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# *Deposit Insurance During EU Accession*

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**Deposit insurance during EU accession**

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*Abstract*: The paper presents a brief review of the systems of deposit insurance in accession countries, comparing their level of harmonization with the perspective of their EU integration. Studying the different practices of deposit insurance in the context of developing financial safety nets in future Europe we have found that: (i) there is overinsurance of deposits in accession countries, and (ii) that this could lead to increasing moral hazard, incentives deformation and increasing costs of banking intermediation in the whole euro area.

*JEL classifications*: G1, P2
*Keywords*: deposits insurance, financial regulation, accession countries

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## Introduction

The recovery of the banking intermediation in Central and East Europe in the beginning of the 90's was followed by the establishment of modern deposit insurance (DI) systems. First of all, this was imposed by the particular importance of financial stability in these countries which experienced banking crises and panic that caused considerable loss of income and credibility in the banking system (see. Tang et al., 2000, Enoch et al., 2002.). Those crises were results of a complex of causes among which the whole transition dynamics and the role of the banking intermediation in the loss accumulation practice (which is related to the deep processes of income accumulation and distribution). A major factor that contributed to the crises is the contradiction between the discretional monetary and fiscal policies on the one hand, and the weak banking regulation, on the other hand. A further reason for the establishment of the new DI schemes was the EU integration and the requirement for harmonization (Directive 91/19 EC of 30 May 1994).

The common problems of DI (moral hazard, adverse selection, agency problems, incentive-compatibility, cost of intermediation)[1] gain a particular meaning in the transition countries. It is of particular interest to study the DI practices in the accession countries (AC) from the point of view of their potential impact on the euro when after being integrated.

In this study we set our task to make a basic comparison of the DI systems in 10 AC (Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia) looking for some common and specific features, assessing the current level of harmonization to the EU and further development. At the same time, we will try to find an answer to two questions: (i) whether there is overinsurance of deposits in accession countries, and (ii) what the impact of deposit guarantee in those countries over the system of the euro area would be.

[1] For theoretical aspects of DI and financial regulation as a whole see the discussion in Economic Journal (1996), particularly Dowd (1996), Benston and Kaufman (1996) and Dow (1996), as well as Garcia (1999) and Dale (2000). Concerning the role of DI in the system of financial regulation see Llewellyn (2001) and on the specificities of deposit guaranty in the financial system of accession countries - Hermes and Lensink (2000), Scholtens (2000). For a detailed description of financial sector development in transition economies during the first decade see Bonin and Wachtel (2002) and Thimann, C. (2002).

Our hypothesis says that the process of mechanically carried out nominal harmonization of the DI systems out of the context of the real condition of the economies and of the banking systems, could impose great costs to the EU. The nominal and real overinsurance could lead to increased general risk level in the financial system, to lower efficiency of the banking intermediation, and as a whole to larger disproportions within the euro area.

In section one we first make a brief review of the EU Directive on DI and present a detailed study of the features of the DI systems in AC on the basis of their legislation and a survey[2]. In the following section we argue that deposits in the AC are overinsured with supporting evidence in nominal and real terms as well as in the future development of DI in line with EU integration process. Moreover we regard the overinsurance in the context of banking system development and supervision. In the third section, we describe some possible channels, through which this overinsurance could influence the financial system in the euro area.

## I. Deposit insurance in Accession Countries

As we have already mentioned AC replaced the implicit DI practice (inherited from the planned economy) with the explicit kind of system in the mid 90's. The old DI system was characterized by no formal agreement (central bank law, banking law or other constitution) despite the existing *de facto* deposit protection provided by government guarantees. Since most AC experienced banking crises and lack of credibility during transition, they were strongly encouraged to introduce DI by the EU requirement for reliable deposit guarantee mechanism. That's why the establishment of the new system in most of these countries follows the Directive 94/19/EC of 30 May 1994, which intends to harmonize EU deposit insurance practice (EC, 1994).

Among all, Hungary and the Czech Republic are the first to introduce the *explicit* DI (in 1993 and 1994 respectively) in line with the dynamics of their transition processes and in response to their banking sector development.[3] Most of

[2] For the purpose of the comparative analysis the Bulgarian National Bank circulated a survey among all 10 AC DI Funds.

[3] Among all other economies, the Czech Republic has the largest banking system (as a percentage of GDP), which is partly due to the existence of a significant banking system under the socialist regime,

others AC set up the new DI practice in 1995 and 1996 soon after the approval of the Directive with the view to provide explicit deposit protection in their fragile banking sectors. Some of AC suffered from banking crises like Lithuania and did not gained credibility, while others like Poland, Slovakia, Romania just took measures to boost banking intermediation and precautions against bank panic in the large scale banking restructuring. From a different point of view, the establishment of the explicit DI at that time could be interpreted in the light of their commitment to the EU integration process. Estonia joins the group in 1998 after the stock market crash and banking restructuring. And Slovenia is the last to introduce the deposit guarantee scheme in 2001 due to the delayed process of banking privatization and the low level of foreign ownership presence in the banking system[4].

To a great extent EU Directive predetermine the design of DI systems in countries negotiating for EU accession, which comply with EU requirement in principle. Despite the trend toward harmonizing the legal framework, various countries still differ in how they treat individual versus corporate deposits, how the view co-insurance issues, risk-adjusted premiums, size of cover, and institutional features (whether there is a special body managing the scheme, its legal status and scope of powers, the manner in which funds for deposit protection are raised and managed). All these features should be considered as country specific although the process of EU integration is aiming to leave no space for free choice among them except credit institutions' contributions so far, which is more or less determined by the volume and characteristics of deposit creation process and banking stability.

Apart from being established in a relatively short period of time, the DI in AC has other similarities. Another common feature is a *special body* managing the scheme. Slovenia is a special case, where the scheme is run by the central bank. All other DI systems are identified with a permanent fund managed by a legal entity which administration could be either mixed (private and official) or only official (Slovenia and Latvia). Mixed or joint administrations are usually administered by private or non-government agencies and they have limited authorities i.e. their decisions should be approved by the central bank. The Deposit Guarantee Fund

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while Hungary in particular is characterized by a strong corporate sector with extensive access to financing abroad due to the high share of multinationals (Caviglia et al., 2002).

[4] The presence of foreign banks inevitably stimulates the introduction of similar DI systems like in their home countries.

management in Latvia is ensured by the Financial and Capital Market Commission under the supervision of the Ministry of Finance.

Another common feature of the DI systems in all AC is that they all are *mandatory* and they cover credit institutions in the country and branches of home credit institutions abroad. Bare-bone DI schemes provide deposit guarantee only for deposit banks (Bulgaria, Poland, Slovenia, Romania, Slovakia, the Czech Republic and Estonia[5]), while other more sophisticated systems extend their scope to credit unions, savings and loan associations (Lithuania, Latvia, Hungary). The nationally recognized DI system usually covers also foreign banks' branches on its territory in case the home country of the foreign bank does not provide adequate deposit protection in terms of scope and size. Besides the compulsory DI, some countries provide *additional* insurance. In the Czech Republic for instance, foreign bank branches may take out supplementary deposit insurance under a contract with the Fund if the DI system to which they are members does not provide the same level and size of protection. In Poland there is a contractual system that extends the guarantee cover beyond the minimum specified in the mandatory scheme. All subjects, rules, rights and obligations are specified in the agreement on establishment of contractual guarantee fund. Also in Slovakia, banks may insure their deposits over and above the level of deposit protection required by the law by taking out insurance with a legal entity authorized by the Ministry to carry on such business.

Concerning the different *kinds of deposits* covered by the guarantee schemes most systems include natural and legal entities (residents and non-residents) deposits in national and foreign currency. With respect to the depositors, Romania is the only exception where only deposits of natural persons are protected, while in Estonia. Slovenia and Poland there is special treatment of different corporate depositors. Besides the ultimately excluded from protection deposits in the EU Directive, almost all 10 AC prefer to keep the scope of coverage limited and further exclude deposits of financial institutions, insurers, pension and insurance funds, privatization funds, government and government institutions, municipalities and others.

[5] The DI system in Estonia is the most developed one extending its coverage to funds deposited by clients of credit, investment institutions, and unit-holders of mandatory pension funds. However, there are three sectoral funds raised by different institutions and used for different purposes.

**Table 1.** Basic characteristics of deposit insurance in accession countries

| **Country** | **Type** explicit=1 implicit=0 | **Date Enacted** | **Foreign Currencies** (yes=1 no=0) | **Coverage Limit** (EUR) | **Co-insurance** yes=1 no=0 | **Permanent fund** funded=1 unfunded=0 | **Premium or Assessment base** | **Annual premiums** (% of base) | **Risk-Adjusted Premiums** yes=1 no=0 | **Source of Funding** private=1 joint=2 official=3 | **Administration** private=1 joint=2 official=3 | **Membership** compulsory=1 voluntary=0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bulgaria | 1 | 1995 | 1 | 7669 | 0 | 1 | insured deposits | entry contribution is equal to 1% of bank's registered capital but no less than 100 000 BGN (51129 EUR); annual premium is 0.5% of the total amount of the deposit base for the preceding year | 0 | 2 | 2 | 1 |
| Czech Republic | 1 | 1994 | 1 | 25000 | 1 | 1 | insured deposits | annual premium for banks - 0.1% of the average volume of insured deposits of the previous year, and 0.05% for building savings banks | 0 | 1 | 2 | 1 |
| Estonia | 1 | 1998 | 1 | 2556 | 1 | 1 | insured deposits | entry fee equals 50 000 (3195 EUR); quarterly premiums of up to 0.125% (0.07% at present) of the insured deposits | 0 | 2 | 2 | 1 |
| Hungary | 1 | 1993 | 1 | 12726 | 1 | 1 | insured deposits | entry fee - 0.5% of the registered; annual premium is up to 0.2% of the total amount of insured deposits | 1 | 2 | 2 | 1 |
| Latvia | 1 | 1998 | 1 | 4920 | 0 | 1 | insured deposits | entry fee - 50 000 LVL (81994 EUR) for banks and 100 LVL (164 EUR) for credit unions; quarterly premiums equal 0.05% of the insured deposits | 0 | 2 | 3 | 1 |
| Lithuania | 1 | 1996 | 1 | 13033 | 1 | 1 | insured deposits | annual premium of 0.45% of the insured deposits for banks and foreign banks departments, and 0.2% for credit unions | 0 | 1 | 2 | 1 |
| Poland | 1 | 1995 | 1 | 18000 | 1 | 1 | deposits and risk-adjusted assets | annual premium of 0.4% of the total balance sheet assets and risk-weighted assets | 0 | 2 | 2 | 1 |
| Romania | 1 | 1996 | 1 | 3156 | 0 | 1 | insured deposits | entry fee - 0.1% of the statutory capital of a bank; annual premium of 0.8% of total household deposits, and a special premium of 1.6% of total household deposits for banks conducting higher risk transactions. | 1 | 2 | 2 | 1 |
| Slovakia | 1 | 1996 | 1 | 20000 | 0 | 1 | insured deposits | entry fee of 1,000,000 SKK (23923 EUR) for banks and 100,000,000 SKK (2392344 EUR) for the central bank, quarterly premiums from 0.1% to 0.75% of the amount of insured deposits from the preceding quarter, and an extraordinary premium ranging from 0.1% to 1.0% of the amount if insured deposits of the preceding quarter . | 0 | 2 | 2 | 1 |
| Slovenia | 1 | 2001 | 1 | 18250 | 0 | 0 | insured deposits | annual liabilities of 3.2% of guaranteed deposits held with the individual bank | 0 | 1 | 3 | 1 |

Note: All data is valid at the end of 2002. The maximum coverage and entry fees are calculated on the basis of the exchange rate at the end of 2002.
Source: National legislation, annual reports of national DIFunds and surveys. The layout of the table and content of indicators follows the one developed by Demirgic-Kunt and Sobaci (2000).

Credit institutions' liabilities per depositor are set in terms of *coverage limit*, which varies across AC (see Table.1). Logically countries that are ahead in their negotiation process with the EU would score higher coverage limits like the Czech Republic, Slovakia, Slovenia, Poland and Hungary[6]. On the low-level side, there are Estonia, Romania[7], Latvia and Bulgaria. With respect to *co-insurance issues*, since the Directive permits EU member countries to decide whether to choose or avoid co-insurance, equal number of AC either maintain or eliminate their existing co-insurance systems by 2002. In Lithuania the coverage is constructed in the following way: 100% of the deposits up to EUR 3 000 with a credit institution per depositor, and 90% of the deposits from EUR 3 000 to EUR 13 033. In Poland the scheme is 100% of the deposits up to EUR 1000 and 90% for the excessive amount up to EUR 18 000 at the end of 2002. In Hungary the two level is: 100% of the deposit up to EUR 4242, and 90% of the exceeding amount up to EUR 12 726. Estonia covers only 90% of the insured deposit up to EUR 2556 and the Czech Republic not more than EUR 25 000.

The *contributions* collected for DI funds are diverse in types and size. There are mandatory annual premiums paid by commercial banks, but apart from them usually there are entry premiums (Bulgaria, Estonia, Hungary, Latvia, Romania and Slovakia), and under special circumstances special premiums are collected as well (Slovakia and Romania). The *initial* contribution is usually due soon after the opening of a new credit institution and it is quoted either as a percentage of the registered capital (Bulgaria, Hungary and Romania) or in nominal amount (Estonia, Latvia and Slovakia). It is interesting to note that in Slovakia the central bank participates in the DI system with an entry premium, and in Latvia both the budget and the central bank.

The size of the *annual premiums* (some of them collected on quarterly basis) depends on the volume of insured deposits as they present percentage of the assessment or premium base. Among the countries with the highest annual premium percentage are Bulgaria (0.5% of the total amount of deposit base for the preceding year as the Fund may increase it but it may not exceed 1.5% of the deposit base), Romania (0.8% of total household deposits), and in Slovakia the premium paid on

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[6] The EU Directive provides for limiting the minimum guaranteed amount to a certain percentage of deposits which should not be less than 90% of the total deposited amount, and for the guarantee to be up to the amount of EUR 20 000.

quarterly basis may vary from 0.1% to 0.75%. In the Czech Republic like in Lithuania there are different annual premiums for different credit institutions. In Hungary the maximum annual premium of 0.2% of the insured deposits has never been collected. In fact there are differentiated premiums depending on the size of deposits - 0.05% for deposits up to EUR 4242, 0.03% for deposits between EUR 4242 and EUR 25 452, and 0.005% for deposits in excess of EUR 25 452. The maximum annual premium in Poland is 0.4% and as of 1 January 2001 it is reduced by 50%. The amount of reduction is paid by the central bank. Finally, in Slovenia the maximum annual liabilities payable by an individual bank amounts to 3.2% of the guaranteed deposits held with the individual bank. Most commonly the assessment base includes only insured deposits but in the case of Poland it includes risk-adjusted assets as well.

Little attention was paid to combating moral hazard through *risk-adjusted premiums* since only two out of 10 AC have this practice. In Hungary the system of increased premium payment is quite simple. It is based on the capital adequacy ratio and its legal maximum is 0.3% of the premium payment base. The risk-adjusted premium system in Romania provides a special premium of 1.6% of total household deposits for banks conducting higher risk transactions. The *extraordinary* premium in Slovakia ranging between 0.1% and 1.0% is due on dates specified by the Fund.

As we have already mentioned there is a special body responsible for the management of the DI fund with the only exception of Slovenia. All these institutions are set explicitly by law and their functions are described in their statutes. The principal duties of all deposit guarantee institutes are to determine and collect the premiums, invest its assets and pay the guaranteed amount of deposits. Since deposit reimbursement is usually provoked by declaring a bank insolvent, Funds have some *additional functions* and powers provided by the law on bank bankruptcy. The Fund in Poland has a second explicit function apart from DI, which is in the context of bank failure avoidance. In fulfillment of its task, the Fund may without limitation extend to the entities covered by the deposit guarantee system, loans, guarantees or endorsements on conditions that are better than generally offered by banks. The financial assistance is provided from a special assistance fund which is minimum EUR 6 000 000 and a restructuring fund exceeding EUR 2 000 000, which is

[7] Since there is high inflationary pressure in Romania, the guarantee ceiling is updated half-yearly through the consumer price adjustment.

extended to banks facing insolvency and banks acquiring or restructuring ones facing insolvency. In order to increase the reliability and stability of the financial sector, the Fund in Hungary may have other commitments like granting credits, subordinate loans, acquisition of ownership participation in a credit institution, providing cover for the transfer of stock deposits against adequate collateral.

The management of the DI funds involves *investment activities* of the money raised by banks' contributions. Investment opportunities are limited by the law as a major part of the resources are most often invested in government securities. In Lithuania the Fund can invest only in government securities (only short-term securities in the Czech Republic and Slovakia) and central banks of countries approved by the Fund Council, while in Latvia investments in securities issued by the central governments of the EU member states whose credit rating are not lower than that of Latvia, are allowed. Apart from placing money on deposits in credit institutions and on treasury bonds of EU member states, and to which investment ratings have been assigned, in Estonia the fund provided for deposit reimbursement can buy bonds or other debt securities which are listed on a stock exchange operating in EU member countries and the issuer of which has been assigned an investment grade credit rating by an internationally recognized rating agency designated by a resolution of the supervisory board of the Fund. In Bulgaria, the Fund can deposit money with the central bank and have short-term deposits with commercial banks that are authorized dealers of government securities. The Fund resources in Slovakia may be used for granting loans to banks for up to 10% of Fund's total assets only when administrators of the central bank have been appointed to the banks. In Slovenia there is no centralized management of the fund but there is a special requirement for the banks' investment activities in order to provide liquid assets required for the payment of the guaranteed deposits. The bank shall invest as a minimum assets in the amount of 2.5% of the guaranteed deposits in bills of the Bank of Slovenia, short-term debt securities issued by the Republic of Slovenia and foreign marketable debt and equity securities whose issuer is awarded the long-term rating of no less than BBB (Standard & Poor's) or at least Baa2 (Moody's).

In some laws it is clearly stated what the Fund should do in case its *resources become insufficient* for the payment of insured and becoming inaccessible deposits. There are three DI systems which are entirely funded by the private sector

(The Czech Republic, Lithuania and Slovenia). Apart from the credit institutions' contributions, in the Czech Republic additional resources can be raised on the market. In Lithuania, where there are sectoral insurance funds, when the DI fund is short of resources while the other has such resources, insurance compensations may be paid by the fund possessing the resources. There is no permanent fund in Slovenia; hence the central bank can temporarily finance it until the contributions of the banks are collected. In the other seven countries the additional resources are collected either from official or private sources.

## II. Overinsurance in Accession Countries

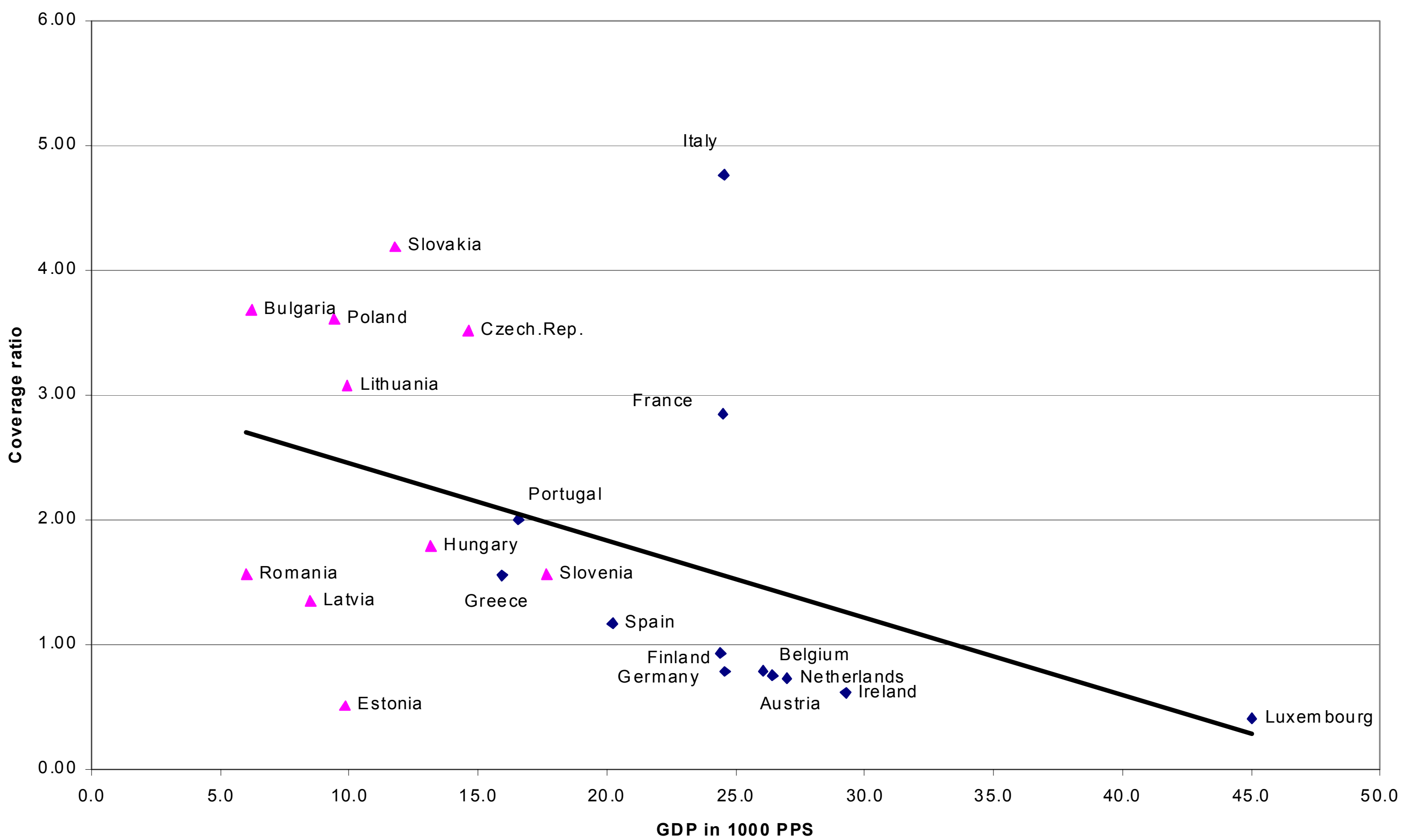
As we have seen from the comparative study of the different DI systems in AC, some countries have already coverage limits close or above the EU Directive protection guaranteed level (for example the Czech Republic and Slovakia). If we do not look at nominal but rather at *relative coverage* or *coverage ratio* the picture of overinsurance is clearer. Assuming for best practice the principle of optimal coverage of deposits of about 1- 2 times GDP per capita, and taking into account that the indicator for the euro area (1.44) is lower than the world average (Garcia, 1999)[8], it is obvious that the average coverage ratio of the studied AC (2.8) is above the optimal world level and much higher than the euro area level (about 2 time the ratio for the euro area). In relative or *real* terms overprotection spreads among other countries as well like Bulgaria (3.68) and Lithuania (3.08) which in nominal terms do not seem to be overprotected. The accession country under study, which has the lowest cover ratio is Estonia (0.51). Estonia obtained this level after negotiations with EU.

[8] Garcia (1999) makes a review of the best practice in deposit insurance on the basis of a survey of 182 IMF member countries. A prior study was rendered by Kyei (1995). On the practice in EU countries, see Gropp and Vesala (2001).

**Table 2** Coverage ratio of deposits in accession and the euro area

| country | Coverage ratio |
|---|---|
| Bulgaria | 3.68 |
| Czech Republic | 3.51 |
| Estonia | 0.51 |
| Hungary | 1.79 |
| Latvia | 1.35 |
| Lithuania | 3.08 |
| Poland | 3.61 |
| Romania | 1.58 |
| Slovakia | 4.19 |
| Slovenia | 1.56 |
| **AC** | **2.49** |
| **Euro area** | **1.44** |

Note: Ratio of the coverage limit to the GDP per capita at the end of 2002.




Note: PPS (purchasing power standards) is an artificial currency that allows for variations between the national price level not taken into account by exchange rates. This unit improves data comparability (Eurostat).
Raw data source: National DIFunds, National statistical institutes, European Commission.

At the same time it is interesting to note that in the course of time some of them go or plan to go beyond the minim requirement of the EU Directive (table 3). After 1999, the prohibition of high export coverage was eliminated and now there is no maximum guarantee limit, which allows for nominal and real overprotection although this could create moral hazard. Another factors related to the problem of deposit overinsurance in AC (and later on in the euro area) are the weak co-insurance practice and lack of risk-adjusted premiums. By 2002 only half of the AC observe the co-insurance principle in their systems (Lithuania, Poland, Hungary, the Czech Republic and Estonia) while there are only two imposing risk-adjusted premiums to the credit institutions. Although considered for best practice, it is not stimulated by the EU Directive[9], and it is expected to be abandoned by the few AC in the process of their legal harmonization with respect to deposit insurance.

[9] During the negotiations leading to the Directive, German views prevailed and the proposal for a mandatory ceiling on protection and for a requirement for co-insurance was rejected, on the grounds that the dangers of moral hazard argument had been overstated (Garcia and Prast, 2002).

**Table 3** Development of the coverage limit in accession countries

| *Years* | *2002* | *2003* | *2004* | *2005* | *2006* | *2007* | *2008* |
|---|---|---|---|---|---|---|---|
| Bulgaria | 7 670 | | 11 250 | | 20 042 | | |
| Estonia | 2 556 | 6 391 | | 12 782 | | | 20 000 |
| Lithuania | 13 033 | | 14 484 | | | 17 380 | 20 000 |
| Latvia | 4 920 | | 9 839 | | 14 760 | | 21 319 |
| Hungary | 12 726 | | 24 500 | | | | |
| Slovenia | 18 250 | | 22 161 | | | | |
| Poland | 18 000 | 22 500 | | | | | |

Note: Coverage limit in EUR calculated on the base of the exchange rate at the end of 2002.
Source: Surveys and national legislation.

Furthermore, this coverage has to be analyzed jointly with such characteristics of AC banking systems as the low share of deposits to GDP (compare to the euro area as a whole). There are great differences among AC, which are determined by the real conditions of the banking sector in each of them, and even taken as an average, euro area has 2 times higher ratio of deposits to GDP than AC. In all AC dominant presence of foreign banks (primarily from the EU) is observed and this fact is closely related to the development of the nominal guarantee limit in those countries. This could be explained by the interrelationship that the higher the share of foreign ownership of the banking system, the closer the coverage limit to the euro area practice.

Another indicator, which is an important factor in banking supervision and safety net features, is the capital adequacy of commercial banks. In the AC under study solvency ratio is *de jure* and *de facto* considerably higher than the international standards (Table 4). Furthermore, in the context of setting the optimal guarantee level, we should consider also the fact that the majority of the deposits in AC is fully covered, because of their small size, i.e the distribution of deposits in accession countries is shifted towards small deposits much more than in developed countries and the euro area.

**Table 4** Indicators of the banking systems in accession countries

| Country | Total capital adequacy ratio (%) | | Deposits/GDP | Foreign ownership |
|---|---|---|---|---|
| | Law provision | Practice | (%) | (% of total assets) |
| Bulgaria | 12 | 25.2 | 26.1 | 70 |
| Czech Republic | 8 | 14.2 | 65.4 | 94 |
| Estonia | 10 | 15.3 | 33.8 | 98 |
| Hungary | 8 | 12.5 | 35.9 | 65 |
| Latvia | 10 | 13.1 | 23.9 | 62 |
| Lithuania | 10 | 14.8 | 20.2 | 86 |
| Poland | 8 | 14.5 | 37.5 | 69 |
| Romania | 12 | 25.0 | 17.6 | 55 |
| Slovakia | 8 | 21.1 | 55.4 | 90 |
| Slovenia | 8 | 11.9 | 49.8 | 16 |
| **Euro area** | **8** | **12.0** | **79.2** | |

Note and source: Data for total capital adequacy ratio and deposits to GDP ratio at the end of 2002 except for Hungary, when the figure is valid at June 2002: National legislation, Annual reports. Deposits in euro area include demand (overnight) deposits, deposits with agreed maturity and deposits redeemable at notice in other MFIs, and deposits in AC include demand, time, savings and foreign currency deposits: IFS. Data of foreign ownership share of total banking assets at the end of 2001: Thimann, C. (2002), and Annual reports.

Taking all these factors together and looking at the whole picture, we have come up with the results that DI in AC is considerably over the optimal level not only in quantitative measures but also in the context of the overall development of the banking systems in AC. Thus, the topping-up provision[10] does not seem to have a strong positive effect on the euro area banking system (if any positive effect at all) since all AC will have reached the EU directive minimum level or even go beyond it. Moreover, it is not likely that an accession bank branches (if they expend at all) could impose some risk over the euro area banking system (due to their lower than the host country guarantee level) since most of them are foreign owned and there is a deep ongoing process of banking mergers and acquisitions.

## III. Possible consequences of the overinsurance

The consequences of the overinsurance could be interpreted in the light of the classical problems of DI – moral hazard, banking intermediation incentives as well as its costs. What makes those problems particular is that these consequences are not only on the account of the AC but at the expenses of the EU as a whole. [11].

*First,* we can presume that moral hazard in EU banking system will increase[12], and hence, system risk can rise instead of decreasing[13].

The high level of DI is to some extent a continuation of the full deposit guarantee during the socialist times (a kind of *path dependence*), when the banking system was state-owned, saving deposits were limited and centralized in saving banks of the each country. In spite of the banking shake-up in the 90s, economic agents still believe that they can rely on the implicit assistance of the state in case of a crisis, and as a whole they are willing to take a higher risk against relatively lower returns (comparing to the behavior of the economic agents in the euro area). This is true not

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[10] EC (2001) Report on the operation of the "topping-up" provision of the Directive on Deposit Guarantee Schemes says that the general argument for keeping topping up provision (either host- or home-country) in the years to come is that it might be especially important during the enlargement process of the EU.

[11] Undoubtedly there would be certain macroeconomic consequences on the level of the common monetary policy conducted by ECB, and on the fiscal policy synchronization process since while the monetary policy is centralized, the banking supervision stays on a national level.

[12] Theoretical foundations of moral hazard development under banking regulation are discussed by Freixas and Rochet (1999); see. also Calomiris (1999).

only for the depositors who place their money with more unstable banks against higher interest rates, and for the banks as well, that would put their money on risky and potentially failing investments. And most empirical studies (with some exceptions) find a positive relationship between the level of DI and the probability of bank crisis outbreak (Demirguc-Kunt and Detragiache (1998)).

The increase of bank crisis probability in accession countries, *ceteris paribus*, combined with the high presence of big European banks, could be potentially translated into an increased probability of crisis in the whole European banking system. Here we have also to mention the fact that exchange rate regimes in AC are more inclined to fixed one (ERM II or the Currency boards), and considering higher share of foreign deposits (known as a "liability dolarization") (see. Table 4), a hypothetical bank crisis would incur considerably higher costs (remember the 2001 crisis in Argentina).

As a whole, in the case of potential problems, the costs of overcoming the crisis would be asymmetric – the richer countries in the EU would endure much more expenses coming than the poorer new members.

*Second,* there is a close link between the increased moral hazard and the problems of oppressing and deforming the incentives in the banking system and the diminishing competition efficiency of EU banking system.

One of the purposes of the nominal harmonization of the European legislation in the filed of DI is to avoid competition among national banking systems via DI. In fact, in the presence of different real deposit coverage (as a ratio to the GDP per capita), the banks in the accession countries are "punished" in terms of the higher expenses they bear. This because it is not likely that the higher level of DI in accession countries will attract deposits form the EU countries (this way enjoying economy of scale in raising funds). The overinsurance of deposits in the accession countries (combined with the higher capital adequacy requirements) would cause higher costs for banking intermediation not only in AC but also in the euro area as a whole. The more expensive banking intermediation would reflect on the efficiency of the entire European banking system.

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[13] About the relation between DI and systemic risk see Llewellyn (2001). On one hand, deposit guarantee protects against bank panic (in the model of Diamond and Dybvig) i.e. systemic risk

**Conclusion**

The close study of the DI systems in the AC shows that those countries are really overinsured from a purely quantitative point of view as well as from the perspective of the European banks presence in these countries and the strength of the banking regulation. This inevitably leads to increasing moral hazard, competition distortion and to higher costs not only those countries but in the whole euro area. Having in mind the functioning of the UE (the distribution process), the old and rich members will incur much more expenses.

Hence, meeting mechanically the requirements for nominal harmonization[14], which are not in compliance with the real development of the AC, could have an adverse result - increasing probability of financial crisis and decreasing efficiency of the European banking system. The problems that will be encountered by the common fiscal and monetary policies will not be minor and could not be discarded (we do not describe them here).

A possible solution (despite the advancing harmonization process), would be the linkage of DI coverage with GDP dynamics and with some indicators of the banking system of AC. Such reconsideration of the DI convergence process would benefit not only the accession countries but also the EU as a whole.

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decreases, while on the other hand, it triggers moral hazard thus increasing the systemic risk.

[14] Referring to the harmonization of the deposit insurance in the EU see Garcia and Prast (2002), Huizinga and Nicodeme (2002), Gropp and Vesala (2001).

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