12, the velocity has tendencies to decline over time what can result in the M3 growth rate significantly different from the reference value without any impact on the price stability.





Source: Hover Analytics, Eurozone Weekly

When considering this fact it rather another sceptical point around the relevance of the monetary pillar. Even the members of the ECB admit that the monetary analysis output could be blurred (see 13).

The importance of the monetary pillar was once downgraded at the already mentioned ECB press conference in May 2003. This was the right step because after those big deviations of M3 from the reference value in the period of mid 2001 – mid 2003 when the monetary policy decisions went absolutely the opposite direction of the monetary pillar's signal, it was impossible to pretend that the money stock is the most important element to watch when evaluating possible risks.

This time period, especially after the terrorist attacks in USA in September 2001 when investors fled into short term assets, what naturally increased the money stock clearly proves that the relevance of information flowing from the money stock is surrounded by noise. Fortunately, the ECB policy makers recognised that this M3 growth does not imply inflation and did not abide by the monetary pillar. Moreover, above mentioned changing velocity of money supply creates another noise around the reliability of the monetary pillar.

There were various reactions of the public to the evaluation of the ECB monetary policy strategy in 2003.

Svensson in his paper published after this evaluation says that these steps of the ECB are in the right direction but not enough and proposes to abandon the outdated two-pillar strategy and instead of it adopt a flexible inflation targeting by incorporating the second pillar (monetary pillar) to the first one. He totally scorched the monetary pillar: "*It would have been better to throw the reference value on the garbage heap of history where it belongs.*"(Svensson, 2003, 4)

The monetary policy of the ECB as a whole can be described as successful. The same monetary policy, however, consists of two pillars; ECB should then take into consideration both of them when making monetary policy decisions.

Nevertheless, the evolution up to know implies that the ECB monetary policy decisions are made on the basis of the economic analysis rather than on the two-pillar approach.

Why then the ECB still insists on the two-pillar approach when it is more than obvious that the price stability achieved from the very beginning of the euro area up to now is mainly a merit of the economic (first) pillar.

The relevance and usefulness of the monetary pillar for the monetary policy of the ECB from my point of view is expressed in **Chyba! Nenalezen zdroj odkazů.** This chart confronts the developments of the price stability from the very beginning of the euro area with respect to

the M3 growth rate and thus shows that even in the period of rather big deviations of M3 from the reference value; these deviations did not bring any considerable inflation and thus the basic principle of the reference value usefulness is denied. The developments of M3 from the reference value were not compatible with the price stability at all.

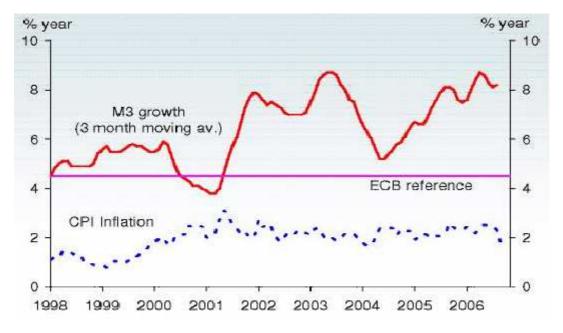


Chart 13: M3 growth rate and its impact at the euro area price level

Source: Eurozone Weekly

In simple words, the price stability has been achieved regardless of the signals coming from the monetary pillar and obviously the success of the monetary policy is not a merit of the monetary pillar, thus the monetary pillar does not deserve to be recognised as being equivalent to the economic pillar just as it is not right to say that the monetary policy strategy is based on the two-pillar approach.

Conclusion

The monetary policy of the ECB was created with the best intentions, based mainly on deliberation which was highly needed when considering what a novel institution the ECB was.

The choice of a strategy later known as the two-pillar approach was demanding as there were pressures in the form of uncertainty which surrounded the beginning of the Monetary Union. Otmar Issing, as the first chief ECB economist knew very well that for any mistake made there would be a high bill to pay. He, despite this, did not want to just adopt the monetary policy of Bundesbank and to inherit the credibility for the ECB in this way. He knew enough about the negatives of this Bundesbank's monetary policy and thus knew that such a brand new institution cannot afford any negatives.

Keeping on mind all these, in 1999, the Governing Council announced the monetary policy strategy for the Monetary Union.

These days, eight years after this announcement, the ECB monetary policy can be described as very successful. It has anchored the inflationary expectations and thus prepared favourable economic environment.

This monetary policy strategy works on the basis of the two pillars, the price stability is to be achieved through the cross check of information flowing from both the pillars.

To gain the credibility means to work transparently. Unfortunately, in spite of the ECB' s pursuit of the price stability, this monetary policy strategy cannot be described as transparent. The principles on which the two-pillar approach is based are relatively good communicated and clarified. In practice, clarification and communication is far away from the principles.

The ECB when making the monetary policy decision constantly relied or at least it seemed to rely (what led to further doubts and confusion) on the economic pillar only, what consequently, spread a debate about the position of the monetary pillar.

This position and its relevance should me clarified in order to clear up doubts about the successful monetary policy strategy. However, it is probable that there is nothing to be clear up as the monetary analysis simply has no considerable relevance for the monetary policy decision.

Otmar Issing at the press conference held in Frankfurt am Main in 2006 admitted that some facts around monetary pillar's relevance for monetary policy decisions might shed the doubts on its usefulness.

However, one of the main reasons why the monetary pillar was build was not to forget the importance of money in the world of low inflation. In meantime, the interest in money has really increased, to support this statement, there were number of contributions dedicated to money¹⁴.

It would be then definitely short-sighted to follow Svensson's words and to throw the main idea of the monetary pillar on the heap of garbage (Svensson, 2003). However, this leaves the question of the separate monetary pillar's relevance open.

In my opinion, the monetary pillar cannot fulfil its task in the eyes of public as long as there is be a lack of communicating the monetary pillar 's importance for the monetary policy decision making.

To that time the Issing's defence of the monetary pillar will sound rather superfluous¹⁵.

¹⁴ e.g. White, 2005

¹⁵ "The interpretation of information from the monetary pillar sometimes has been anything but simple not least because of substantial portfolio shifts. But, this is not to say that economic analysis on balance "did Berger" or even "standing alone" could have given complete and consistent guidance to the ECB for maintaining price stability..." (Issing, 2006)

Appendix 1

Alternative monetary policy strategies and the reasons why the ECB did not go the conventional way

There is a number of other monetary policy strategies used by other national banks and which were considered when creating the ECB monetary policy. The fact, that this was a new institution was the most probably reason for not going the conventional way, the way where it is inevitable to rely on things happened in the past, which the ECB did not have.

Monetary targeting

The principle of monetary targeting is that the central bank sets a specific interest rate, which is compatible with price stability, according to which the central bank changes the official interest rate in order to speed up or slow down the monetary growth.

For effective use of this alternative, there are two conditions to be fulfilled, as it is described in Bulletin of the ECB. Firstly, there has to be defined a stable relationship between money and the price level. Secondly, the monetary stock should be controllable also over short time periods. (ECB, 2004)

The monetary targeting could not be the choice, because according to the decision of the Governing Council, it is important to take into account also other variables than money and, in addition, there were some doubts about the empirical properties of money as there was a transition to Monetary Union, all of this already explained in Chapter 1.

Inflation targeting

The key principle of this alternative is the central bank's forecast. As it is described in the Revenda's book, this approach works in three stages. The first one is to set the inflation target and the exception of its reaching, the second, to make a forecast based on a econometric and the last one is to compare the predicted inflation – prognosis and its deviations. The answer to some deviations from this prognosis and from the target is satisfied by mechanical reactions, either increasing or decreasing the operative interest rate. (Revenda et al, 2004)

The Governing Council decided not to adopt solely this strategy because it was risky to rely on a single forecast because the models available did not comply with the brand new conditions the euro area created.

Exchange rate targeting

In this approach, there are two main conditions that have to be fulfilled in order to work properly. The economy of such country that uses this monetary policy approach must be relatively small and open so that the production and consumption of internationally traded goods and services create a major part of economy and thus the changes in the exchange rate have a big impact on the price level as the exchange rate changes affect the prices of import.

As the European Union does not fulfil the two above mentioned conditions, this strategy was refused at the very beginning.

Appendix 2

The medium-term orientation of the two pillars strategy

This medium-term orientation gives the monetary policy of the ECB enough room for flexible response to various potential economic shocks from the point of the time frame.

Generally, economy of any country is very often a target of unpredictable shocks affecting the price stability. The central bank's monetary policy can react to these shocks only with time lags, that is why it cannot keep the inflation on a certain level all the time as well as to bring it back to the desired level in a very short time. The monetary policy can work only in the longer periods of time and also needs to view the future when decision making.

All the shocks affecting the economy have a specific nature and as such it is inevitable to choose the right monetary policy response with respect to their nature.

There are shocks that have to be solved promptly (e.g. demand shocks moving the output as well as prices in the same direction). This prompt reaction will not only keep the price stability but also stabilise the economy as a whole.

On the other hand some shocks (e. g. cost-push nature that move the prices and the output in the opposite direction) do not require prompt aggressive reaction in order not to cause volatility in employment, volatility in real activity and thus to maintain the stable price level over the longer horizon.

Thus, the medium-term orientation not only gives enough room for flexible reaction, it also provides enough room for an appropriate monetary policy responses.

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List of charts

Abstract

Monetary policy of the ECB was created under the conditions of extreme uncertainty. This was probably one of those reasons, why Otmar Issing – the mastermind of monetary pillar of ECB's monetary strategy decided not to go the conventional way. His decision and the key principle of the monetary pillar – to give the money a prominent role - faced and still face the criticism.

Nevertheless, the monetary policy of the ECB works quite successfully more than eight years after the implementation of the two pillars approach.

Thanks to the stable price level, the ECB is these days one of the most credible institution in the world.

If the credibility of the ECB is also a merit of the monetary pillar, how the monetary pillar was created, how it works, its contribution to the price stability in the Euro zone, and if implementation of this pillar was a right decision – this all is going to be discussed in this bachelor paper.

Key words: monetary policy, price level, central bank, monetary aggregate **JEL Classification**: E520, E580, E310

Abstrakt

Měnová politika Evropské centrální banky byla vytvořena za velmi nejistých podmínek. To byl pravděpodobně jeden z hlavních důvodů, proč se Otmar Issing, mentor měnového pilíře, rozhodl pro netradiční strategii měnové politiky pro nadcházející měnovou unii.

Jeho rozhodnutí a zároveň základní princip měnového pilíře – prominentní role peněz čelí neustále kritice.

Měnová politika ECB navzdory kritice splňuje stanovený cíl cenové stability už více než osm let a vzhledem k tomu je nyní jednou z nejdůvěryhodnějších institucí.

Zásluha měnového pilíře v dosáhnutí zmíněné dlouhodobé cenové stability je však téma k diskuzi.

Historie měnového pilíře, jeho fungování, charakteristika a zejména relevance pro měnovou politiku ECB je předmětem této bakalářské práce.

Klíčová slova: měnová politika, cenová hladina, centrální banka, měnový agregát

JEL klasifikace: E520, E580, E310