Correction manual Economics of the EU – Exam 19 DEC 2009 – 2010-I

General requirement: The candidate in this course should in his answers to the exam questions be able to show that he knows the workings of EU's economic institutions, understands the major policies of the EU in the economic areas, and is able to apply the readings by analysing and commenting on European Union economic events or trends not necessarily fully described in the actual readings and by using also a combination of the various parts of the readings.

Answer to Question 1.

Reference: Chapter 6 in Eijfinger and De Haan and De Grauwe chapter 4, 7 and 11.

Answer to Question 1.1.

The difference between the covered interest parity condition and the ex ante uncovered interest parity condition is primarily described in section 6.1.1. Here, financial integration is defined as the degree to which capital flows equalise expected and realised returns on comparable assets denominated in different currencies.

Covered interest parity (CIP) holds if the forward premium (discount) equals the difference between the domestic and foreign nominal interest rates at the appropriate maturity.

A forward premium (discount) means that the forward price of foreign currency delivered and paid for some time in the future expressed in domestic currency is higher (lower) than the foreign current spot price.

Ex-ante uncovered interest parity (UIP) holds if the expected nominal exchange rate change equals the nominal interest differential at the appropriate maturity.

A reproduction of equations in table 6.1 will support the argument.

CIP and UIP measures to important aspects of financial integration: capital mobility and substitutability among assets denominated in different currencies.

CIP is an arbitrage condition with covered positions, i.e. without any exchange rate risks. The degree of substitutability between domestic and foreign bonds based on exchange rate risks and the degree of risk aversion of the investors are therefore completely irrelevant. Since the absence of CIP suggests that there exists arbitrage opportunities, CIP should indeed hold in integrated markets (without transaction costs). Absence of UIP implies the existence of a risk premium in the exchange rate.

The CIP is the least stringent criterion for money market integration. A negative country premium is indicative of capital export restrictions, A positive country premium is indicative of capital import restrictions.

Figure 6.1 showing the deviations from CIP relative to Germany could be added to the answer of this sub-question as it is a good description of the decline in variations with the Basel Nyborg

Accord as an important milestone in 1988. Yet, the deviations were already relatively low for Belgium earlier.

Another use of the CIP is shown in Figure 6.2 where we measure the degree of money market integration by regressing mean absolute deviations of CIP vis-à-vis Germany against a constant. Here all nine European countries included in the study show significant negative trend coefficients (monthly change in the degree of money market integration). Yet, there are also many differences among EU countries.

Answer to Question 1.2

Figure 1 in the exam question shows the 3 month interest rate spreads in the Euro area compared to three of the non-Euro countries, the UK, Sweden and Denmark from august 2008 – May 2009. The time period is thus coinciding with the "worst" period of the socalled "financial crisis". In the whole period Sweden keeps almost the same interest rate spread difference compared to the Euro area. The spread is below the spread of the Euro area. This indicates a difference in financial integration between the Euro area vis-à-vis DK/UK compared to vis-à-vis Sweden. Moreover, it indicates more money market mobility in Sweden compared to the Euro-area. The graph also shows the impact of the financial crisis on all areas. From the end of September 2008 the interest rate spread rises significantly in all areas culminating in NOV-DEC 2008 with UK as the peak country. This emphasised the degree of collapse of the money market. Another interesting feature is the degree to which the development in the UK reacts with getting more spread variation than the Euro-area compared to the initial situation where the Euro-area and the UK spread were on the same level. As for Denmark, DK follows suit with the Euro-area in the first half year of the financial crisis, but after that the spread variations increases compared to the Euro-area and becomes closer and closer to the UK development. On the contrary, the Euro-area development approximates Sweden's development and the initial level after April 2009. As possible explanations, one may first of all say that initially the Euro-area, the UK and DK were most closely integrated possibly due to the relatively close similarity in business cycles between these areas. As for the changes to this initial structures there seems to be a clear sign of a higher risk premium being paid in the UK and DK compared to the Euro area, probably a reflection for DK that they are not part of the Euro area, and for UK, that they have been more badly hit by the financial crisis because of the importance of the financial sector, than the Euro-area.

Answer to Question 1.3

According to the Optimum Currency Area approach (OCA) openness (trade integration), and flexibility and mobility of factors of production are some of the main factors that can move countries closer to an optimum currency area. Whereas the focus in the Grauwe mainly is on wage flexibility and labour market mobility, he however also dedicates a couple of sections to the impact of financial integration (Section 2.1 Different Legal systems and Financial Markets, page 29-30 in particular). De Grauwe mentions that financial markets continue to work differently across the EU. This is mainly due to differences in legal systems in the member states and historically different monetary policies. E.g. in historically high-inflation countries the long-term bond market barely exists. However after the EMU the maturity structure of the bonds issued by e.g. the Italian and German government has converged, and so have the budgetary implications of the same interest rate shock. Thus monetary integration in the EU has eliminated some of the institutional differences that exist in national financial systems. However, deeper differences, i.e. those that are the result of

different legal system, will only disappear by a convergence of national legal systems/political integration.

Answer to Question 1.4

The treaties are not explicitly part of the readings, so the question is not primarily to be answered in a “legalistic” manner, yet, of course does the candidate know the treaty conditions more precisely, this will of course be valued positively as well.

One may say that there are three main areas that cover the compentence of the EU as regards financial integration. The competition rules, the Economic policy of the EU, and the Monetary policy of the EU, including the EMU. In the competition area, the EU as full competence to set the rules necessary for the functioning of the internal market. This is so before as well as after the Lisbon Treaty. In the area of economic policy both the EU and the Member States have competence, so we can define this area, as an area with a shared competence – but not a shared competence in the usual EU meaning of it - both before and after the Lisbon Treaty. In the Monetary Policy area, the EU has full competence.

Answer to Question 2

Reference: De Grauwe Chapter 9

The monetary strategy of the ECB should be defined during the answer. The monetary strategy first of all consists of the definition of price stability. This was initially defined as a year on year increase in the Harmonised Index of Consumer Prices (HICP) for the Euro area below 2 %. This was later changed to “close to 2 %”.

The strategy to achieve it is a two pillar approach The first pillar is a monetary one, where the ECB makes a forecast of the future trend growth of real GDP, future velocity of money, and hereafter finds the growth rate of the money stock, M3, that is consistent with the inflation target, close to 2 %. The selected growth rate of the Money stock is regarded as a “reference value”.

The second pillar identifies a number of variables that provide important information to forecast future inflation. These variables include inter alia wages, the exchange rate, bond prices and the yield curve, various measures of real activity, fiscal policy indicators, price and cost indices, and business and consumer surveys.

(De Grauwe, section 9.3, pag. 199-201)

Answer to question 2.1

The Balassa Samuelson effect is the effect of productivity growth on inflation. In the EU context the effect is often used to illustrate the potential impact of enlargement on the inflation and thus to illustrate the potential limitations of the monetary strategy of the ECB, especially the price stability target on 2%, ¨

In the Grauwe, the Balassa Samuelson effect is not regarded as a big problem, in fact he regards inflation differential caused by these as having an equilibrating influence. The largest impact of the

Balassa-Samuelson effect will be in the field of ERM-II. In this case, we are dealing with Member States under the convergence criteria where many of these countries are in a catching up process with Western Europe. The B-S effect in this case may lead to structurally higher inflation. This should however not be a problem once these countries are in the Euro-zone. The problems in the transition process comes from the fact that these countries have to maintain a rate of inflation that is close to Euro-zone inflation until entry into the monetary union, but at the same time the ERM-2 reduces the scope to use the exchange rate as an instrument to lower the inflationary dynamics coming from higher productivity growth.

The ECB has been criticised for many things and that they had not giving due regard to the B-S effect was part of the criticism before 2003. Yet, until now this has probably not been a major problem for the EMU countries, more so, however for the remaining group of non-EMU members, but ERM-II members.

Answer to Question 2.2

(Mostly chapter 7, but use of theory in chapter 2).

The effect of initiating a monetary union on respectively a hard-nosed and a wet government is described on page 145-147. Especially reconstruction of figure 7.1 would be helpful.

In the figure a considered monetary union between Italy and Germany is established. A common central bank takes over, and the low inflation (hard-nosed) government of Germany reduces its welfare by forming this monetary union with the high inflation country. This is so because the union's central bank is likely to reflect the average preferences of the participating countries. As a result the Union's inflation rate increases and will be located between Germany's and Italy's initial inflation level. The efficiency loss from the higher inflation must then be compared with the other gains from a monetary union, e.g. reduction in transaction costs, lower risks etc.

The low inflation country loses when it joins a monetary union with a high inflation (wet-nosed) country. Therefore it will not want to join a monetary union unless it can get some strict conditions fulfilled.

Answer to question 2.3

(De Grauwe section 9.2)

Figure 2 shows the development of the HICP for the Euro area from 2004 to end of 1. Quarter of 2009. In general HICP has been far from any indication of risk of disinflation for the whole period except from the time of the peak in mid 2008. From then on the inflation has fallen sharply and clearly we are not anymore talking about only a risk of disinflation but an actual disinflation. One should remember that we are dealing with average rates, so some member states still have inflation, others have disinflation.

The question is if this development is a consequence of some of the ordinary risks of disinflation that are present in the Euro-area or whether we might more consider the development as a one time development caused by the financial crisis.

Again, empirics, the development of Figure 2 until mid 2008 is probably the best indication that has it not been because of the financial crisis, the disinflation has probably not come. Or, put in another way, the EU has not in particular contributed to any higher risk of disinflation, probably more on the contrary. This has to do with the larger amount of goods that are now price set at the European level, which means that as long as there is not a world crisis- as with the financial crisis – there is generally a higher probability for a price development among member states that are fairly similar to the one at the EU level. Moreover, one should note that the ECB actually has changed its price stability definition to being close to 2% instead of below 2%. One should also note that the risks of disinflation generally are higher in areas/countries that have a relatively low degree of openness to the rest of the world – on the contrary the EU has a very high degree of openness both internally, and to the rest of the world.

Answer to Question 2.4

(De Grauwe section 9.4, 214-218).

The ECB uses three types of instruments: open market operations, standing facilities (credit lines) and minimum reserve requirements.

Open market operations implies buying and selling of securities with the aim of increasing or reducing money market liquidity. The ECB engage in outright buying and selling of securities in the "open" market. The ECB engage in outright buying and selling of securities in the "open" market. The ECB also uses traditional open market operations but then uses tenders calling them its main financing operations. (the use of Figure 9.18, and table 9.3 and 9.4 should be used as a supplement in this description).

Standing facilities aim to provide and absorb overnight liquidity. Banks can use the marginal lending facility to obtain overnight liquidity from the National Central Banks. The governing council of the ECB fixes the marginal lending rate. It is typically 1 % above the interest rate used in the main financing facility. Banks can borrow from this facility without limit provided they present adequate collateral. The marginal lending rate acts as a ceiling for the overnight market interest rate.

Similarly banks can use the deposit facility to make overnight deposits. The governing council fixes the interest rate on the deposit facility. It is typically 1 % below the interest arte used in the main financing facility.

Minimum reserves requirements are used to affect money market conditions. An increase in the reserve requirements increases the shortage of liquidity and tends to reduce the money stock. The ECB uses the instrument to smooth short term interest rates. This is achieved by computing the minimum reserve requirements as a monthly average of daily reserve ratios.

Answer to Question 3

References: De Grauwe, Artis and Nixson Chapter 3 (Economics of preferential trading areas) Chapter 4 /(CAP), Chapter 13 (Aid, Trade …) and Chapter 12 (Fiscal Policy), El-Agraa Chapter 16-17 (Transport and Energy Policy), Baldwin and Wyplosz (Chapter 10, competition).

Generally, one would expect that a crisis of the size of the financial crisis 2007-2009 would lead to a tendency to more European integration based on simple cost-benefit analysis, and focusing on reasons like insurance, spill-over, transaction costs etc.

The candidate should in this question show his/her ability to think across different EU-policy areas. The various areas should be introduced and defined during the answers (also preferably in more detail than in the answer below).

Stability and Growth Pact:
Financial crisis has led to a large increase in excessive deficit procedures (breach of 3 % government deficit to the GDP) in the EU. If sanctions are still not executed in the coming years, the situation looks problematic as then you in reality have a majority of Member States breaching the pact without any enforcement of the adequate rules. As the aftermath of the financial crisis probably will take years to overcome as regards improving budget deficits, the Stability and Growth Pact will come under increasing pressure. On the other hand one may also say that the Stability and Growth Pact enters an important period of time, as the surveillance and transition measures now really are coming into use.

In this regard, Figure 3 shows the general budgetary positions – euro area and EU – developments 2007-2008 and expected 2009 and 2010. One sees that both debt and the structural budget balance are expected to increase above respectively the 60% and 3 % maximum levels from 2009 an onwards.

The Common Agricultural Policy (CAP):

The CAP is one of the more constant entities in the EU, so initially one would not expect big changes from the financial crisis on the CAP. Yet, in the fight between regional funding and the CAP over the expenditure side of EU's budget, there might be an increased pressure against the CAP when the new financial period are supposed to be renegotiated in the coming years. The current period last until 2013, but negotiations over financial funds in the coming period will start maybe already in late 2011.

Moreover, the financial crisis may actually have the impact of making also certain parts of the agricultural sector more efficient, thus forcing some of the inefficient producers to leave. In this sense the financial crisis may indirectly reform the CAP.

Transport and Energy Policy

As regards transport and energy policy an economic downturn of the size of the financial crisis will necessarily have to change the demand as well as the supply side in the foreseeable future, thus the business cases on the many especially infrastructural projects that the EU supports. One may thus for example, expect a decline in the applications for TEN-T and TEN-E projects in the coming years. As the transport and energy sector is highly related to industrial structures in general one may at the same time probably see some important changes spatially and geographically as regards tendency to clustering in regions and overall in the EU.

Competition policy:

Especially in the banking sector both also other sectors have received both national and European Union aid packages during the first couple of years of the financial crisis. The various national packages have been approved at the EU level but the question is still whether the packages still will show to have some problematic effect on EU competition. The aid packages to the banking sector will have a structural impact on the financial sectors for many years to come. Similarly, one may see an impact of the financial crisis on the earlier so successful policies of the EU towards SME's making it necessary to rephrase this policy in the coming years. Moreover, the number of mergers and acquisitions will necessarily fall making the EU to a certain extent less integrated than before assuming that also some mergers and acquisitions fail from time to time.

External trade

Generally, the financial crisis has until now led many countries in to a more protectionist behaviour. It this sense one may expect a more frequent use of many of the trade measures that the EU has developed (some also WTO) concerning MS trying to circumvent international trade rules to the disadvantage of the EU. The EU itself might also internally be pressured in e.g. the Doha trade Round to postpone reaching more significant results even longer than has been the case until now. The thesis is that the EU by the mere necessity to react to other countries becoming more protectionist will become de facto more protectionist. Yet, it is unlikely that the EU in more regulatory form will set over board some of the important principles of free trade, customs union etc. It will probably be more in the practical execution of the regulatory framework in trade.