

“Approved”

Financial Markets Supervisory Authority
of the Republic of Azerbaijan
Resolution № 1851100009
“08” October 2018

Acting Chairman of the Management Board

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Regulations on substantiation and comparative analysis of costs for selection of any of the resolution measures

1. General provisions

1.1. These Regulations have been developed in accordance with Articles 57-5.4.1 and 57-8.5 of the Law of the Republic of Azerbaijan on Banks (hereinafter – the Law) and the International Valuation Standards and determine the order and methodology on substantiation and comparative analysis of costs for selection of any of the measures specified in Article 57.6 of the Law, as well as the methodology on setting a starting value for sale of a bridge bank.

1.2. Valuation is maintained by a temporary officer, who may involve an outside appraiser to the appraisal process.

2. Definitions

2.1. The definitions used herein bear the following meanings:

2.1.1. appraiser – qualified and experienced individual(s) or legal entity(ies) who can objectively and independently assess assets and liabilities;

2.1.2. standard loan – a loan classified as a standard asset by regulations of the Financial Markets Supervisory Authority of the Republic of Azerbaijan (hereinafter – the FIMSA);

2.1.3. substandard loan – a loan classified as a substandard asset by regulations of the FIMSA;

2.1.4. secured loan – a loan secured by the following types of collateral for the purposes of these Regulations:

2.1.4.1. money in national and freely convertible currency pledged to the bank;

2.1.4.2. government securities of the Republic of Azerbaijan, as well as securities issued by the Central Bank of the Republic of Azerbaijan (hereinafter – the Central Bank), government or Central Bank guarantee;

2.1.4.3. securities and guarantees issued by governments or central banks of the Organization for Economic Cooperation and Development (hereinafter - OECD) countries with a minimum investment rating assigned by reputable international rating agencies (Standard & Poor's, Fitch Ratings, Moody's, hereinafter - international rating agencies);

- 2.1.4.4. bank metals and precious metals pledged to the bank;
- 2.1.4.5. securities and guarantees issued by multilateral development banks with minimum investment rating issued by international rating agencies;
- 2.1.4.6. securities and guarantees issued by banks with minimum investment rating registered in OECD countries and given by international rating agencies;
- 2.1.4.7. guarantees (warranty) issued by the banks operating in the Republic of Azerbaijan;
- 2.1.4.8. securities traded on the Baku Stock Exchange or issued by companies registered in OECD countries with a minimum 'A' credit rating (or equivalent) assigned by international rating agencies;
- 2.1.4.9. backed securities issued by the Mortgage and Credit Guarantee Fund of the Republic of Azerbaijan;
- 2.1.4.10. real estate;
- 2.1.4.11. vehicles.
- 2.1.5. premium – difference between the market value of the bank, which is greater than the sum of net tangible and intangible assets, registered or unaccounted for in the bank (fully depreciated, but usable assets)
- 2.1.6. expenses of the temporary officer (liquidator) – all costs and expenses incurred by the temporary officer (liquidator) on insolvent bank resolution (liquidation), including salary, court, travel, professional appraisal service, determined in accordance with Annex 1 herein, costs of audit services and other services received;
- 2.1.7. final residual value – the value that can be obtained from the present value of the asset less probable costs of selling it;
- 2.1.8. presentation value – the value that is expected to be paid to the owner at the end of the useful life of the asset;
- 2.1.9. modern equivalent asset – an asset created (built, designed, etc.) by modern materials and equipment that has a function and utility similar to the asset being valued;
- 2.2. Other definitions used herein bear the meanings specified in the Law.

3. Selection of a more cost effective resolution method

- 3.1. A resolution method that is more profitable in terms of losses and costs is selected on the basis substantiation and comparative analysis of costs. Substantiation and comparative analysis of costs is maintained in the following sequence:
 - 3.1.1. evaluation of assets and liabilities of an insolvent bank;
 - 3.1.2. determination of expenses for each resolution method on the basis of assessment in the order specified in Annex 1 herein;
 - 3.1.3. comparison of expenses determined per resolution method;
 - 3.1.4. selection of the least expensive resolution method.

4. Valuation of assets

- 4.1. One or several of the following approaches may be applied depending on the type and nature of the asset under valuation:

4.1.1. **Market approach** – method of determining the value of an asset based on the selling price of the same or similar assets in the market;

4.1.2. **Income approach** – determining the value of an asset on the basis of calculating net present value of future cash flows on the asset;

4.1.3. **Cost approach** – determining the value of the asset on the principle that the expenses the buyer would incur should not exceed the cost of acquisition (purchase, construction, etc.) of the asset with the same usefulness.

4.2. When selecting approaches and methods the temporary officer (appraiser) should consider at least the following:

4.2.1. strengths and weaknesses of possible valuation approaches and methods for valuing a particular asset type;

4.2.2. compliance with the approaches and methods used to value relevant assets in the market;

4.2.3. availability of reliable information required for application of method (s).

5. Market approach

5.1. The market approach is used in valuation of an asset if:

5.1.1. the appraised asset has been acquired over recent 6 months;

5.1.2. the appraised or similar asset is publicly traded in the market;

5.1.3. there are operations on a similar asset over recent 6 (six) months.

5.2. The following methods are used to value an asset via a market approach:

5.2.1. comparable transactions method – determination of the asset value using information on individual transactions on assets that are identical or similar to the asset being valued;

5.2.2. method of mass comparative transaction – determination of the value of an asset using information on transactions with publicly traded assets that are identical or similar to the asset being valued.

5.3. The comparable transactions method is applied as follows:

5.3.1. identification of comparative units used in the market (assets that are identical or similar to the asset);

5.3.2. determination of prices by comparative units;

5.3.3. comparative analysis of similarities and differences in terms of quantity and quality between comparable assets and the asset being valued;

5.3.4. making necessary changes to prices when there are differences between the asset being valued and similar assets;

5.3.5. application of the changed price to the asset;

5.3.6. reconciliation of results when multiple values are used.

5.4. The method of mass comparative transaction is applied as follows:

5.4.1. determination of publicly offered and comparable assets and prices on those assets;

5.4.2. comparative analysis of similarities and differences in terms of quantity and quality between publicly offered and comparable assets and the asset being valued;

- 5.4.3. making necessary changes to prices when there are differences between the asset being valued and publicly offered assets;
- 5.4.4. application of the changed price to the asset;
- 5.4.5. reconciliation of results when multiple values are used.

6. Income approach

- 6.1. The income approach is used in valuation of an asset if:
 - 6.1.1. asset's earning capacity is considered a factor that has a significant effect on its price;
 - 6.1.2. there are forecasts on the amount and timing of the return on asset being valued and there are not enough assets available for comparison.
- 6.2. A discounted cash flow (hereinafter – the DCF) method is used with respect to application of the income approach and is based on discounting future cash flows to the current date.
- 6.3. The DCF method is applied as follows:
 - 6.3.1. selecting the most appropriate type of cash flow according to the nature of the asset being valued (e.g., cash flow before or after taxes, aggregate cash flows, real or nominal cash flows, etc.);
 - 6.3.2. determining the most appropriate predictable cash flow period;
 - 6.3.3. developing cash flow forecast for the period specified in sub item 6.3.2;
 - 6.3.4. determining the final residual value of the asset that is the subject of valuation at the end of the period specified in sub item 6.3.2 herein;
 - 6.3.5. determining the appropriate discount rate;
 - 6.3.6. application of a discount interest rate to projected cash flows, including the final residual value of an asset.
- 6.4. The discount interest rate is approved by the Chairman of the Management Board of the FIMSA at the proposal of the temporary officer.

7. Cost approach

- 7.1. This approach determines the value of an asset by calculating replacement or recycling costs less amortization cost.
- 7.2. The cost approach is applied if:
 - 7.2.1. an asset with the same usefulness as the asset being valued can be formed without regulatory and legal restrictions as soon as possible;
 - 7.2.2. the asset does not generate direct income and the nature of the asset does not allow the use of an income or market approach.
- 7.3. The following methods are used to value the asset through the cost approach:
 - 7.3.1. replacement cost method – determining the price on the basis of the cost to be incurred as a result of replacing the asset with another one with the same usefulness;
 - 7.3.2. recycling cost method – determining the value of an asset by calculating the costs required to produce the same. The method is applied when the cost of a modern

equivalent asset exceeds the cost of creating the same asset being valued or when usefulness of the identical asset exceeds that of the modern equivalent asset;

7.3.3. accumulation method – determining the value of an asset on the basis of accumulation of the value of its parts.

7.4. The replacement cost method is applied as follows:

7.4.1. calculation of all costs incurred in creating an asset that has the same usefulness as the asset being valued;

7.4.2. determining the amortization cost of the asset being valued;

7.4.3. deduction of amortization cost from total cost to determine the value of the asset being valued.

7.5. The recycling cost method is applied as follows:

7.5.1. calculation of all costs incurred in connection with the creation of the same asset being valued;

7.5.2. determining the amortization cost of the asset being valued;

7.5.3. deduction of amortization cost from total cost to determine the value of the asset being valued.

7.6. The accumulation method is applied as follows:

7.6.1. determining the value of the parts of an asset using the approaches and methods determined herein;

7.6.2. accumulation of the value of the parts of the asset being valued.

8. Valuation of liabilities

8.1. The estimated value of a liability is taken to be equal to its carrying value.

9. Determining the starting value for the sale of a bridge bank

9.1. The starting value for bridge bank sale is determined with the below formula:

$$SV = EVA - EVL + PR$$

where: SV – starting value for the sale of the bridge bank, EVA – estimated value of bridge bank's assets on the basis of the methodology determined herein, EVL – estimated value of bridge bank's liabilities on the basis of the methodology determined herein, PR – premium established for the bridge bank (if any).

9.2. The temporary officer (appraiser) determines the bridge bank's premium considering at least the following:

9.2.1. bank's branch network;

9.2.2. bank's IT system;

9.2.3. experience, productivity and comparative advantage of bank staff;

9.2.4. expected benefit of the loan and deposit portfolio for healthy growth of the bank.

How calculate costs for each resolution method

1. Costs for each resolution method are calculated as follows:
 - 1.1. insolvent bank's assets are classified on the following types:
 - 1.1.1. credit portfolio:
 - 1.1.1.1. standard loans;
 - 1.1.1.2. non-standard unsecured loans;
 - 1.1.1.3. non-standard secured loans.
 - 1.1.2. real estate;
 - 1.1.3. unfinished buildings;
 - 1.1.4. movable property;
 - 1.1.5. securities;
 - 1.1.6. cash and equivalent, as well as balances of correspondent accounts;
 - 1.1.7. participation in subsidiary companies and other economic entities;
 - 1.1.8. intangible assets;
 - 1.1.9. other assets.
 - 1.2. Value of each resolution method is calculated as per Item 2, Annex 1 herein;
 - 1.3. Cost of the Deposit Insurance Fund (hereinafter – the Fund) and other creditors (hereinafter – creditors) except for insured deposits on the basis of the value of the resolution method.
 - 1.4. Cost of the Fund is calculated as follows:
 - 1.4.1. if the resolution method value is below zero, the Fund's cost is equal to this amount;
 - 1.4.2. if the resolution method value is zero or over, the Fund's cost is taken equal to zero.
 - 1.5. Cost of creditors is calculated as follows:
 - 1.5.1. if the resolution method value is below zero, cost of creditors is taken to be equal to the carrying value of their credit exposure;
 - 1.5.2. if the resolution method value is zero or over, cost of creditors is taken to be equal to the difference between carrying value of credit exposure and cost of the resolution method.
2. Cost of each resolution method is calculated with the below formula:

2.1. **cost of insolvent bank's liquidation method:**

$$VM = LVA_L - (ID + \sum_{t=0}^T EXP_L)$$

$$LVA_L = \sum_{j=1}^n A_j * (1 - d_j) - \sum_{t=0}^T EXP_M$$

where: VM – resolution method cost, LVA_L – expected income from sale of assets to be transferred to the liquidator, ID – estimated value of insured deposits, EXP_L – liquidator's expenses, EXP_M – temporary officer's expenses, A_j – assets estimated value on j asset type, d_j – discount interest rate on j asset, n – the number of asset types, t – time.

2.2. **cost of insolvent bank's other resolution methods:**

$$VM = LVA_i + LVA_L + PR - (ID + \sum_{t=0}^T EXP_L)$$

$$LVA_i = \sum_{j=1}^n A_j * (1 - d_j) * k_j - \sum_{t=0}^T EXP_M$$

$$LVA_L = \sum_{j=1}^n A_j * (1 - d_j) * (1 - k_j)$$

where: VM – resolution method cost, LVA_i – discounted value of the assets to be transferred to the buyer bank, the bridge bank or an investor, LVA_L – expected income from sale of assets to be transferred to the liquidator, PR – premium to be paid by the buyer bank or an investor, ID – estimated value of insured deposits, EXP_L – liquidator's expenses, EXP_M – temporary officer's expenses, A_j – assets estimated value on j asset type, d_j – discount interest rate on j asset, k_j – ratio of assets to be transferred to the buyer or bridge bank on j asset type, n – the number of asset types, t – time.