PREPARING THE EURO CHANGEOVER – ROMANIA'S CASE

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ABSTRACT

This paper analyses the effects on inflation after adopting the euro currency. The research aims to help Romania better understand and prepare for the consequences of the changeover. There are a large number of studies carried out to measure the effect of euro transition on price changes (for the euro area member states). After looking over some papers, we shall analyze the main issues Romania has to handle when adopting the euro. For this study, most of the data used is available on the Eurostat Database. As our paper will show, the changeover is expected to bring significant price increases in a number of sectors. Most exposed are those dedicated to recreational activities. However, the impact on aggregate HICP should to be relatively low.

Keywords: Euro changeover, Inflation perceptions, EMU countries, Eurozone, HICP

1. INTRODUCTION

As a European Union (EU) member, Romania is expected to adopt the euro and join the European Monetary Union (EMU) as soon as it meets the Maastricht convergence criteria. Romanian Government committed that joining the euro area becomes an achievable and necessary objective as of 1 January 2019 and sent the "2014-2017 Convergence Programme" to the European Commission In May 2014,CristianPopa, the then-vice-governor of National Bank of Romania (NBR) commented "The objective has a big political component. I think it is feasible, I think it is very ambitious. I took it as a target which Romania proposes for the future". It is well-known that the adoption of the single currency is a crucial step in a Member State's economy, for this reason the economic conditions stated by the convergence criteria are designed to ensure the country is prepared for the changeover.

According to NBR website [1], "Starting with May 2011, preparations for euro adoption are coordinated at national level by the Inter-ministerial Committee for changeover to the euro (Romanian only), chaired by the Prime Minister, comprising the NBR Governor, the Minister of Public Finance, other ministers and heads of other government organizations, representatives of employers' associations and trade unions."

This paper's purpose is to analyzethe effects on inflation after adopting the euro currency. It might seem that this concern is not such an urgent matter, nonetheless, when preparing

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the transition to the euro area; it is of great importance to analyze the immediate impact it has on prices. The monetary integration particularly challenges the national bank, which must hand over the monetary policy to the European Central Bank (ECB). This is one main reason why a good understanding and an accurate forecast of the inflation generated by the euro adoption are of great help for both the authorities and citizens. Also, quantifying its consequences on consumers should be a point of great interest.

The introduction of the euro in 12 EMUcountries (2002) sparked a series of debates on its effects on the increase of prices. According to BjörnDöhring and Aurora Mordonu(2007)[2], two years after the transition to the euro, more than 90% of euro area consumers associated with euro adoption with price increases.

Subsequently, similar concerns emerged in Slovenia (2007), Slovakia (2009) and Estonia (2011).

2. RELATED LITERATURE

The EMUcountries have alreadycompleted a number of studies that measure the effect the euro changeover had on price deviations. Among these, some very interesting researches were coordinated by the Deutsche Bundesbank for Germany (2002 [3], 2004 [4] ,the Central Bank of Belgium (2002) [5], Pollan W. for Austria (2002) [6], Paolo Del Giovaneand Sabbatini Roberto for Italy (2008) [7], Eurostat for Slovenia (2007) [8] and Malta (2008) [9].

Furthermore, there are a couple of interesting papers preparing the euro transition developed before joining the euro area (Czech Republic, Hungary, the Slovak Republic). Felix Hüfner and IsabellKoske (2008) [10] have an interesting approach in their paper; they study the impact of euro adoption on both inflation and interest rates, on the short and also on medium term.

Most empirical studies related to the changeover effect on price levels are carried out at country level and not aggregated on the Eurozone. The reason is very simple: there are deep structural differences between these countries such as different taxation rules, different government policies, different weights associated to the inflation sub-sectors, etc. However, most papers generally agree on the same conclusion: the increase of prices should not be regarded as a generalized phenomenon; it only concerns certain categories of goods and services. For this reason, its impact on the aggregate price index is rather modest. Most studies estimate an aggregated effect of about 0.2% - 0.3%, the result follows the estimation published by Eurostat, regarding the entire Eurozone (2003).

Perhaps, Folkertsma (2001) [11] is the first one to predict that the adoption of euro will generate an augmentation of the price level. His analysis was based on the theory of agents "rounding up" prices and costs when exchanging the local currency with the euro. The phenomenon is also known as "menu costs". The idea of menu costs has gained reputationafter the adoption of the single currency. Most of the research that followed represented an attempt to identify any price leap caused by the euro adoption. A great deal of these studies used themenu costs theory as a theoretical foundation.

Most of the debate on price rises has its root in the observation that consumer expectations regarding inflation have increased substantially in the nearness of adopting the euro. On that account, a study carried out by the National Bank ofCzech Republic emphasizes the

importance the government should attach so that the households and firms are very well informed on the changeover effects.

There have been carried out a large number of microeconomic studies focused on either the aggregated price index or on the restaurant sector. The motivation for the second option would be that the restaurants themselves seem to be the starting point for the theory of menu costs. Adriani et al. (2004) [12] examine the inflationary consequences of theoretical models and empirical models in the restaurant sector. The data used in this paper was taken from the Michelin Red Guide and supports the assumption that there was a definitive change in relative prices of EMU member states. Also, Gaiotti and Lippi (2005) [13] focused their studies on the price evolution in the restaurant sector in Italy, between 1998 and 2004. Their conclusion is that, for this sector, the changeover meant a priceincrease of 3% - 4%. They showed the possibilitythat consumers attributed the entire increase acquired during this period to the change of currency.

There is also Ercolani (2007) [14], who grants three main explanations for the changeover inflation: the existenceof menu costs in re-posting prices, of sellers rounding-up prices at the time of thecurrency changeover, and of temporary monopolistic price increases due to the rational limited attention on the part of buyers. His paper presents a time-series regression analysis of price inflation at the time of the euro currency changeover in January 2002. His conclusion is that the lack of evidence for reduced inflation immediately prior to the euro changeover suggests menu costs are not important.

3. THE RESEARCH METHODOLOGY USED

In order to analyze the effect of the euro area transition, this paper uses the data available on Eurostat database [15] on the Harmonized Indices of Consumer Prices (HICP) with all its sectors. The countries taken into consideration are the EMU member states, Great Britain, Sweden and Denmark. Using the data from the last three states should help observe that the price increasein some sectors is due to reasons other than the euro adoption. This research uses monthly series of annual and monthly HICP rates. There are 4 different periods taken into consideration. The first period (2002) – compares the data of the 12 EMU countries with the other three countries mentioned above. We also looked for dissimilarities between Slovenia (2007), Slovakia (2009), Estonia (2011) and the monthly inflation rate of the euro area in the same periods.

There is worth mentioning that the National Bank of Romania (NBR) uses the Consumer Price Index (CPI) as a measure for inflation. Therefore, their direct inflation targeting policy is conducted taking into consideration the CPI values, not the HICP data. Between these two indices, there are a series of conceptual differences (see NBR methodological notes on the inflation reports [16]), however their influence on the final output is of little importance. For the considered periods, the difference between the two indices is often smaller then 0.1. Taking this into account, the paper only considers the HICP data published.

Unfortunately, lately, bigger gaps between CPI and HICP (~0.5) have been observed.There could be two main reasons: either the underground economy plays an important role (this possibility is sustained by the different weight values regarding goods such as tobacco, spirits – well known for their trading on the black market)or the massive changes in the consumption and in the weights used for measuring utilities (such as electricity and gas –

markets known to be in the process of “liberalization”). However, this topic will not be further considered in our paper.

Data regarding the consumer perception on inflation was taken from the European Commission publications. Data were processed and manipulated using different specific tools.

The next section measures the impact of adopting the single currency on aggregated HICP and on its sectors. The below analyze presents different situations where the price index was deviated from its usual position. One should notice that we consider all EMU member states. As far as Romania is concerned, it is worth mentioning that we should paya greater deal of attention to what happened in countries such as Greece, Portugal, Slovakia, Estonia. Even though their standard of living is better, they are closer to Romania’s case then are the more developed countries such as Germany, France, etc.

4. THE IMPACT OF EURO ADOPTION ON PRICES – EMU COUNTRIES

The study ofaggregate HICP (cp00)time series for the following periods: 2002, 2007 (Slovenia), 2009 (Slovakia),revealed that there had not been substantial increases in prices in January or in the months that followed. On the other hand, in Estonia (2011)the first two months after euro adoption where characterized by an increase in the price level, compared to the average price of EMU member countries. Also, during the months prior to the euro changeover, monthly inflation recorded higher values;therefore it cannot be exactlydetermined what percentage of the price increase is due to the change of currency.

Hahn (2002) [17]advocates for the exclusion of the seasonal factor when calculating the price indexfor foodand energy, arguing that due this cause, aggregate HICP values can be misleading. However, as Chart 1 shows, aggregate HICP does not seem to reflect a price increase causedby euro adoption. Charts 2 and 4 confirm that Slovenia and Estonia did manage very well the immediate effects on inflation when entering euro area. On the other hand, Slovakia encountered small difficulties, especially the first 6 months after the euro adoption.

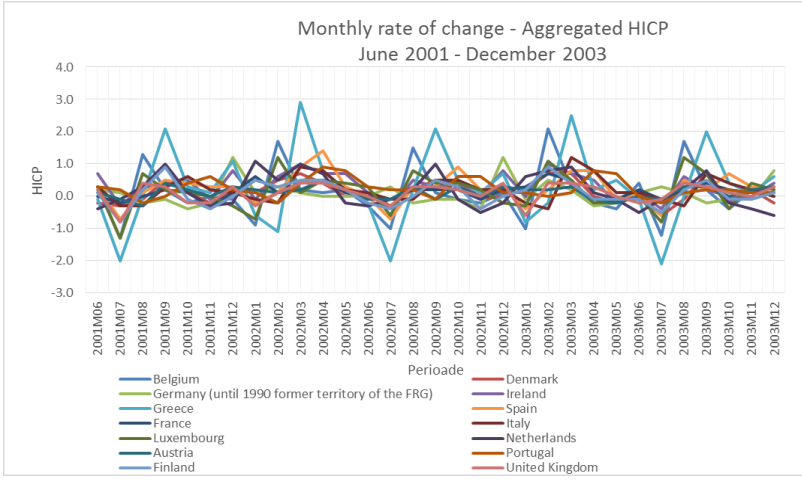


Chart 1. Aggregated HICP – Monthly rate of change in the Eurozone, Denmark and United Kingdom (2001M06 – 2003M12

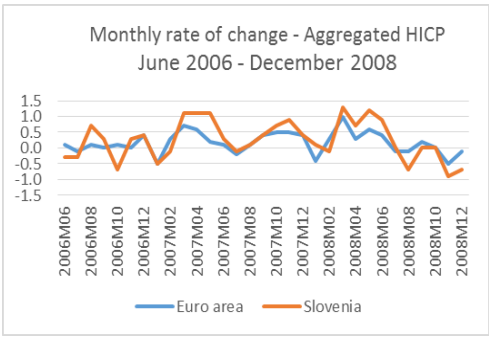


Chart 2. Aggregated HICP – Monthly rate of change

Comparison between Slovenia and Euro area (2006M06 – 2008M12)

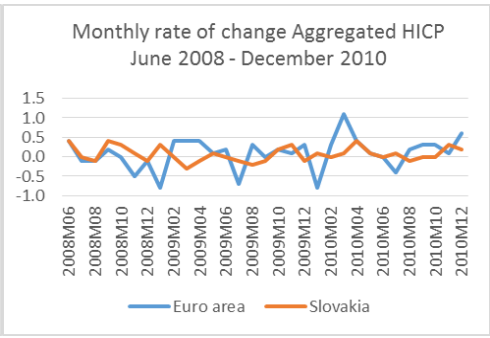
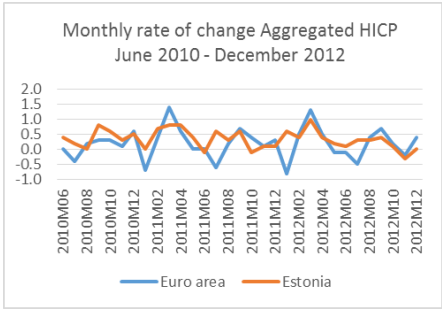


Chart 3. Aggregated HICP – Monthly rate of change

Comparison between Slovakia and Euro area (2008M06 – 2010M12)



Chat 4. Aggregated HICP – Monthly rate of change,

Comparison between Estonia and Euro area (2010M06 – 2012M12)

Before summing the examination results for each sector, it is worth knowing that Annexes 1, 2, 3 and 4 contain explicit charts for each sector and for each examined period. Some of the details presented below could be better understand if correlated with the according information available in the Annexes.

As far as the food and non-alcoholic beverages sector (CP01) is concerned,the model is a mixed one, with substantial increases in prices, increases that occurred the year prior to the currency change (Spain, Greece) and in early 2002 (Finland, Austria) . This sector is one of great interest for Romania, especially regarding the highly-volatile prices, i.e. those of fresh fruit and vegetables, eggs. Unlike more developed countries, the weight these goods have when calculating the HICP is approximately 2.5 times higher than in the euro area (2011, Romania 6.2%, Eurozone 2.7%).

Together with the transition to euro, increases in prices can be also noticed in the alcoholic beverages, tobacco and narcoticssector (CP02). However, no conclusion can be drawn, due to the fact that in this sector prices are regulated by tax increases. This sector is also of great significance in Romania's case. Though, as it shown in Charts no.2 (Annexes 1,2,3,4), regulation and taxation are the main reasons for price volatility

Clothing and footwear sector (CP03) is not affected by the currency conversion, but seems to follow a fluctuating model, with seasonal variations - significant increases in every January and July of each year and decreases in their previous months (December and June). Months of growth coincides with the discounts periods.

Fluctuations occurred in the housing sector (CP04), especially in theactual rentals for housing sub-sector (CP041). Austria and Ireland noticed declines in rental prices, on the contrary in the Netherlands and Portugal showedprice increases. However, the increases were causedmainly due to state regulation in this market.

Price fluctuations have also been observed in the health sector (CP06), however, they cannot be associated with the transition to the euro area, but most probably with legislative changes concerning government policies on health. Nonetheless, during the changeover, Ireland experienced a substantial increase in prices, which seems to be due to the currency change.

Sub-sector purchase of vehicles (CP071) has also noted slightly changes in price. In Germany, Ireland and Italy, January 2002 coincided with slight price increases, uncommon characteristic of this period. On the other hand, Greece and Luxembourg, the same period has brought small reduces in price. We tend to believe that the price rise is due to the adoption of euro.

In the education sector (CP10) price changes are unanticipated, and often coincide the month of September of each year (therefore the beginning of the academic year). This market is very well controlled and price changes does not appear to be caused by the transition to the euro area, but rather by government regulations. Still, there were noticed small price increases in January 2002 for Germany, Ireland and the Netherlands.

Another significant increase was recorded in the sub-sector restaurants and cafés(CP1111). Countries that have accomplished growth in this sector are Finland, Germany, Ireland, Luxembourg, the Netherlands, Spain and Slovenia.

There are several sectors where the transition to euro area seems to have had no impact in the increase of prices. Among these it can be included thefurnishings, household equipment and routine maintenance of the house sector(CP05).

5. CONCLUSION

Cash change is expected to bring significant price increases in a number of sectors, most exposed are those dedicated to recreational activities. However, the impact on aggregate HICP appears to be relatively low.

The effect should be better perceived by people with higher revenues because they spend a larger share of their income on leisure activities.

Competition in the product market seems to play an important role in determining the level the transition to euro area affecting prices. The highly competitive product markets are less exposed to the risk of rising prices. This is another reason for wealthy people to experience the inflation effects of the changeover (It is well known that luxury goods markets are far from being competitive).

Although the overall real effect of adopting the single currency was quite low in most euro area countries; there was a widespread feeling among the population - that the changeover

has brought significant price increases. If such a perception will be felt by Romanian consumers, there is the possibility of a negative attitude towards euro. However, studies ran by the EMU member states show that this attitude is unlikely to have negative consequences for actual inflation. However, the better informed the population, the less risks of unexpected price increase arise.

There is another measure the Government could take to lower the chances of immediate price rise. It was proved that requiring dual currency display prices for a longer period would bring lower rates of price growth. The retail sector and the restaurants and cafés seem to be mostly influenced by these measures. On the other hand, adopting an easy to convert rate of exchange did not seem to bring significant benefits.

As far as Romania is concerned, adopting the euro as a new currency will create more medium-term price effects;the main argument being that Romania's income level is below the average in the euro area. Usually, in such cases, the price level tends to higher price levels, close with those in the more developed economies, causing real exchange rates to appreciate. Before the adoption of euro, the real appreciation is reflected in the appreciation of the nominal exchange rate. With the adoption of the euro, this channel is no longer available and the catch-up process would rather reflect in higher inflation rates than in the exchange rate appreciation.

Once again, note that along with the conversion of price, the changeover process also involves the loss of monetary autonomy, the decision-making role of monetary policy being transferred European Central Bank. First of all, this means that short-term interest rates set by the central bank are determined based on the euro area as a whole. As an emerging market, Romania tends to grow faster and has slightly higher inflation than the average in the euro area, thus, the interest rate, as expected, would have higher values. During the recovery period, interest rates will tend to be lower, thus discouraging saving and sustaining investments.

6. ACKNOWLEDGEMENT

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Annex no.1 Aggregated HICP and its sectors - Monthly rate of change – Euro zone, Denmark and United Kingdom – June 2001 – December 2002

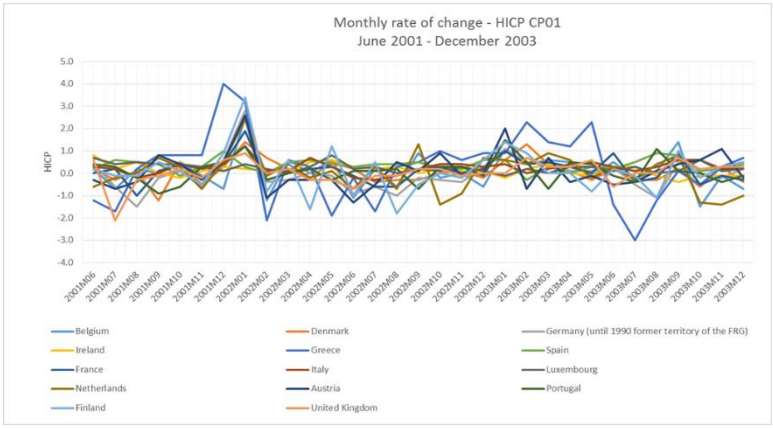


Chart 1 – Monthly rate of change HICP CP01

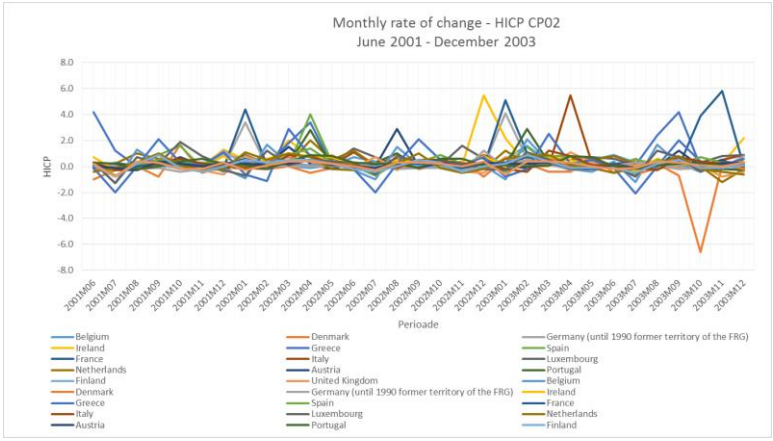


Chart 2 – Monthly rate of change HICP CP02

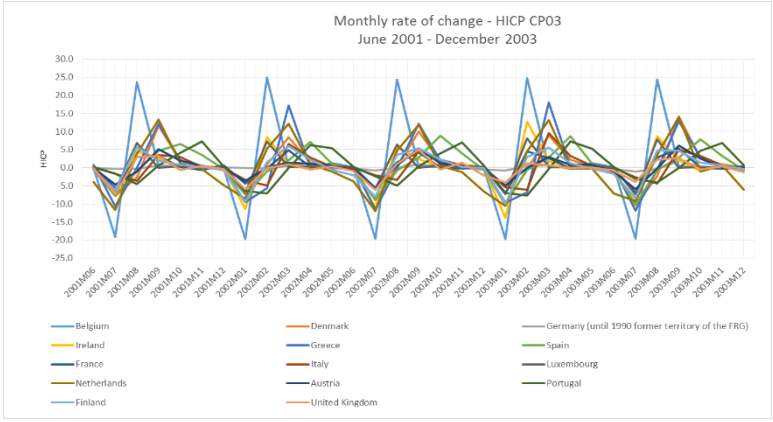


Chart 3 – Monthly rate of change HICP CP03

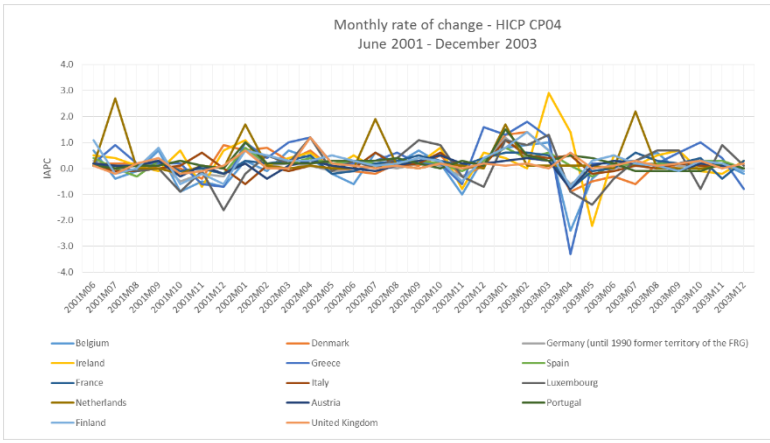


Chart 4 – Monthly rate of change HICP CP04

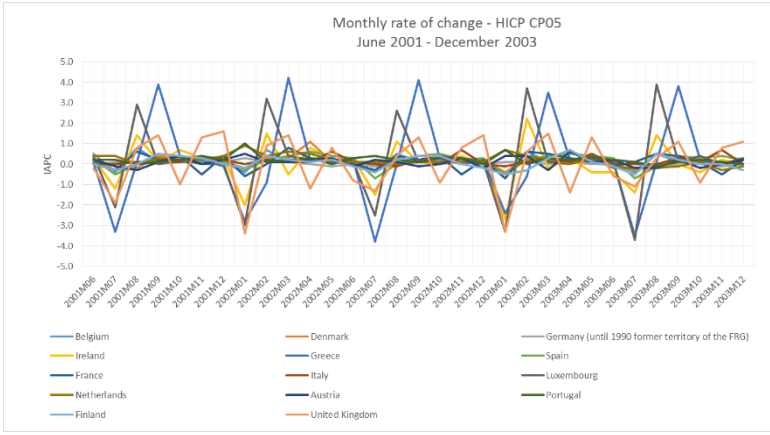


Chart 5 – Monthly rate of change HICP CP05

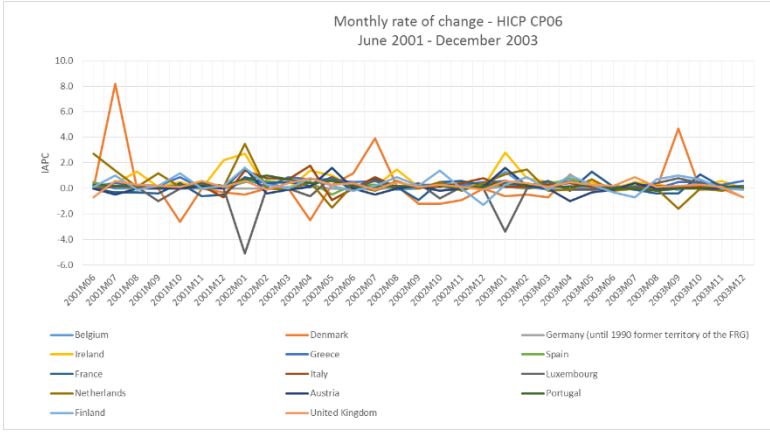


Chart 6 – Monthly rate of change HICP CP06

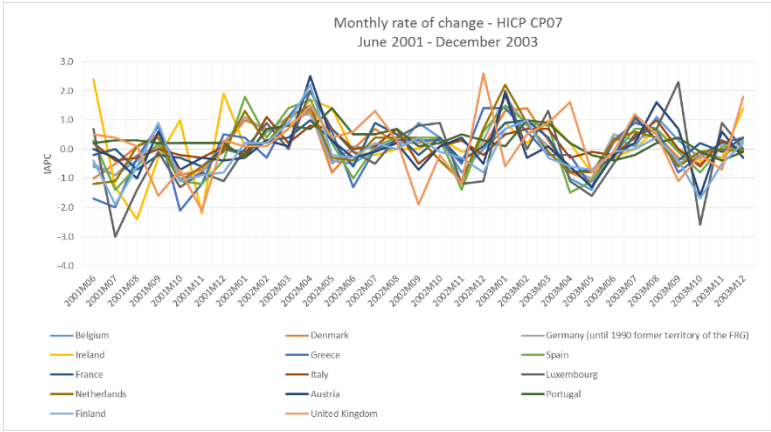


Chart 7 – Monthly rate of change HICP CP07

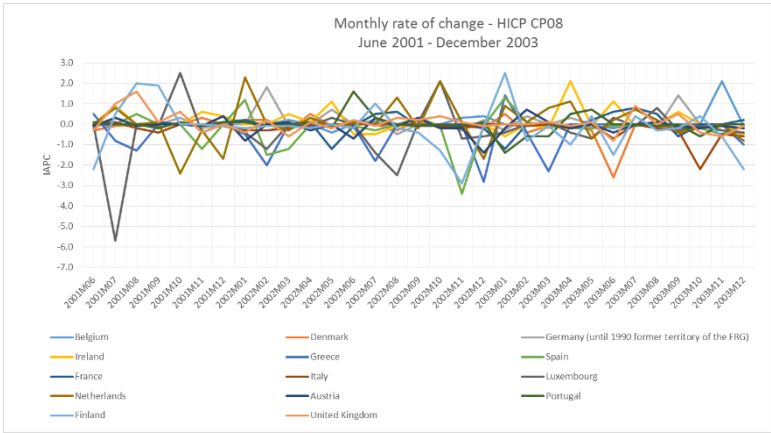


Chart 8 – Monthly rate of change HICP CP08

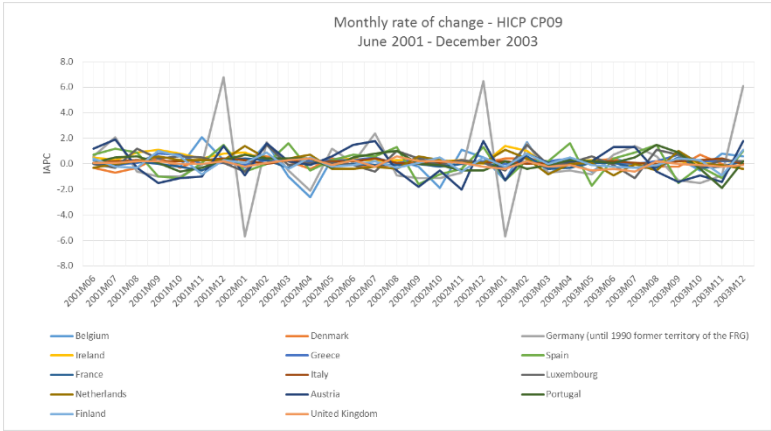


Chart 9 – Monthly rate of change HICP CP09

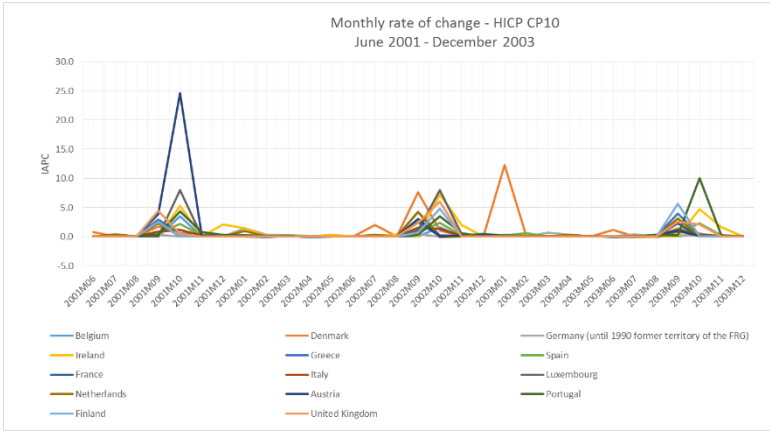


Chart 10 – Monthly rate of change HICP CP10

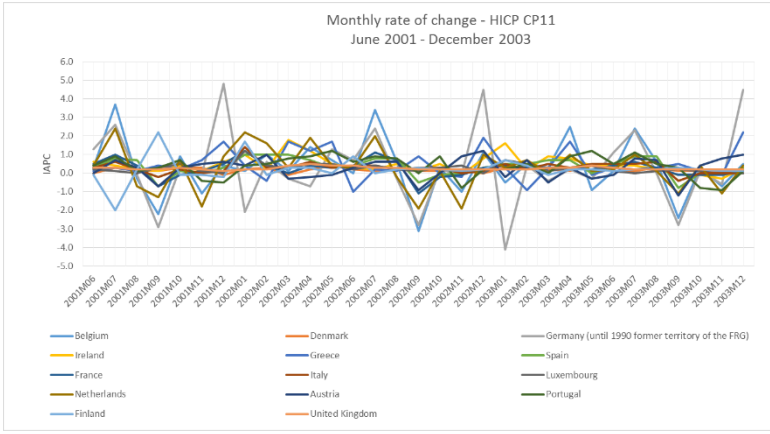


Chart 11 – Monthly rate of change HICP CP11

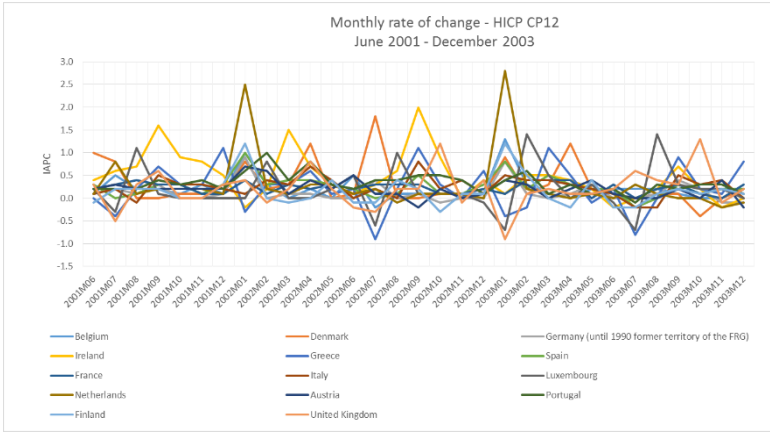
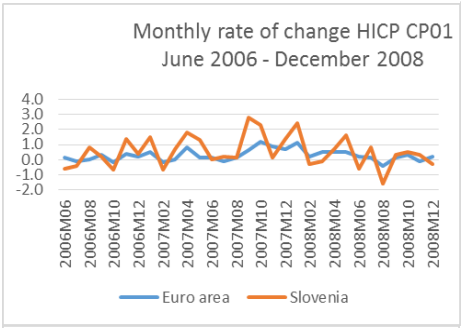
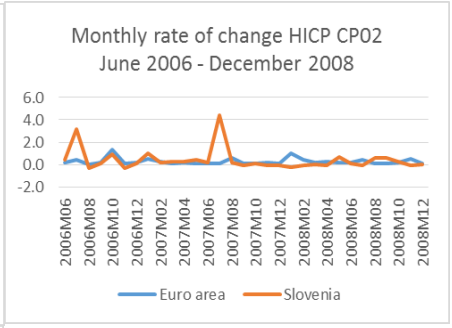


Chart 12 – Monthly rate of change HICP CP12

Annex no.2 Aggregated HICP and its sectors - Monthly rate of change – **Slovenia** – June 2006 – December 2008





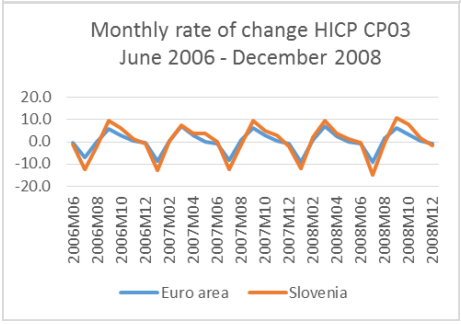
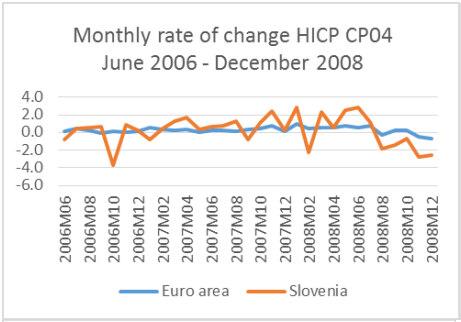
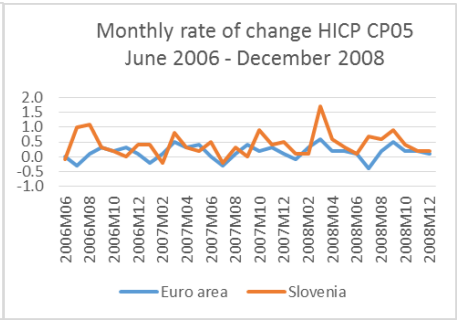


Chart 1 – Monthly rate of change HICP CP01 Chart 2 – Monthly rate of change HICP CP02 Chart 3 – Monthly rate of change HICP CP03





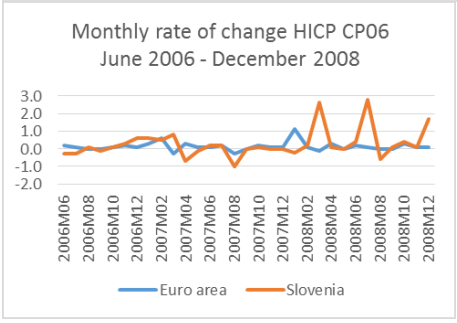
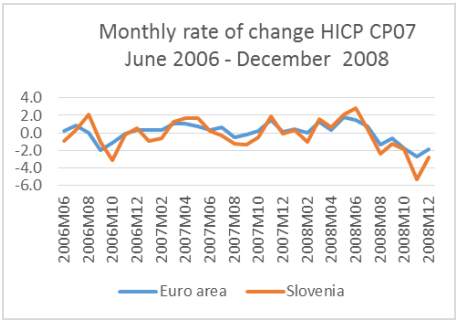
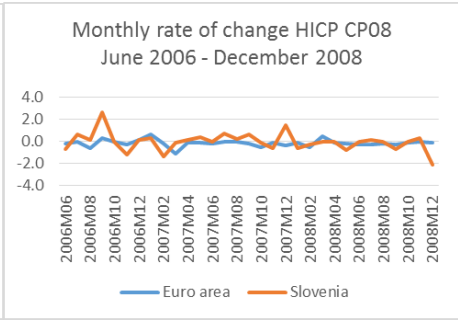


Chart 4 – Monthly rate of change HICP CP04 Chart 5 – Monthly rate of change HICP CP05 Chart 6– Monthly rate of change HICP CP06





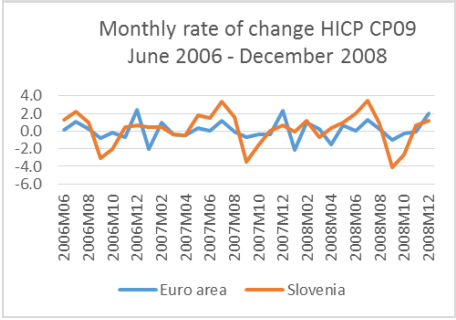
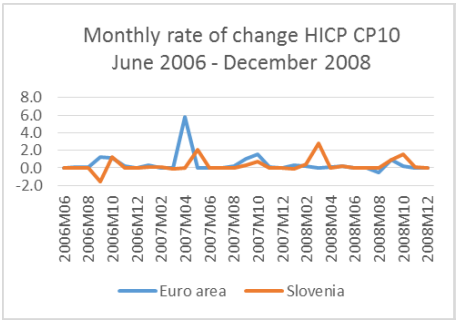
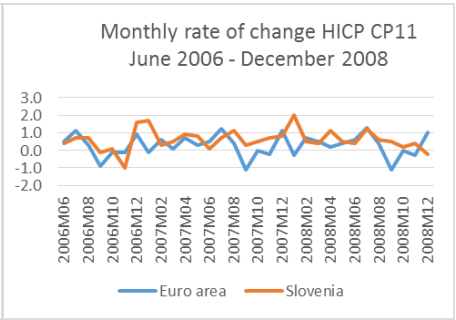


Chart 7 – Monthly rate of change HICP CP07 Chart 8 – Monthly rate of change HICP CP08 Chart 9– Monthly rate of change HICP CP09





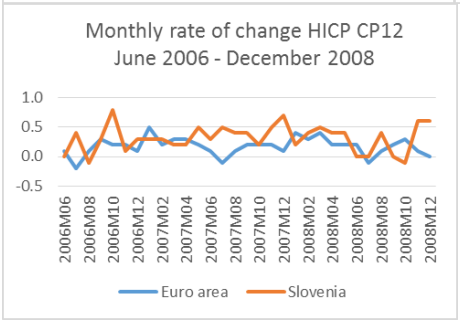
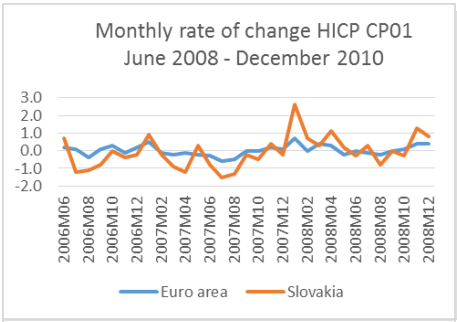
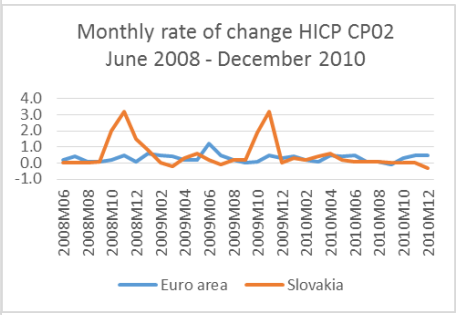


Chart10 – Monthly rate of change HICP CP10 Chart11 – Monthly rate of change HICP CP11 Chart12– Monthly rate of change HICP CP12

Annex no.3 Aggregated HICP and its sectors - Monthly rate of change – **Slovakia** – June 2008 – December 2010





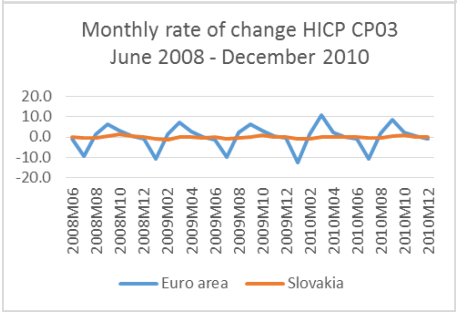
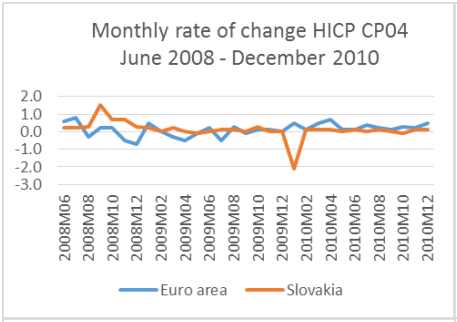
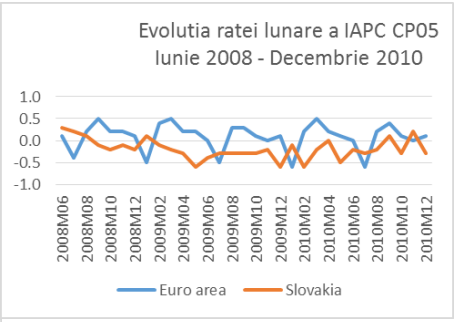


Chart 1 – Monthly rate of change HICP CP01 Chart 2 – Monthly rate of change HICP CP02 Chart 3 – Monthly rate of change HICP CP03





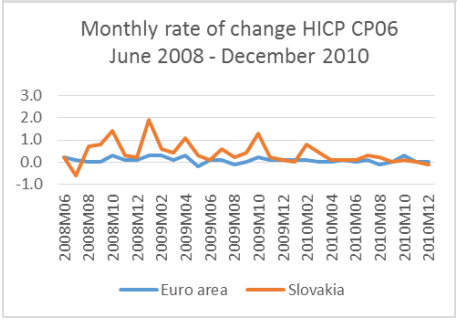
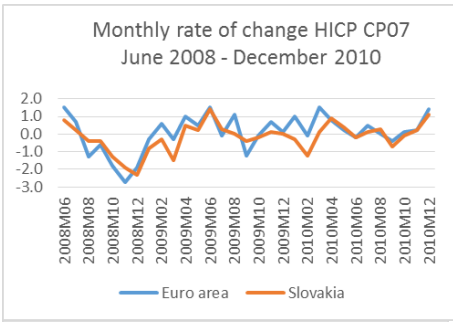
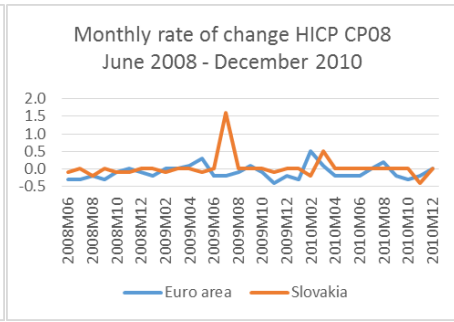


Chart 4 – Monthly rate of change HICP CP04 Chart 5 – Monthly rate of change HICP CP05 Chart 6– Monthly rate of change HICP CP06





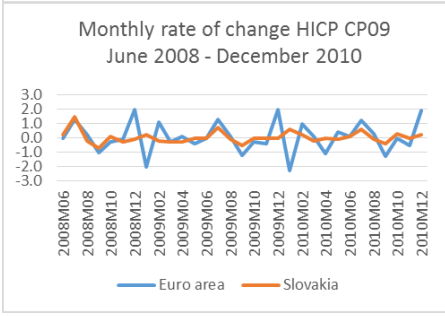
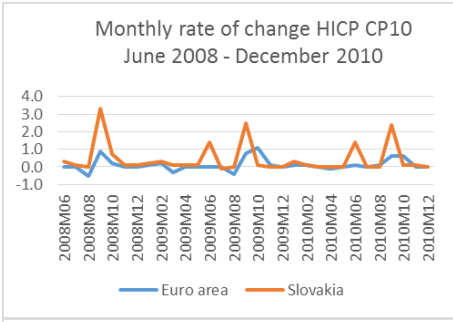
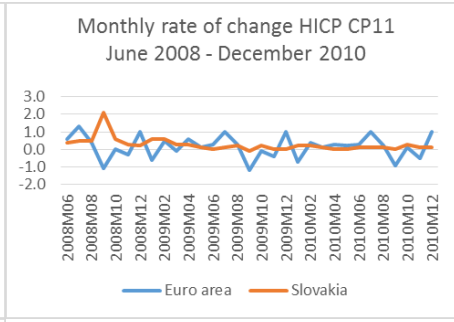


Chart 7 – Monthly rate of change HICP CP07 Chart 8 – Monthly rate of change HICP CP08 Chart 9– Monthly rate of change HICP CP09





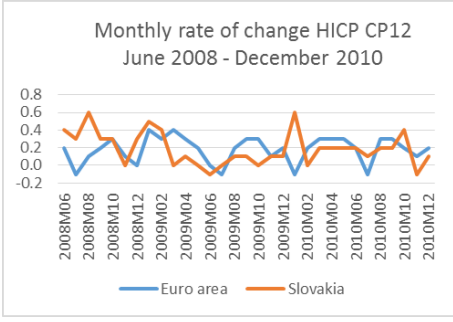
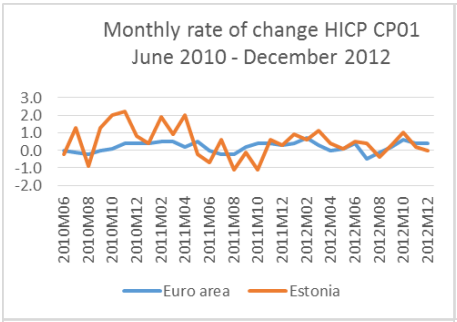
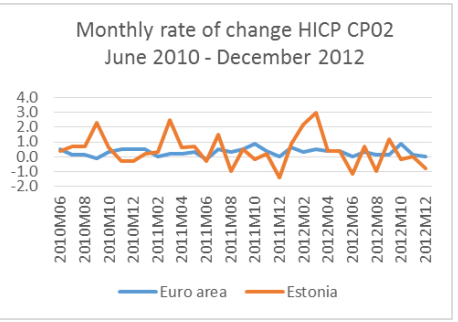


Chart10 – Monthly rate of change HICP CP10 Chart11 – Monthly rate of change HICP CP11 Chart12– Monthly rate of change HICP CP12

Annex no.4 Aggregated HICP and its sectors - Monthly rate of change – **Estonia** – June 2010 – December 2012





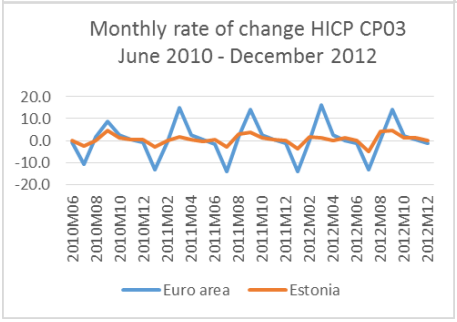
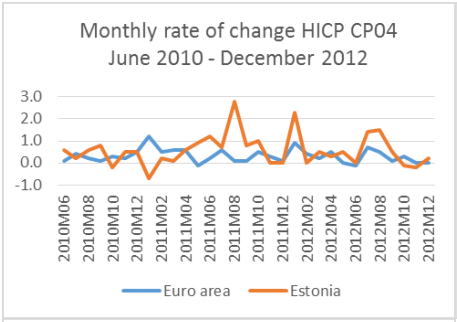
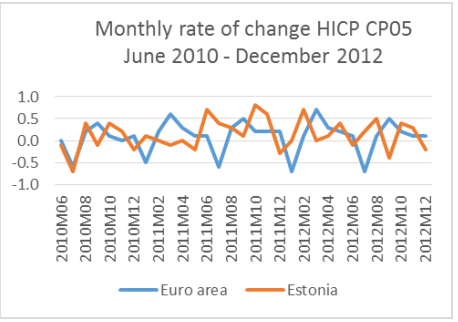


Chart 1 – Monthly rate of change HICP CP01 Chart 2 – Monthly rate of change HICP CP02 Chart 3 – Monthly rate of change HICP CP03





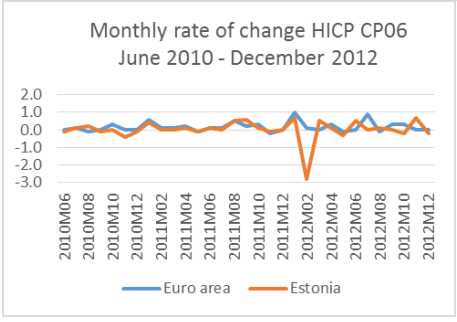
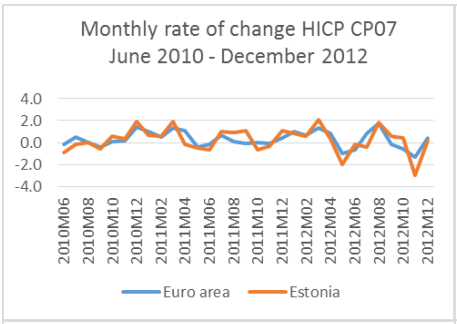
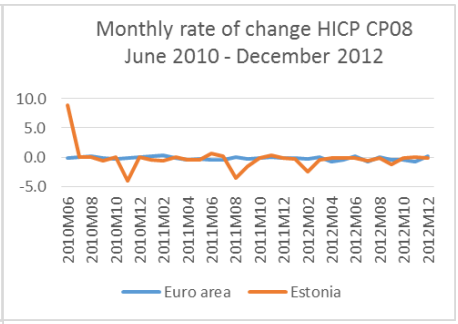


Chart 4 – Monthly rate of change HICP CP04 Chart 5 – Monthly rate of change HICP CP05 Chart 6– Monthly rate of change HICP CP06





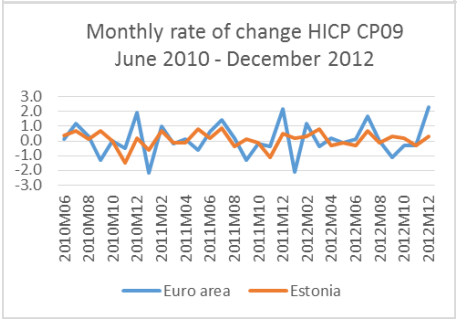
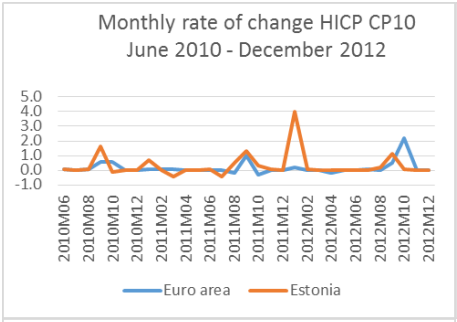
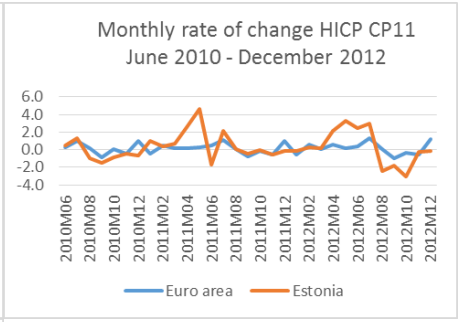


Chart 7 – Monthly rate of change HICP CP07 Chart 8 – Monthly rate of change HICP CP08 Chart 9– Monthly rate of change HICP CP09





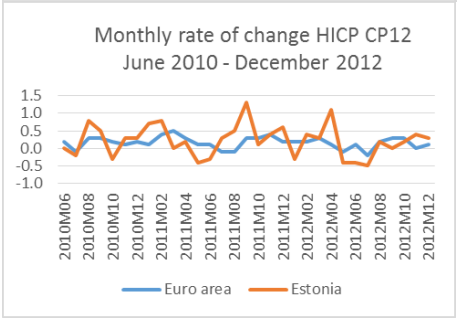


Chart10 – Monthly rate of change HICP CP10 Chart11 – Monthly rate of change HICP CP11 Chart12– Monthly rate of change HICP CP12