



IMPROVING COLLATERAL ARRANGEMENTS IN LENDING TO SMALL ENTERPRISES

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ABSTRACT	KEYWORDS
This article examines the selection, valuation, and monitoring of collateral in lending to small businesses. Drawing on legislation governing the collateral registry, international practice in the use of movable assets, and principles of partial credit guarantees, it proposes an approach that combines legal and economic due diligence. The analysis distinguishes between the market value of collateral and its discounted net recovery value and provides an illustrative calculation. The use of movable assets and receivables as collateral is constrained by the quality of documentation and the applicable legal framework. The recommendations presented are conceptual and do not constitute empirical findings based on actual bank collateral portfolios.	Collateral, collateral registry, movable assets, liquidity, recovery value, receivables, guarantee.

Introduction

Although collateral is a tool that can reduce a bank's loss in small-business lending, treating it as the sole lending criterion may exclude solvent businesses with limited real estate from access to finance. This article focuses not on the nominal appraised value of collateral, but on its legal enforceability, marketability, and the net value expected to be recovered through enforcement. The central proposition is that the degree of reliance on collateral should be determined jointly with an assessment of the business's cash flow.

Literature Review

The World Bank principles on partial credit guarantees [1] aim to broaden access to finance by covering part of the lender's risk. A guarantee can alleviate the problem of insufficient collateral; however, borrower assessment and recovery discipline must be preserved. A guarantee by itself does not make a business with inadequate cash flow creditworthy.

IFC material on the launch of a collateral registry in Sri Lanka in 2025 shows the importance of legal and information infrastructure for expanding the use of movable assets [3]. This experience is not a ready-made legal rule for Uzbekistan; its practical lesson is that the existence of an asset, the rights over that asset, and the enforcement mechanism should be examined together. Judicial procedures, registration systems, and asset-market conditions differ across countries.

Research Methodology

The study is based on legal-document analysis, comparison of collateral types, and an illustrative discounted-value calculation. The version of Law No. ZRU-356 published on LexUZ was checked on 2 October 2026. The law serves as a source for examining information contained in the registry and the procedure for its use; it does not provide a single conclusion on the legal validity of every type of collateral in every circumstance. In practice, enforcement depends on the type of asset, the contract, documents confirming the relevant rights, and applicable legislation. Because the present article does not use actual enforcement files or valuation reports, the discount rates and sale periods are illustrative. The proposed formulas are explanatory models for designing internal bank policy and should not be treated as regulatory collateral coefficients.

Analysis and Results

Law No. ZRU-356 defines the collateral registry as an information database containing records concerning creditors' rights and related restrictions [2]. In credit analysis, a registry search helps identify prior rights or encumbrances. However, the existence of a registry record does not confirm market value and does not replace all title and authority documents.

It is proposed that collateral valuation distinguish three levels: market value, value adjusted to realization conditions, and discounted net recovery value. The first may reflect an ordinary market exchange. The second incorporates the urgency of sale, asset depreciation, and liquidity discounts. The third additionally deducts costs and accounts for the time value of money. Linking a credit limit solely to the initial market appraisal conceals these differences.

Table 1. Valuation and Monitoring of Different Types of Collateral

Type of collateral	Main limitation	Area of verification
Real estate	Regional liquidity and legal restrictions	Title documents, condition of use, and comparable sales
Equipment	Depreciation and a narrow secondary market	Model, year of manufacture, servicing history, and buyer market
Inventory	Changing quantities and perishability	Warehouse control, inventory checks, and price monitoring
Receivables	Debtor quality and probability of dispute	Contract, confirmed delivery, and debtor verification
Cash collateral	Currency and rights of use	Availability of funds and contractual restrictions

Source: Author's comparative classification. The use of each instrument is subject to the relevant legal review.

Illustrative calculation model: $R = [V \times (1 - h) - C] / (1 + r)^t$, where R is the discounted net recovery value; V is market value; h is the realization discount; C represents enforcement and sale costs; r is the annual discount rate; and t is the recovery period expressed in years. This simplified model assumes that the proceeds are received at one point in time. If proceeds are received in stages, each cash flow should be discounted according to its own date.

Table 2. Illustrative Calculation of Collateral Value

Scenario	V, UZS mln	h	C, UZS mln	t, years	R, UZS mln
Baseline	700	20%	30	1	460.87
Higher realization discount	700	35%	30	1	369.57
Longer sale period	700	20%	30	2	400.76

Source: Author's calculation. In each scenario $r = 15\%$. These parameters are not actual bank statistics or mandatory regulatory norms.

Under the baseline scenario, $(700 \times 0.80 - 30) / 1.15 = \text{UZS } 460.87$ million. If the bank's exposure at default is UZS 500 million, collateral coverage based on market value appears to be 140%, whereas discounted net recovery coverage is only 92.17%. This difference demonstrates that the conclusion on collateral adequacy depends on which value concept is used. The entire unrecovered portion may not ultimately become a credit loss, since other receipts and payments should be calculated separately. If the realization discount rises to 35%, the net value falls to UZS 369.57 million. If the baseline sale takes two years, the net value becomes UZS 400.76 million. The first case illustrates market and liquidity risk, while the second illustrates timing risk. If the discount and recovery period are calibrated using historical enforcement outcomes, the bank's decision becomes more realistic; applying the same percentage to every asset ignores these differences.

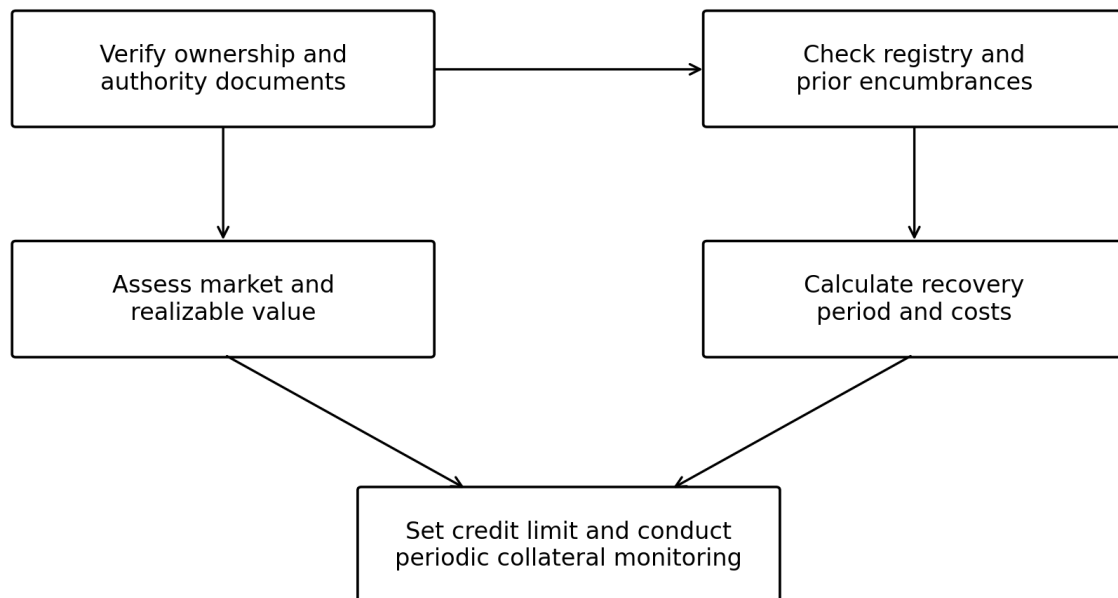


Figure 1. Joint Assessment of the Legal and Economic Value of Collateral

Source: Conceptual framework developed by the author.

Movable Assets and Alternative Collateral

Clear identification of the asset is essential when movable property is used as collateral. For equipment, the serial number, location, and technical condition should be documented; for inventory, the type, quantity, storage location, and turnover procedure should be recorded. In businesses with rapidly changing stock, the initial inventory list alone is insufficient. The cost of control should be proportionate to the income generated by the loan.

When financing is secured by receivables, the bank should verify that the relevant goods or services were actually delivered, that the claim is not disputed, and that the debtor is creditworthy. If the debtor is a related party of the business owner, the documented receivable may not be treated as an independent source of cash inflow. The risks of duplicate financing of the same claim and other restrictions should be assessed through registry and contractual checks.

Where partial guarantees are combined with collateral, the coverage limit, claim conditions, payment period, and allocation of subsequent recoveries should be specified clearly. Simply adding the amount recoverable from collateral to the guarantee amount may result in double counting. The bank's net loss depends on the contractual order in which payments are received; the risk that a guarantee claim may not be accepted should also be analyzed separately.

Table 3. Checks When Combining Collateral and Guarantees

Issue	Condition to be checked	Effect on outcome
Coverage share	Which exposure does the guarantee cover, and to what extent?	Risk retained by the bank
Payment condition	Definition of default and required claim documents	Whether the guarantee works in practice
Collateral recovery	Which party receives what share of recoveries?	Prevention of double counting
Payment period	Time between claim submission and cash receipt	Discounted coverage value
Guarantee fee	One-off and recurring costs	Total financing cost for the client

Source: Author's proposal; practical interpretation of the principles in [1].

Monitoring and Institutional Recommendations

When selecting an appraiser, independence and experience with the relevant asset type should be verified. Responsibilities should be separated so that credit sales personnel cannot pressure the valuation process. Assumptions used in the valuation report—such as the sale period, market comparables, and discounts—should be retained in the credit file. If a new report differs sharply from the previous value, the reason should be explained; accepting only valuations that increase the asset value creates selection bias.

Collateral monitoring should vary according to the risk of the asset. Rapidly changing inventory may require shorter review intervals, whereas assets with more stable liquidity may be monitored less frequently. A decline in price, expiration of insurance, relocation of the asset, or a dispute over title should trigger reassessment. The existence of insurance does not automatically eliminate liquidity or legal risk.

Within the bank, a unified collateral database should link the loan number, asset identifier, valuation date, registry record, and recovery outcome. Updating the relevant records after repayment is also part of the process. An outdated encumbrance may complicate subsequent financing. It is recommended that the life cycle of collateral be tracked from loan origination until release of the security.

Table 4. Indicators of Collateral-Management Effectiveness

Indicator	Definition	Practical use
Net recovery ratio	Net proceeds / exposure at default	Analysis of actual loss and LGD
Recovery period	Months from default to final proceeds	Discounting and process-cost analysis
Valuation error	Difference between forecast and actual sale value	Updating discounts and valuation models
Share of legal defects	Defective files / reviewed files	Document quality and staff training
New clients using movable collateral	Number of businesses that had not previously borrowed	Financial additionality

Source: Author's proposed monitoring indicators.

International Conceptual Foundations of the Collateral System

The UNCITRAL Model Law on Secured Transactions proposes a unified and functional approach to different transactions that serve a security purpose [4]. It covers movable tangible and intangible assets as well as different forms of debtors and creditors. This instrument is not a rule that automatically applies in Uzbekistan. Rather, it is used as a benchmark when analyzing national legislation and institutions.

The UNCITRAL Legislative Guide includes equipment, inventory, receivables, bank accounts, certain documents, and intellectual property among the types of movable assets that may be used as security [5]. In lending practice, merely placing an asset on a broad list of eligible collateral is not sufficient. The creation of the security right, its effectiveness against third parties, priority, and enforcement procedure must be clear. Banks should obtain a national legal opinion for each type of asset.

A collateral registry generally does not verify the market value of the asset or the absolute correctness of a creditor's claim. Its role is to provide notice of potential security rights and help identify competing claims. Therefore, a registry search should be combined with verification of ownership, contractual authority, and the existence of the asset. If the search criteria are incorrect, an existing record may not be found.

Table 5. Four Layers of Verification of Collateral Rights

Layer	Key question	Evidence
Creation	Was the security right validly created?	Contract and authority
Asset	Does the asset exist and is it clearly identified?	Inventory, number, and location
Third-party effectiveness	Was the right disclosed in the required manner?	Registry record or other lawful method
Priority and enforcement	What is the ranking in the event of competing claims?	Search, applicable law, and judicial-practice review

Source: Author's classification based on international principles [4; 5].

Valuation Standards and Independence

The valuation assignment should clearly state the basis of value, valuation date, intended use, condition of the asset, and material assumptions. Market value and value under forced-sale or liquidation conditions are not the same concept. The bank should separately record which value is used in setting the credit limit and what discount is applied. An appraiser's conclusion should not automatically determine the lending decision; the bank should compare the assumed sale period and costs with its own historical data.

Appraiser independence is not ensured solely by the source of the appraisal fee. The terms of engagement, conflicts of interest, appraiser rotation, and review of reports are also important. Credit sales staff should not select preferred comparables in order to inflate the value. The bank should test valuation quality against subsequent actual sale outcomes and identify methods or providers that systematically overvalue collateral.

Table 6. Main Adjustments in Collateral Valuation

Adjustment	Economic meaning	Data source
Liquidity discount	Price reduction under rapid sale	Historical sales and market depth
Physical depreciation	Condition and remaining useful life of the asset	Inspection and technical documentation
Legal cost	Registration, court, and enforcement expenses	Actual cases and applicable tariffs
Sale period	Time until cash proceeds are received	Recovery files
Currency risk	Mismatch between asset currency and exposure currency	Stress exchange rate and policy assumptions

Source: Author's proposal. Discounts should be calibrated using historical data by asset type.

Inventory and Warehouse Documents

Inventory can be economically appropriate collateral for working-capital lending because the asset financed by the loan is converted into cash through sales. However, inventory quantities change rapidly, quality may deteriorate, or goods may be moved elsewhere. The bank should define in the contract the minimum stock balance, accounting method, storage location, insurance requirement, and periodic inventory procedures.

Where an independent warehouse or control agent is used, its authority, responsibility, and reporting quality should be verified. A warehouse receipt or other document may indicate that an asset exists, but the reliability of the issuing party is important. The risk that the same inventory is pledged repeatedly in favor of several creditors should be assessed by combining registry, warehouse, and accounting data. The cost of verification must remain proportionate to the size of the loan.

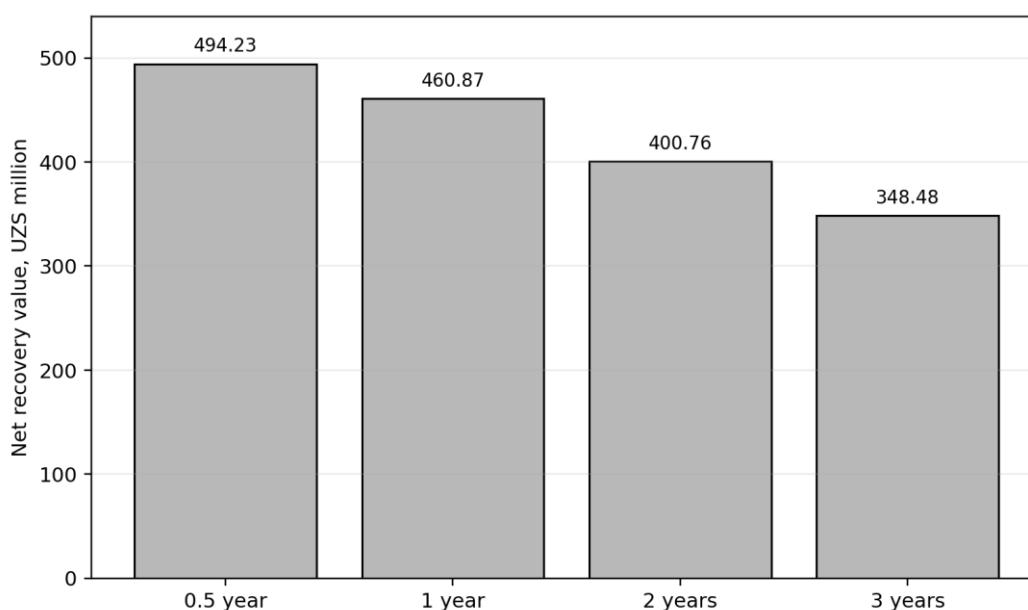
Table 7. Inventory Monitoring Plan

Control	Frequency	Trigger
Electronic balance report	Weekly or monthly	Balance falls below the minimum threshold
On-site inventory count	Quarterly depending on risk	Difference between records and physical stock
Price review	Monthly or during a market shock	Sharp price decline
Insurance and storage review	Before expiry	Breach of policy or warehouse conditions
Registry and encumbrance search	At loan origination and upon material changes	New competing claim

Source: Author's proposal. The frequency is indicative and should be adjusted according to risk.

Receivables and Factoring-Related Collateral

The value of a receivable is not equal to the nominal amount shown on an invoice. Confirmation of delivery, return terms, discounts, disputes, the debtor's solvency, and the maturity of the claim should all be examined. A high concentration in a single debtor weakens diversification. If the debtor is related to the borrower, the economic substance of the transaction and the pricing terms require deeper review. Assignment of a receivable in favor of another party, notification of the debtor, and the account to which payment is directed should comply with the contract and applicable law. Credit monitoring should cover not only the volume of newly issued invoices but also overdue receivables, credit notes, and returned goods. The risks of fictitious trade documents or double financing of the same receivable should be managed through cross-checking documents and data.

**Figure 2. Sensitivity of Illustrative Recovery Value to Time**

Source: Author's calculation. $V = \text{UZS } 700 \text{ million}$, $h = 20\%$, $C = \text{UZS } 30 \text{ million}$, and $r = 15\%$; these are not actual bank statistics.

The illustrative calculation shows that, for the same asset, discounted net recovery value declines as the recovery period becomes longer. If the process extends to three years, the value falls to approximately UZS 348.49 million. This result demonstrates the economic importance of accelerating judicial or enforcement procedures. In practice, however, cash flows may be received on several dates, with additional costs or partial payments; therefore, each actual inflow should be discounted separately.

Collateral Portfolio Management and Stress Testing

In addition to individual assets, a bank should monitor concentration across the entire collateral portfolio. Real estate located in one region, equipment of the same model, or inventories linked to the same commodity price may all lose value simultaneously during a common shock. Nominal overcollateralization can conceal such dependence. A stress test should therefore worsen asset prices, sale periods, costs, and currency factors jointly.

The collateral coverage ratio can be calculated as $CR = R / E$, where R is the discounted net recovery value and E is the exposure at default. Even if the coverage ratio is above 1, a legal defect or loss of the asset can change the outcome. Economic and legal assessments should therefore be performed separately and then considered together. The borrower's cash flow should remain the primary source of repayment.

Table 8. Illustrative Results of a Collateral Stress Test

Scenario	Price discount	Cost, UZS mln	Period	Net value, UZS mln	Coverage of UZS 500 mln exposure
Baseline	20%	30	1 year	460.87	92.2%
Market shock	35%	40	1.5 years	335.92	67.2%
Legal delay	20%	50	3 years	335.34	67.1%

Source: Author's illustrative calculation. $r = 15\%$; these are not actual recovery outcomes.

Collateral data should be stored in the credit system together with the valuation date, basis of value, applicable discount, registry record, insurance status, and monitoring status. When a loan is closed, responsibility and a deadline should be defined for releasing or updating the relevant registry entry. A client should not suffer in subsequent financing because of an outdated record. Delayed updates, missing documents, and corrected errors should be tracked as separate data-quality indicators.

Pilot Proposal for Evaluating Reforms

The broader use of movable assets should first be tested within a limited segment. Among borrowers with comparable risk, the pilot should compare access to credit, collateral costs, decision time, delinquency, and actual recoveries. Growth in the number of loans secured by movable assets alone does not prove that the reform is effective. The central questions are whether previously rejected but creditworthy businesses have obtained financing and whether bank losses remain manageable.

For the pilot, legal specialists, appraisers, risk professionals, and the operations unit should jointly develop a standardized file. The reason for every rejection or exception should be coded. If the number of enforcement cases is still small, initial conclusions should be limited to process quality and access to credit; sufficient time should be allowed before drawing final conclusions on loss given default.

(LGD). This approach reduces pressure to demonstrate rapid positive results and helps preserve the quality of evidence.

Conclusions and Recommendations

Improving collateral arrangements cannot be achieved simply by uniformly reducing or increasing collateral requirements. The key directions are to assess legal enforceability, realization liquidity, and net recovery value jointly. The use of movable assets can be expanded where identification, monitoring, and enforcement procedures are sufficiently robust.

Practical recommendations include creating a unified collateral database, incorporating into the credit file a calculation that moves from market value to discounted recovery value, strengthening independent valuation, and preventing double counting of coverage when partial guarantees are used. Future research should calibrate discounts using actual sale and recovery data. Collateral should be treated as a secondary source of repayment, while analysis of the business's operating cash flow should remain the primary basis of the lending decision.

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