

Deposit Insurance System: Time for Improvement

Summary

The development of a reliable deposit insurance system is of crucial importance for Ukraine, since it can help to achieve important goals of economic policy: the enhancement of public confidence in the financial sector, the prevention of bank runs, attracting household deposits, lowering the deposit interest rate, and, hence, decreasing the cost of crediting and increasing investment. Although the framework of the Ukrainian deposit insurance system was designed rather well for the starting phase of its functioning, we argue that now it should be developed further. Otherwise it will not be able to promote financial stability in full extend.

In this paper we suggest measures, which should make the deposit insurance fund in Ukraine more efficient and allow it to give momentum to the development of financial intermediation. Our major suggestions concern the funds' capital and the system of deposit coverage. We advise to *legally define a target for DIS capital and to capitalize it with NBU contributions, adjust premiums according to the riskiness of commercial banks, introduce coinsurance and gradually raise coverage of deposits.*

1. Introduction
2. The benchmark system
3. Current system in Ukraine
4. Proposals concerning the funds' capital
 - 4.1 Increase of funds' capital
 - 4.2 Sources of finance
 - 4.3 Diversification of investment
5. Proposals concerning deposit coverage
 - 5.1 Introduction of coinsurance
 - 5.2 Increase of deposit coverage
6. Conclusions

1. Introduction

Virtually in all countries authorities pay special attention to the financial sector, particularly the banking system. This fact is explained first of all by importance of banks for an economy due to their involvement in the payment system, the intermediation between depositors and borrowers, and the role of commercial banks in the transmission of monetary policy. Moreover, banks are highly vulnerable to liquidity and solvency risks. Frequently, the failure of one bank can spill over to others, causing systemic problems for the banking sector¹. The importance of commercial banks, the necessity to prevent contagion, and the danger of potential losses by depositors led to the establishment of safety nets. Besides banking regulation, supervision and lender-of-last resort facilities, such nets include a system of deposit protection.

There are several options of promoting financial stability through deposit protection². Among these options, explicit and limited coverage of deposits proved to be the best variant. Currently this form of deposit protection is found in 74 countries, two thirds of the deposit insurance systems (DIS) were set up during the last fifteen years.

The development of well-functioning DIS is of crucial importance for Ukraine, since it can help to achieve important goals of economic policy: the enhancement of public confidence in financial sector, preventing bank runs, attracting household deposits, lowering of the deposit interest rate, and, hence, reduce the cost of crediting. Furthermore, strengthening of DIS can be seen as an important step in Ukraine's ambition to join the EU in the future³.

In Ukraine the Household Deposit Guarantee Fund was set up in 1998. Two years later it gained first experience by dealing with the problem of "Slavyansky" bank and later with bank "Ukraina". Although the framework of the Ukrainian DIS was designed pretty well for the initial period of it's functioning, we argue that now it has to be developed further, or otherwise it will not be able to promote financial stability in the fully possible extend. In this paper we look at the international experience of establishing DIS and define the features of the benchmark system (section 2), describe the current state of the Ukrainian deposit insurance fund (section 3) and set forth proposals for improvements in the DIS capital (section 4) and deposit coverage (section 5).

2. The benchmark system

A well-functioning DIS should be able to achieve three main objectives:

1. **Enhance public confidence and avoid bank runs.**
2. **Increase savings** by assuring depositors that certain portion of theirs deposits are protected.
3. **Provide protection for depositors**, especially for small one, through mechanism of prompt repayment of the insured part of deposits in case of bank failure.

In order to attain these goals, countries try to build systems fitting best the specialities of their economies. The design of DIS varies quite a lot across different countries. Some established private deposit insurance systems (Germany, France, United Kingdom), but the majority prefers to set up publicly run systems. By using the international experience,

¹ According to the World Bank, there were around 120 episodes of systematic bank crises in 93 countries during past two decades.

² Different forms of deposit protection can be distinguished: 1) legal priority of the claims of depositors over other claims; 2) an implicit guarantee; 3) explicit limited coverage; 4) explicit full coverage.

³ According to a EU directive all commercial banks in EU must take part in a DIS, which covers at least EUR 20,000 per deposit.

we defined features of public deposit insurance funds that allow to meet its objectives in the best way. Thus, a well-functioning DIS as a rule has following characteristics:

- **Explicit.** The DIS should be clearly defined in a law and the public should firmly know the rules of repaying deposits. Explicit DIS are operating in around 84 countries.
- **Compulsory.** Membership in DIS should be compulsory for all banks, including foreign and state-owned ones. Otherwise, only weak institutions will join DIS, reducing the DIS financial stability.
- **Defined target for capital.** In order to avoid insolvency, the DIS should evaluate economic stability and legally define target for accumulation of capital. Since financial stability is a public good, not only commercial banks, but the government as well should take part in financing the accumulation of funds' capital. Besides that, the DIS should always be able to receive low-cost credits from the state in cases of emergency.
- **Risk-adjusted premiums.** The premiums banks pay to the DIS should be adjusted according to their performance. This makes more riskier institutions that are most likely to have troubles to pay more for coverage. In this case sound banks do not subsidise weak banks.

Around one third of countries with explicit DIS are currently using a risk-adjusted system and their number tends to increase.

- **Limited coverage of deposit.** If the government offers an unlimited coverage of deposits, incentives of depositors to monitor the performance of banks are weakened and moral hazard more likely to occur. In this case the flow of deposits will be biased towards banks with risky operations and higher deposit rates, so that the probability of a systematic banking crises increases.

A limited coverage of deposits is also desirable due to social considerations: it protects small depositors, who are unable to monitor banks. Besides that, unlimited or too high coverage can lead to situations, when the deposit insurance fund will lack funds to repay deposits and may go bankrupt.

As a rule of thumb, it is suggested to set the coverage limit at the amount of one to two times the GDP of per capita. The average coverage in the world is 3.2 times of GDP per capita.

- **Prompt repayment.** In case of a bank failure the DIS should be able to offer the repayment of deposits very quickly, otherwise the danger of general bank run and systematic crises dramatically increases.

A well-functioning DIS should be able to offer a repayment within several days after the announcement about the liquidation of a bank. Most of the repayments should be completed within a month.

- **Information-sharing with central bank.** The central bank should be sharing information with DIS not only on an ex post basis, for instance inform about liquidation of commercial bank, but also provide data about potential problems. This will help the DIS to plan its operations and meet obligations without problems.

3. Current system in Ukraine

The idea of establishing a deposit insurance system in Ukraine appeared in 1995. At the beginning of 1996 the NBU approved the creation of the Interbank Deposit Insurance Fund, but at that time the fund did not meet the requirements of existing legislation. In 1996 officials of NBU and experts from World Bank prepared the law "On deposit

insurance". Only two years later a Presidential Decree initiated the household deposit insurance system⁴.

It's characteristics are the following:

- Household Deposit Guarantee Fund is a state, non-profit organization, the only deposit insurance agency in Ukraine;
- Compulsory for all banks, excluding Oschadbank (currently it includes 149 banks);
- Fund guarantees repayment of deposit and interest on it for each depositor in one bank up to UAH 1200.
- Fund does not repay deposits to the bank's insiders;
- Fund has the right to demand necessary information from NBU and commercial banks, but should keep bank secrecy;
- Fund is ruled by a Council, which includes two representatives from Cabinet of Ministers, two from NBU and one from the Association of Ukrainian Banks;
- Source of funds: UAH 20 m was contributed by the state; commercial banks contribute initially at the amount of 1% of statutory fund and 0.5% of deposits each year (0.25% twice per year). As of September 1st 2002 the fund's capital amounted to UAH 107 m;
- Investment of capital should be in state bonds (OVDP).

4. Proposals concerning funds' capital

4.1. Increase of funds' capital

In order to be able to offer coverage of deposits at a high enough level to attract average depositors and safely repay the insured part of deposits in case of bank failure, the deposit insurance fund should choose a sufficient target level for accumulation of its capital⁵. International practice shows that advanced countries with stable financial systems tend to set relatively moderate targets: 0.5% of total deposits, subject to insurance in Belgium, 0.8% in Italy, 1.25% in USA, etc. Transitional and developing economies, on the contrary, try to protect themselves from greater financial instability and select higher targets: 1.5% of deposits in Hungary and Slovakia, 3% in Estonia, 5% in Argentina.

Currently, Ukrainian deposit insurance fund does not have legally defined target for accumulation of funds. As of September 1st 2002 Ukrainian DIS accumulated UAH 107 m that covers 0.9% of total household deposits, collected by banks-members of DIS as of June 2002 (UAH 12 bn). In order to avoid problems with repayment of deposits and be able to set adequate deposit coverage, DIS should first of all **legally set the target and keep accumulating funds until reaching it**. On our view, appropriate target for Ukrainian DIS should be **3% of household deposits in the middle run**.

4.2. Sources of finance

We see two major ways of raising funds: regular payments of commercial banks and transferring part of NBU profits to DIS⁶.

⁴ Decree of the President of Ukraine "About protection of the rights of natural persons – depositors of Ukrainian commercial banks." № 996/98, September 10th, 1998

⁵ It should be noted that some advanced countries do not accumulate DIS capital at all and practice ex-post financing. Some of them: Germany, Austria, United Kingdom, Luxemburg. In our view, this method would not be credible and thus not suitable for Ukraine.

⁶ There are two more ways of raising capital. First, DIS gets profits from investment that it makes; we talk about investment policy later on in this paper. Second, there is also a possibility to take credits from the government in emergency cases.

Risk-adjusted premiums by commercial banks

Commercial banks pay premiums at the level of 0.5% of insured deposits (0.25% twice per year, in June and December). We think that overall level is quite suitable and propose not to change it in the near future to either side. Indeed, we see shortcoming in other issue: premiums are flat and paid at the same proportion of deposits by all banks. Although for the beginning of Fund activity flat premiums were more preferable since they are less complicated, nowadays Fund should think about improving this practise. At this point we suggest to introduce risk-adjusted premiums.

Motivation of this proposal is following: Underlying major working principles of DIS is just the same as in any other insurance company: it collects premiums from insured agents and stands ready to repay insurance in provided case. It is logical to assume that more risky agents with higher chances to call for help should pay higher insurance premium. According to this principle, DIS in many countries (including transition economies) use risk-adjusted premiums: riskier commercial banks pay higher premiums than more safe one's. Departure from this principle, flat premiums, is undesirable, since by paying equal premiums healthy banks subsidy weak institutions, hence, it disturbs incentive structure and risky banks at least in this point do not have stimulus to improve their performance.

Thus, we propose to **introduce risk-adjusted premiums according to central bank rating of commercial banks**. One of the simple, but powerful rating systems is CAMELS⁷, which is used by many central banks, including NBU. CAMELS rates banks on scale from 1 (best) to 5 (worst); premiums, adjusted to this system could be for example *from 0.3% for banks rated "1" to 0.7 % for banks rated "5"*⁸.

It could be the case that National Bank will not be willing to disseminate information about its rating of commercial banks to public. Nevertheless it is still possible to use it for risk-adjusted premiums but oblige deposit guarantee fund to keep privacy (as sometimes done in international practice).

One more issue, which we would like to discuss talking about commercial banks, is deposit insurance in "Oschadbank". Currently state saving bank "Oschadbank" is not included into common deposit insurance fund and given state guarantee. Exclusion of "Oschadbank" from common DIS has two major drawbacks:

First of all, state saving bank should operate like any other financial institution in the country. Granting it privileged treatment in deposit insurance brings distortions to the incentive structure of the financial market: "Oschadbank" enjoys more preferable conditions of operations regardless its performance.

Second, efficiency and long-term soundness of the "Oschadbank" stays doubtful. Despite many talks with international financial institutions, it has not been restructured yet. Thus, the probability of problems in this bank stays quite high, while mechanism of its resolving is not clear. In unfortunate case of "Oschadbank" failure, number of claims from depositors (especially small ones) will be enormous and government most likely will not be able to respond to all of them timely and fully. Thus, we can expect dramatically costly decrease in credibility not only towards government, but also towards all financial system, drop in households deposits and investment.

The ultimate solution to this problem is to bring state saving bank under the same regulations of deposit insurance as other commercial banks. It is very important to understand that before removing state guarantee and including it into common deposit insurance system, "Oschadbank" should be successfully restructured to sound conditions. It would be detrimental to include such huge saving bank, which holds 15% of all household deposits in the banking system, until it is reasonably safe. Transition to the common DIS should be announced well in ahead.

⁷ CAMELS is widely used banking rating system, which includes C – capital adequacy, A – asset quality, M – management quality, E – earnings, L – liquidity, S – sensitivity to market risk.

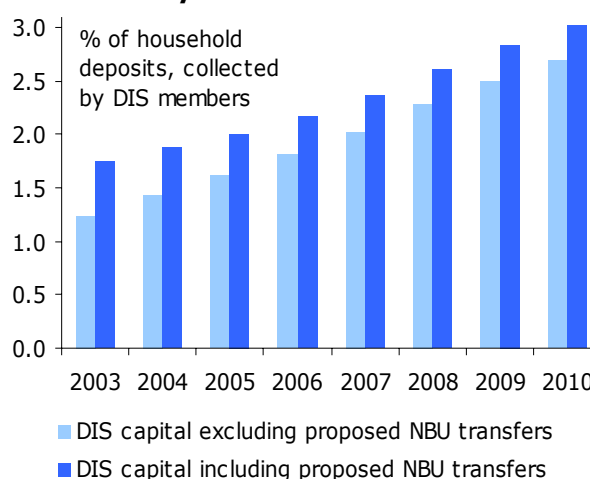
⁸ In order to make a concrete proposal, it would be necessary to know exact distribution of banks in this rating.

Transferring part of NBU profits

Left by their own, commercial banks will not be able to provide sufficient accumulation of capital. Besides that, raising capital of deposit insurance fund serves as a mean of increasing confidence in financial system and secures stability. Last point, financial stability, is actually public good and not only commercial banks, but government as well should make efforts to achieve it. Thus, we highly support the idea of NBU that foresees **transferring part of NBU profits to deposit guarantee**⁹.

Importance of this move is illustrated in Graph 1 where we showed our estimates of DIS capital accumulation for the period between 2003 and 2010 with and without transferring part of NBU profit¹⁰. As can be seen, participation of NBU in raising DIS capital is very beneficial, especially at the early stages. As was mentioned above, currently DIS capital is 0.9% of all deposits, subject to insurance. In 2003 without participation of NBU this level will reach 1.2%, while contribution of National bank increases it to 1.8%, which is quite acceptable level of security. Later on the difference becomes smaller, but still significant. DIS capital will be able to reach target level of 3% of insured deposits in 2010 under the stipulation that NBU will transfer funds; otherwise it will need two more years.

Graph 1. Capital accumulation of deposit insurance system in Ukraine



Source: own estimations

4.3 Diversification of investment

After discussing ways of accumulating funds, let's now turn to the other side of DIS capital and see how to allocate it wisely. First of all, we would like to clarify that primary objective of DIS investment is to secure capital from economic shocks and put it into liquid and reliable assets. Investment should not be treated only as a way of receiving profits; it should not also be considered as a mean of supporting domestic state debt market through obliging to invest exclusively into state securities. Instead, safety considerations should always be the priority of investment policy.

In Ukraine DIS legally authorised to invest only in domestic state securities and we consider this to be risky. First of all, domestic state securities are not as safe and liquid as it is required by DIS features. Second drawback is significant exchange rate risk. As of the middle of 2002, 47% of deposits, attracted by members of DIS were in foreign currency. Deposit insurance fund repays deposits, denominated in foreign currency according to official exchange rate at the moment of bank liquidation. Thus, if need to repay deposits will be combined with devaluation of national currency, DIS will be faced with higher level of repayment in national currency. In order to avoid these problems we suggest to **diversify DIS portfolio and allow investment in highest rated foreign securities**. Criteria for choosing safe institutions should be the same as for NBU.

⁹ For more discussion of distribution of NBU profits see paper S 13 "NBU profits: Who should get how much?".

¹⁰ Basic assumptions are following: Rate of deposit growth will gradually decrease and reach steady 15% growth by the end of decade. Commercial banks will generally pay 0.5% of insured deposits yearly. NBU will start transferring part of its profits (10% to 20%) in 2003. In our calculations we assume a transfer of UAH 100 m in 2003 and a yearly increase of 10% afterwards. DIS will on average invest 70% of its funds and receive income at the level of 5% yearly. We do not exclude possibility of a bank failure and repayment of deposits by DIS. Resulting depletion of capital is considered as temporary, since Fund has high priority in getting back funds during liquidation.

5. Proposals concerning deposit coverage

5.1. Introduction of coinsurance

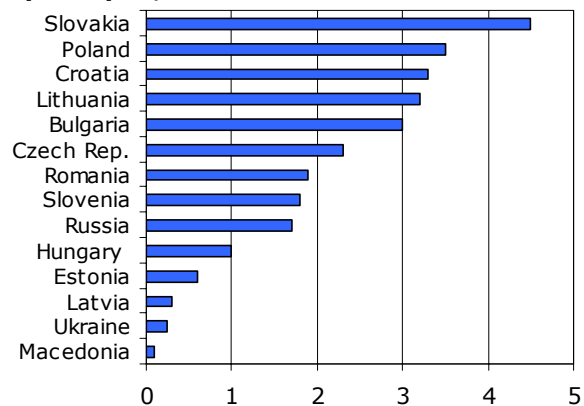
To our mind it is advisable to change current practise of offering full coverage and instead **introduce coinsurance: set full coverage up to certain small amount and then offer limited partial coverage**. This kind of deposit coverage is used in quite many countries, including transition one's. For instance, Poland offers full coverage of 1000 euro, then 90% of the next 18000 euro; in Russia it is projected to offer full coverage up to 2000 roubles, 10% for deposits up to 20000 roubles and 50% for deposits up to 80000 roubles. Similar schemes are used in the Czech Republic and Estonia. Such mechanism is more preferable since full coverage of small deposits will protect people with low income; coinsurance of the second part will attract larger depositors, while partial coverage will force them to select commercial banks more carefully, favouring healthier banks.

5.2 Increase of deposit coverage

Choosing level of coverage is a key point that determines success of DIS work and at large extend trust of the population to the financial system. Here DIS should find balance between two factors. From one side deposit coverage should not be too high. DIS should fully cover deposits of small investors, but motivate large depositors to look for sound commercial banks. From the other side, coverage should not be too small either, since in this case it will not be attractive for average depositor to save money in commercial banks. Last point is especially important for Ukraine, taking into account still low confidence to the financial system. Besides that, level of coverage should correspond to the level of DIS capital.

As a rule of thumb, it is suggested to set deposit coverage at the level of one to two times of GDP per capita; the average level of coverage in the world is 3.2 times of GDP per capita. Currently Ukraine set deposit coverage roughly at the level of 0.25 times of GDP per capita. For comparison, Graph 2 presents this ratio in selected Central and Eastern European countries with explicit DIS. As can be seen, Ukrainian deposit insurance fund offers deposit coverage not only dramatically small comparing to general international standards, but also virtually lowest among transition countries.

Graph 2. Ratio of Deposit Coverage to GDP per capita, 2001



Source: Deposit insurance funds of respective countries

Such low coverage hinders from inflow of deposits from average Ukrainian households and we suggest to **gradually increase deposit coverage** and try to achieve level of one time of GDP per capita in the middle run.

Very important point here is to connect increase of deposit coverage to increase of DIS capital. As we mentioned earlier, current assets of deposit insurance system in Ukraine is quite low, hence, significant and sharp increase of deposit coverage is undesirable. Nevertheless, we see scope for gradual increase, starting in the very near future, preferably right after next regular payment of commercial banks. Below we would like to set forth our arguments why it is possible now.

First of all, we have to take into account that overwhelming majority of deposits in Ukraine contain very little amount of money (see Table 1).

Table 1. Disaggregation of household deposits according to their size, as of July 1st , 2002 (only for banks in DIS)

Size of deposit, UAH	Number of accounts, thousands	% of total	Amount at the accounts, UAH m	% of total	Average size of the deposit
<500	4593.9	79.4	240.6	2.0	52
500-1000	288.3	5.0	225.0	1.8	780
1000-5000	495.6	8.6	1374.0	11.2	2772
>5000	407.7	7.0	10411.9	85.0	25540
Total	5785.4	100.0	12251.5	100.0	2118

Source: Ukrainian deposit insurance fund

Evidently, 80% of depositors make up just 2% of total amount of savings, the size of average deposit in this group is only UAH 52. Thus, we can expect that although number of claims in case of bank failure is likely to be big, amount of money DIS has to pay is not that huge.

Second feature of Ukrainian financial structure is large concentration of deposits in a few banks. Three big banks, Privatbank, Prominvestbank and Aval, account for 40% of households deposits that are placed in all 149 banks, included in deposit insurance system. In international practice it is considered that failure of any such bank should be regarded as systematic crises in the banking system. Although DIS should enhance public confidence and do the best to avoid bank runs, it is not a function of DIS to resolve *systematic* banking crises, the government should deal with it. Excluding three biggest banks, DIS can easily cover deposits in any other commercial bank.

Last point that we would like to emphasize is that deposit insurance institution should always have power to get low cost credits from government and restore its solvency during process of deposit repayment.

Summing up arguments in favour of coinsurance and increase of deposit coverage, we propose to change current repayment system. Instead of present full guarantee of UAH 1200 we propose to introduce coinsurance and increase higher bounder of repayment by roughly 1.5 times in the near future. It could be, let's say, *full coverage of UAH 1200 and 80% coverage for deposits up to UAH 2000*. In this case ratio of deposit coverage to GDP per capita will increase from 0.25 to roughly 0.4; later on, as DIS capital increases, it has to be raised further.

6. Conclusions

Proper functioning deposit insurance system is of high advantage for the economy. Main benefit comes from ensuring confidence in financial system and promoting its stability. This induces households to expand savings in the commercial banks; trust in financial intermediaries eliminates part of risk premium in the interest rates and pushes latter downwards. Both of this factors encourage financial intermediation, allow to expand crediting and, thus, investment and economic growth. Besides that, deposit insurance system is important due to its social meaning: it protects population, especially less wealthy, from losing money in case of bank failure.

In Ukraine deposit insurance fund operates for four years already. During this time it significantly developed, gained experience and confidence. Backing on this fact and taking into account urgent need to encourage confidence in financial system, we think that now is the right time to improve deposit insurance system in Ukraine. In this paper we suggest measures, which should make deposit insurance fund more efficient and allow it to give momentum to development of financial intermediation. We advise to **legally define target for DIS capital and fill it up with NBU contributions, adjust premiums according to riskiness of commercial banks, introduce coinsurance and gradually raise coverage of deposits**. In the table below we summarize our proposals and explain why, on our view, it is important to implement them.

The last point that we would like to mention, is that although deposit insurance fund may be very well designed, it makes little sense if public does not know about it much. The core of deposit insurance system is that people are aware of its benefits. For this purpose it is very important to conduct broad information campaign, convincing public in safety of financial system. Such activity should be extended in Ukraine.

I.E., R.G., Lektor: F.P.

Kiev, October 2002

Summary of proposals

Proper practice	Drawbacks of Ukrainian DIS	Consequences of drawbacks	Proposals
Proposals concerning the funds' capital			
Legally defined target for DIS capital. DIS should have legally defined target for accumulation of the funds. In transition countries it is usually set at 3% level of total household deposits.	Ukrainian DIS does not have defined target, it is not mentioned in any law. Currently DIS capital is 0.9% of total household deposits, collected by banks-members of DIS.	DIS is not able to safely increase deposit coverage. Not transparent activity.	Legally define target of DIS, set it at the 3% level of total household deposits in banks-members of DIS. Reach this goal in the middle run.
Risk-adjusted premiums. Premiums that commercial banks pay should be adjusted according to their riskiness.	Flat premiums, 0.5% of insured deposits.	Moral hazard, healthy banks subsidize weak banks.	Adjust according to central bank rating of commercial banks <i>0.3% to 0.7% of insured deposits according to CAMELS</i>
Compulsory for all banks, including state banks.	Oschadbank is not a part of DIS, deposits guaranteed by state, but mechanism is not clear.	Not fair competition, moral hazard.	Oschadbank should be restructured and then included into the common DIS.
State contributes to DIS capital	Currently only commercial banks make payments to DIS	DIS is not able to accumulate sufficient capital and safely increase deposit coverage.	Transfer part of NBU profits to DIS.
Proposals concerning deposit coverage			
Coinsurance Small amount is covered fully, then only certain percentage of deposit	Full coverage of UAH 1200	Households do not have enough incentives to monitor performance of commercial banks.	Preferable to provide 100% coverage of small deposits and then partial insurance (e.g. 80%) up to certain amount.
Sufficient coverage of deposits. DIS should find balance between moderate coverage, but high enough to attract deposits (internationally suggested 1 or 2 times of GDP per capita).	Deposit coverage in Ukraine is currently 0.25 of GDP per capita.	Low incentives for average depositor to save money in the bank.	Gradually increase coverage, full coverage of minimal amount and then coinsurance. <i>UAH 1200 covered full and 80% for deposits up to UAH 2000 or 0,4 of GDP per capita.</i>
Proposals concerning information dissemination			
Wide dissemination of information about DIS activity to the public	Public has little knowledge about Ukrainian DIS activity, banks rarely inform depositors about it as well.	Even though DIS may perfectly function, households may not know about it and have low trust in financial system.	Information campaign should be intended for average depositor, like posters in the subway, etc.