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STRENGTHENING DEPOSIT INSURANCE STRUCTURE IN LATVIA

Introduction

After roughly two years and a half since the accession of the 10 new EU member states - including Latvia – we can start assessing the impact it has had on the developments in our country. The impact has been remarkable indeed. The EU accession has lead to increased flows of foreign trade and at the same time provided access to more liquid and deeper financial markets. All that – in the combination with a lower risk premium associated with the EU membership – has resulted in the falling interest rates and increased the inflow of funds, both in the form of domestic and foreign direct investment. As a result, the rates of economic growth have accelerated and achieved the highest level in the EU.

The single most significant development in Latvia in the past couple of years has been a rapid growth and a significant deepening of the banking sector. Unfortunately, this development has been associated with a number of concerns. The most important concern in the recent developments of the banking sector, namely, a high credit growth, rising monetary aggregates, as well as a rapid rise in housing prices[1]. In economic literature all these are well known leading indicators for potential increase of financial volatility in the coming periods. Of course, the usual caveats apply, since it is not at all certain that every occasion of the higher money and credit growth leads to increased financial instability. However, the fact that most episodes of increased financial volatility in the world have often in the past been preceded by rapid money and credit expansion and the rising house prices provides the reason why we should pay closer attention to the developments in the country's banking sector.

The banking sector should be directly involved in trying to resolve the issue of stability of the banking sector because its instability at large could ultimately hurt every individual bank too. The 1998 Banking Crisis in Latvia clearly corroborates this. Hence, it would be wholly in the interests of the banks themselves to maintain safety of the operations. However, banks in Latvia have on the whole been rather reluctant in this respect[2]. This can also be explained in terms of the economical logic. The Latvian financial market in Latvia is currently in the process of formation, and the relative position of each bank in this market has yet to be set. Thus, the market share gained today is likely to determine the flows of income for many years to come. Unsurprisingly, most banks are actively pursuing aggressive strategies with increasing their market share coming at the top of priority lists. This situation is leading to increasing probability of the potential financial crisis in Latvia.

Fortunately, there are numbers of approaches to solve this problem. One of them is the adoption of Deposit Insurance System (DIS). DIS is designed to protect financial systems from the impact of bank failures[3]. The growing number of explicit DIS around the globe – 85 at last count in 2004 (comparing to 44 explicit deposit insurance systems in 1995) attests to their value and importance in any modern financial system [12]. A well-designed DIS contributes to the stability of the financial system; if poorly designed, it only increases the probability with which a country suffers a banking crisis[4]. A recent study carried out by

[1] The high lending growth has led to a rapid increase in housing prices. For instance, the ratio of prices for a square meter of private apartment to income is already higher in the Latvian capital Riga than in many other big cities of the EU – London, Warsaw or Vilnius [11].

[2] Bank Capital Adequacy (CAR) (the major bank stability indicator) has been on decline since 1999. Average CAR of the Latvian banks stood at 9.2% in the first half of 2006 [5] (comparing to 16.4% at the end of 1999 [1]). It is still over the minimal required CAR level (that stood at 8% in the first half of 2006) that indicates that bank risk-taking in the Latvian banking industry is increasing.

[3] DIS is established with a purpose to prevent contagion of the runs of deposit taking institutions, thereby contributing to the stability of the financial system as a whole.

[4] Dimirguc-Kunt and Huizing (1999) find that the adoption of poorly designed explicit DIS undermines market discipline exercised by creditors and depositors on banks, and has net effects that appear to have been destabilizing [4.,33].

Mihails Maskalovs and Nikolajs Baranovskis in 2006 reveals that the current Latvian DIS has several design features that work against the effective and equitable functioning of the system [9., 964]. In response to these issues the authors propose implement a number of DIS design features (such as risk-adjusted premiums, co-insurance system and hybrid funding system) in order to increase DIS effectiveness, encourage the financial institutions operate more safely and reduce the incidence of potential financial crises. The proposed Latvian DIS design reform should stimulate the banks and the depositors toward a behavior that would foster a long-term development of the Latvian economy. This is especially important in the light of the recent developments of the Latvian banking sector that are described above.

The aim of this study - to develop detailed and comprehensive action plan with key issues of the DIS design reform addressed in order to make proposed DIS design changes operational.

The authors defined the following research tasks:

1. To identify key issues that should be addressed in order to make the proposed DIS design changes operational.
2. To examine advantages, disadvantages and trade-offs associated with various approaches to the above issues.
3. To suggest a strategic action plan with the above key issues of the DIS design reform addressed.

1. Proposals Related to Risk-Adjusted Premium System Implementation

The author found that in regards to a risk-adjusted premium system implementation the following issues should be addressed:

1. What approach should be used to differentiate bank risks?
2. How to assign risk-adjusted premium categories?
3. How to assign risk-adjusted premium rates?

One of the most challenging issues in the risk-adjusted premium system implementation is to find appropriate method to differentiate bank risks. There are three major approaches to do that:

1. To use Quantitative Criteria Approach.
2. To use Qualitative Criteria Approach.
3. To use Combined Quantative and Qualitative Criteria Approach.

Quantative criteria approach uses one or a combination of quantative factors to differentiate bank risks. The most common factor used is Capital Adequacy. Information on quantative factors get usually collected through on-site and off-site data collection according to the industry-accepted accounting principles. The main disadvantages of this approach is that this the methodology uses information on the past financial condition of banks and doesn't take into consideration important qualitative factors about bank's institution's governance and management (that might contain a valuable information on the bank's potential risks). There are few countries that use quantitative criteria approach. For example, Swedish system is based only on Capital Adequacy, with no qualitative criteria approach components such as supervisory rating included [8., 18].

Qualitative criteria approach generally relies on a number of qualitative factors. Bank categorization into different categories for premium assessment purposes is based on some form of supervisory judgment or rating system. For qualitative criteria approach methodology usually use such factors as adherence to guidelines, standards, compliance measures. The main advantage of the qualitative approach methodology it can provide important information on the current and future risk profiles of the banks (which may not captured by quantative factors alone). The main disadvantages of the qualitative criteria approach is that the methodology utilizes subjective factors that utilize a higher degree of judgment compared to quantative techniques.

Combined Quantative/Qualitative Criteria approach uses both quantative and qualitative measures to categorize banks for premium assessment purposes. Combined quantative/qualitative systems are the most popular. These systems combine the best features of quantative and qualitative criteria approaches and according to the previous experience appear to be the most effective methodology to differentiate banks into appropriate risk categories for premium assessment purposes. For example, Argentina, Canada, France, Taiwan and the United States utilize this approach in their risk-adjusted premium systems [14., 8].

Deciding on number of premium categories is an important consideration when designing a risk-adjusted premium system. There are three basis approaches regarding an assignment of premium categories [14., 10]:

1. To use the large number of categories (5-9 categories) (like in USA and Taiwan).
2. To use the small number of categories (4 and less) (like in Canada).
3. To charge premium as a continuous function linked to the risk profile of the bank without using any premium categories (like in Argentina and France).

In order to make decisions on number of premium categories the following facts should be taken into consideration:

1. The use of the large number of categories has an advantage that it may result in less significant premium distinctions between categories. This can allow the Deposit Insurer more easily to differentiate banks according to their rating. On other hand, the large number of categories can increase the complexity of the system and reduce incentive for banks to move from one premium category to another.

2. In cases where a high proportion of insured deposits is with a small number of large banks, the movement of a bank between categories could lead to substantial changes in total premium revenue for the Deposit Insurer.

Taking into consideration the size and the number of Latvian banks (at the end of 2004 five largest Latvian banks (out of twenty two banks) amounted to 65.9% of total deposits [2., 17]) the author concluded that the large number of premium categories is preferred for the Latvian banking system at this stage of development of the Latvian DIS. The suggested system allows the Deposit Insurer to receive relatively stable premium revenue (that particularly important taking into account that DIS in Latvia was started only in 1998 and it is still important to maintain a relatively stable premium revenue volume). The smaller number of premium categories can be introduced in the future when Latvian DIS accumulates more financial reserves.

In determining risk-adjusted premium rates to apply to the bank premium categories the following considerations should be taken into account [14., 11]:

1. Rates should be set to ensure that the funding requirements of DIS are met.

2. The spread between the various premium categories should be as wide as possible to provide a meaningful incentive for banks to improve their risk management practices.

3. All banks should be charged a premium, even very low (no matter how healthy and strong they are, they still pose some risk to DIS).

Reviewing a cross-country experience and excluding from our study countries that use system where banks with the highest rating are charged “0” risk-adjusted premium rate (4 countries out of 25 worldwide at the end of 2004 [14]) the authors concluded that the most common and successful spread ratio between the lowest and the highest premium risk category was 3.9 (based on available information on 18 countries at the end of 2004 [14]). The spread ratio varies from one system to another with the lowest ratio in Turkey (1.2) and the highest in Finland (15). The authors propose to use the risk-adjusted premium system with the spread ratio of 4 in Latvia. It allows providing a meaningful distinction between categories and act as an incentive for banks to improve their risk profiles.

2. Proposals Related to Co-insurance System Implementation

The authors found that in regards to the co-insurance system implementation the following issues should be addressed:

1. What co-insurance approach should be used in Latvia?

2. How to choose a co-insurance rate?

One of the most challenging issues in the introduction of co-insurance system is to find appropriate method to implement it. There are two major approaches in the co-insurance system implementation - one-level and two-level co-insurance approaches.

One-level co-insurance system requires deposit holders to bear a share of their bank’s accrued losses when their bank fails. A depositor usually loses a pre-specified proportion of the covered deposit (typically up to 10%) but is reimbursed for the majority of it by DIS. The main advantage of the above approach is that it is more effective in combating major DIS design problem - Moral Hazard[5] comparing to the two-level co-insurance. At the same time it fails to provide basic consumer protection for depositors holding small account balances. Two-level co-insurance system provides individuals holding small accounts balances full protection against the risk of loss, while depositors holding larger account balances are co-insured.

Five out of ten “new” EU member countries have chosen co-insurance for their DIS. They are Czech Republic, Estonia, Hungary, Lithuania and Poland. Three of them (Lithuania, Poland and Hungary) are utilizing two-level co-insurance system [10., 6].

The authors concluded that the two-level co-insurance approach is preferable for Latvia. It re-

[5] Moral Hazard – banks incentives for additional risk taking that arise from the fact that banks can take the higher risk at no additional costs for deposit insurance. At the same time depositors confident in the protection provided by DIS have less incentives to monitor banks. In this manner, both banks and depositors engage in imprudent banking practices that can encourage banks to take excessive risk, unless there is a mechanism to impose financial penalties.

duces Moral Hazard by maintaining the incentive for depositors holding larger account to monitor banks, and at the same time provides basic consumer protection for individuals holding small accounts. Taking into the account that one of the main strategic objective of the Latvian DIS (besides "*Promotion of the stability in the financial market*") is "*Protection of the interests of depositors*" its becomes obvious that the two-level co-insurance approach is more consistent with the Latvian DIS strategic objectives comparing to the one-level co-insurance.

The authors propose to define small deposit account as an account with balance that is not exceeding LVL 3000 (EUR 4269). The primary consideration in choosing this limit is that such amount provides credible protection to small and unsophisticated depositors.

According to the global DIS survey there are two major approaches in choosing co-insurance rate - to apply 90% or 75% co-insurance rate.

In 1999 the total of 16 countries utilized co-insurance in their DIS. 7 countries applied 90% co-insurance rate, 3 applied 75% co-insurance rate and for 6 countries information on co-insurance rates is not available [6., 36].

The authors propose to choose 90% coinsurance rate for Latvia. 90% co-insurance rate (maximum allowed rate according to the EU 94/19/EC Directive) is chosen to maximize this feature effectiveness in reducing Moral Hazard.

Therefore, the authors propose to construct the co-insurance coverage in Latvia in the following way: Latvian DIS guarantees 100% of the deposits up to LVL 3000 and 90% of the deposits from LVL 3000 to the maximum coverage limit.

3. Proposals Related to Hybrid Funding System Implementation

The author found that in regards to the hybrid funding system implementation the following issues should be addressed:

1. What hybrid funding system type should be used in Latvia?
2. How to choose additional "Ex-post" assessments rate?

In practice, most of the DIS around the world have opted to build a fund "Ex-ante" and "top-up" it with various "Ex-post" assessments. For example in USA Deposit Insurer maintains a fund "Ex-Ante" but in case of emergency Deposit Insurer has authority to borrow a line of credit from the Treasury. Such borrowing must be repaid from "Ex-post" assessments on insured depository institutions [13., 16]. In Argentina Deposit Insurer maintains a fund "Ex-Ante" but in case of need the funding can be enhanced by collecting the premiums corresponding to the next two years [3., 9]. In Greece Deposit Insurer maintains a fund "Ex-Ante" but in case if all the available financing sources are not sufficient to cover compensation claims, Deposit Insurer can raise loans from DIS participating credit institutions [7., 10].

The author suggests to introduce Latvian DIS "Ex-post" funding provision in the following way: borrowing from the state budget to pay guaranteed compensation must be repaid from "Ex-post" assessments on the insured depository institutions. This provision makes clear that the responsibility for covering the insured deposits of failed banks falls on the banks, not the government. It also gives the banks an incentive better monitor their operations to ensure that they are sound. This type of "Ex-post" funding arrangement is the most widely used by DIS around the globe.

Reviewing other countries' experience in applying additional "Ex-post" assessment rates the authors made the conclusion that the legislation should specify a limit to the additional "Ex-post" assessments that can be imposed on the banks in any one year. This is very important because the industry might not have a capacity to pay an unlimited amount in one year, especially if it is affected by a financial crisis. The author proposes to specify in the *"Deposit Guarantee Law"* the maximum limit of "Ex-post" assessment that can be imposed on the banks in one year. Therefore "Ex-post" payments by credit institutions should be repeated and extended over few years until funds borrowed from the state budget are repaid in full.

Conclusion

The main accrued results of this study can be summarized as follows:

1. The authors identified key issues that should be addressed in order to make the proposed Latvian DIS design changes operational.
2. The authors examined advantages, disadvantages and trade-offs associated with various approaches to these issues.
3. The authors developed a strategic action plan with these issues addressed.

The developed strategic action should make the proposed DIS design changes operational. These changes should create more effective DIS design in Latvia. More effective Latvian DIS design should have a positive long-term effect on probability of bank runs and reduce the risk of banking crisis. The increased financial stability should generate a greater confidence in the banking sector, increase the level of financial intermediation and make more resources available for investment. More available financial resources should contribute to higher economic growth rates and ensure sustainable growth for the Latvian economy.

Table 1.

Action plan on the Latvian DIS Design Reform Implementation

Key Issues	Proposed Solutions
1.What approach should be used to differentiate bank risks?	The authors concluded that Combined Quantative and Qualitative Criteria Approach is the most effective establishing the differential premium system. The above suggestion is based on the consideration that the above approach combines the best features of quantative and qualitative criteria approaches. Also this model is utilized by most of the countries with Differential Premium Systems.
2.How to assign differential premium categories?	Taking into consideration the size and the number of the Latvian banks the authors concluded that large number of premium categories (5-9 categories) is preferred for the differential premium system in Latvia at this stage of development of the Latvian DIS. The suggested system allows the Latvian DIS to receive a relatively stable premium revenue volume (that particularly important taking into account that DIS in Latvia was started only in 1998).
3.How to assign differential premium rates?	Analyzing cross-country experience the authors concluded that the most common and successful spread ratio between the lowest and the highest premium risk category is 4 (based on available information on 18 countries at the end of 2004). The authors propose to use the differential premium system rates with the spread ratio of 4 for in Latvia. This allows providing a substantial distinction between categories that should act as an incentive for banks to improve their risk profiles.
4. What co-insurance approach should be used?	The authors concluded that the two-level approach is the most effective in establishing co-insurance system in Latvia. This arrangement discourages Moral Hazard and at the same time provides basic consumer protection for individuals holding small accounts. The authors propose to define small deposit account as an account with balance that is not exceeding LVL 3000.
5.How to choose a co-insurance rate?	The authors propose to choose 90% co-insurance rate. This co-insurance rate (maximum allowed rate for EU member countries according to the EU 94/19/EC Directive) is chosen to maximize this feature effectiveness.
6. What hybrid funding system type should be used?	The authors suggest to use the hybrid funding system according to the following scheme: borrowing from the state budget to pay guaranteed compensation must be repaid from "Ex-post" assessments on insured depository institutions. This provision makes clear that the responsibility for covering the insured deposits of failed banks falls on banks, not the government. Also, it gives banks an incentive better monitor they operations to ensure that they are sound.
7.How to choose additional "Ex-post" assessments rate?	The authors propose to specify in the "*Deposit Guarantee Law*" a maximum limit of the "Ex-post" assessments that can be imposed on banks in one year. This is very important because the banking industry might not have a capacity to pay an unlimited amount in one year, especially if it affected by a financial crisis.

Also, the authors think that Latvian experience would be very valuable for Ukraine in the country's reform success, as the current government has upheld the strategic goals of membership in the EU.

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МЕХАНІЗМИ ЗАБЕЗПЕЧЕННЯ ІНСТИТУЦІОНАЛЬНИХ ПЕРЕТВОРЕНЬ У ЛІСОВОМУ СЕКТОРІ РЕГІОНАЛЬНОГО РІВНЯ

У ринкових умовах стабільність розвитку лісового сектора регіонального рівня значною мірою пов'язується з тим, наскільки злагоджено працюють та взаємодіють ринкові інститути, що забезпечують функціонування цієї складної виробничо-господарської системи. На жаль, на даний час система ринкових інститутів у лісовому секторі перебуває на стадії становлення та не відповідає сучасним вимогам щодо забезпечення стабільності його розвитку. Для вирішення цієї проблеми необхідно детально дослідити сучасні тенденції розвитку лісового сектора, використати теоретико-методологічні положення і практичні рекомендації представників зарубіжної школи, розробити та обґрунтувати механізм взаємодії цих інститутів у процесі економічної діяльності. Також важливо, щоб ринкові інститути були максимально адаптовані до галузевої специфіки лісового сектора, забезпечували поєднання загальнодержавних, регіональних та локальних інтересів лісокористувачів, а також територіальних громад, спрямовувалися на реалізацію принципів сталого розвитку лісового господарства на науково об-