

# **Policy Brief**

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The impact of the transition to escrow plans on the Tashkent development market: a financial modelling perspective

# **KEY MESSAGE**

- Introduction of escrow schemes policy for financing new residential construction in Tashkent
- The bank will only release the buyers' funds held in escrow to the developer as a lump sum amount after construction is completed and the property is registered
- Micro-economic approach was applied in our analysis, specifically a comparative three-statement financial modelling methodology to analyse the development process for a standardized mixed-use but predominantly residential development in central Tashkent
- Results are obtained for key model outputs assuming the disappearance of DDY-related discounts for advance payments upon transition to escrow plans

# INTRODUCTION

This policy brief explains the impact of a recent policy in the Republic of Uzbekistan that introduces escrow schemes for financing new residential construction in Tashkent. Using the 3-statement financial modelling approach, this policy brief outlines the key consequences of this transition and what it means for developers, buyers, the banking sector and the In construction. government. escrow schemes usually refer to bankintermediated financial arrangements designed to protect the interests of all parties involved in a construction project. These schemes include setting aside apartment buyers' funds in a neutral, third-party account (the bank "escrow") to ensure that money is distributed correctly to the project-initiating developer at specific milestones or upon the completion of the construction project. This helps ensure that both the property buyer and the developer fulfil their obligations before funds are released. We find a moderate impact of the plan on expected development project profitability. However, the substantial additional equity re-

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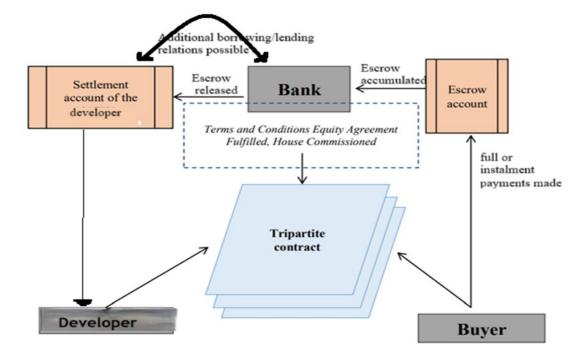


quirements to implement the plan should not be overlooked.

#### Escrow system in a nutshell

Mandatory escrow schemes for apartment developments have been legislated in several countries, including UAE <sup>1</sup>, India <sup>2</sup> and Russia <sup>3</sup>. They are also widely used, but not mandated, in the UK and other British Commonwealth countries, such as Australia and South Africa. According to the Presidential Decree YP-11 dated 27 Jan 2025 <sup>4</sup>, Uzbekistan is to introduce escrow schemes on all off-plan contracts in residential unit acquisition (called "investment" or "DDY" contracts in Uzbek-

istan) with full effect from 1<sup>st</sup> of Jan 2026. Henceforward, apartment buyers will deposit their advance payments on investment contracts directly to escrow banks based on a trilateral contract concluded between them, the developer and the associated escrow bank funding the development. The apartment buyers' funds will be released to the developer by the escrow bank only upon the timely completion of the construction process or in proportion to the completed construction. This reduces the risk of purposeful delays and disruptions in the construction process. (See Fig. 1) This means developers will no longer be able to use funds



<sup>1</sup>Law No. (8) of 2007 Concerning Escrow Accounts for Real Estate Development in the Emirate of Dubai, Stable URL: <u>https://dlp.dubai.gov.ae/Legislation%</u> 20Reference/2007/Law%20N0.%20%288%29%200f% 202007.html?utm\_source=chatgpt.com

<sup>2</sup> Razorpay (2023) All About RERA Escrow Account. October 26, 2023. Stable URL: <u>https://razorpay.com/learn/</u> <u>business-banking/rera-escrow-account/?</u> <u>utm\_source=chatgpt.com</u> Fig. 1 Interaction of the parties in the construction escrow schemes

Source: adapted from Matveeva (2020) 5

<sup>3</sup> Matveeva M.V. (2020) Impact of escrow accounts on construction rates 2020 IOP Conf. Ser.: Mater. Sci. Eng. 880 012119 <u>https://iopscience.iop.org/</u> <u>article/10.1088/1757-899X/880/1/012119/pdf</u> from future apartment buyers to finance construction. Instead, they will need to take out loans from the escrow bank, paying interest on the borrowed money. The bank will only release the buyers' funds held in escrow to the developer as a lump sum amount after construction is completed and the property is registered. Previously, the developers got the funds from apartment investors directly payable to their accounts under the so-called DDY schemes. Those funds could have been utilized directly in the construction process.

The resulting delay in the receipt of funds matters. A typical metropolitan construction project takes about 2 years to complete, plus some extra allowance of time for the title registration process. The emergence of such timing mismatches in favour of deferred cash receipts by the developers. This policy brief attempts to model the effect of the introduction of escrow schemes on the profitability of business-class project developments in central Tashkent, additional equity requirements, and the underlying land values.

# METHODOLOGY

We use a micro-economic approach in our analysis, specifically a comparative three-statement financial modelling methodology<sup>6</sup> to analyse the development process for a standardized mixeduse but predominantly residential development in central Tashkent (see details in the Appendix). The approach has certain strengths, specifically, in minutely capturing the changes in the economics of construction observed at a unit development level, but it is also characterized by certain weaknesses and blind spots as far as the subsidiary and knock-on macroeconomic effects are concerned.

The three-statement model outputs are the standard project efficiency parameters, such as the Net Present Value (NPV) and the Internal Rate of Return (IRR), as well as the indicative distribution of debt and equity funding needs across time. In keeping with the tenor of the YP-11 Decree, the financial model for the escrow plan assumes the freezing of the apartment buyers' funds by the escrow bank until the developer completes all the stages in the construction process. Since the escrow bank should stand ready, in recompense, to fund the development via project finance loans extended to the developer for up to 70% of the project's investment costs, the model considers two funding scenarios for the project: 100%, and 50% funding of the investment costs by the developer's equity. For the parameters of the escrow plan, it is additionally assumed that the developer earns interest on the frozen funds at zero real rate of interest (or about 13% p.a. nominal interest rate) for the duration of the freeze to compensate them for general inflation.

<sup>&</sup>lt;sup>4</sup><u>https://lex.uz/ru/docs/7353752</u>

<sup>&</sup>lt;sup>5</sup>Matveeva M.V. (2020) Impact of escrow accounts on construction rates 2020 IOP Conf. Ser.: Mater. Sci. Eng. 880 012119 <u>https://iopscience.iop.org/article/10.1088/1757</u> -899X/880/1/012119/pdf

<sup>&</sup>lt;sup>6</sup>Artemenkov A. (2023) Applied Corporate Finance: a modern practical guide. Uzbekistan edition. Reach publishers, 2023. pp.419

Item 100% Equity funding f	Baseline (DDY) or investment costs	Alternative (escrow) of the project:	Difference be- tween the sce- narios	
FCFE-based Internal rate of return (IRR), %p.a. (nominal)	29%	27%	-2% p.a.	
Additional equity contributions, \$mln	\$22 mln.	\$55 mln.	An increase of 2,5 times	
50% debt funding for investment costs of the project:				
FCFE-based Internal rate of return (IRR), %p.a. (nominal)	30%*	29%*	-1% p.a.	
Additional equity contributions, \$mln.	\$5,2 mln	\$ 34 mln	An increase of 6,5 times	

#### Source: model outputs

Note: \*despite the presence of interest costs, the debt-funded construction projects still yield higher equity returns due to the leverage effect, for instance, the excess of overall project IRR over the cost of debt funds. In the context of Tashkent, this leverage effect is much smaller than in some OECD states due to the higher real cost of debt.

# **Results and effects**

The following results are obtained for key model outputs assuming the disappearance of DDY-related discounts for advance payments upon transition to escrow plans:

*Effect on developers:* Quite predictably, we estimate the impact of the switch to the new escrow policy to be moderately negative for property developers in Tashkent: while their FCFE-based Internal rates of return will decline slightly (extra bank interest charges on escrows are expected to be mostly offset by the disap-

pearance of off-plan (DDY) discounts offered to apartment buyers), they will still remain higher than returns from passive investments, such as bank deposits. This means developers will still have an incentive to continue building residential properties in Tashkent. A more substantive identified problem - arising due to unavailability, under escrows, of apartment purchase prepayments as under the old DDY schemes -- is the anticipated need for a much higher equity capitalization of developers, even if they avail themselves of a higher level of bank loans afforded by escrows (but still short of 100%). This has the potential to further consolidate the development activities in Tashkent, leaving the field only to big, well -capitalized players. As a countervailing effect, on the other hand, the use of additional leverage afforded by ready access to loanable funds advanced by escrow banks is still expected to generate favourable leverage effects on equity returns of developers, even in the context of presently high market cost of debt (see note to Table 1).

Effect on the apartment buyers: The apartment buyers, on the other hand, and apart from the consideration of safe payments, will be at the losing end of the arrangement. If they invest early, apartment buyers in Tashkent can still expect steep discounts (up to 30%) on off-plan unit purchases. With the new escrow scheme, this benefit will mostly disappear because primary residential investments will become less risky. Additionally, since developers will earn less profit, they may pass some of the costs to buyers, leading to slightly higher prices for new apartments. Additionally, the disappearance of staggered DDY instalments will also cause extra demand for mortgages, with their attendant interest rate costs for buyers.

# Effect on banks and the mortgage market:

Of certain interest in the context are the mortgage loan market interactions: since one of the benefits of phased-out DDY plans was the possibility of staggered advances on apartment costs, consolidation of settlements towards lump-sum protocols will incentivize the need for, and proliferation of, mortgages - unless developers still continue encouraging staggered advance payments from apartment buyers (which they will now be much less inclined to do under the escrow schemes by having ready access to funds from escrow banks). This is another identified demerit of escrow schemes for apartment buyers that offsets reduced risks of fraud and delays for them.

Apart from the mortgage market, the banks dealing in escrows also emerge as net beneficiaries of the escrow schemes, to the extent they will be able to claim the net interest differential (spread) on the amounts they collect from the apartment buyers and fund with. For Tashkent alone, with roughly 0,5 mln. sq.m. of apartment space commissioned annually within the traditional city bounds, the assumption of zero real depositary rate on escrows translates up to \$ 70 mln. in gross annual interest profits to be earned by the banks, which will be taxed by the government at a roughly 20% profit tax rate. But the exact *net* effect on the bank's profits will also depend much on the specific value of the depositary rate of interest given to developers once the escrow accounts unfreeze, as well as the developer's equity share in construction costs. Additionally, it shall be noticed that, in the context aside from the mortgage circuit, escrow schemes won't represent an additional drag, or a strain, on the existing funding sources of banks, since, with an accuracy up to the timing difference, the funding is directly contributed to the escrow bank by apartment buyers in the first place.

Land: the impact of development cash flow patterns on the land element of construction. Finally, analysing the impact of escrow transition on development land prices, our model also shows a 70% upward pressure on ground rents from the changes in FCFF and FCFE cash-flow profiles associated with the transition of development projects to escrow plans. This ground rent has the potential to be captured in increased land prices established by bidding at development land auctions.

Effects on government revenue: These effects will mostly accrue from the profit tax on additional income generated by banks from the escrow schemes (about \$10 mln. annually for Tashkent in its traditional bounds), as well as the enhanced and accelerated collection of the VAT tax on the consolidated apartment payments (with the fading away of the old DDY scheme-related discounts contributing to it). The greater land residual income resulting from escrow schemes can also be partly captured by the government through land auctions. However, the positive effects of escrows on government revenue will be partially offset due to greater reliance on mortgages, causing extra claims on the mortgage subsidy mechanism.

The ultimate public effect from the escrow schemes, thus, remains the reduction of payment risks and improved, and more uniform, quality of construction due to the additional supervision of the construction process by banks.

# Policy recommendations

The policy recommendations below aim to reduce the negative effects of the new escrow scheme:

1. Given Uzbekistan's high real interest rates, it is recommended to allow both the old (DDY) and new (escrow) schemes to operate side by side in the metropolitan development market. This aligns with the Escrow Decree YP-11, though on a shorter timeline. The construction market should determine which funding method becomes more popular over time. If developers offer both options at different prices, buyers—fully aware of the risks and costs—should have the freedom to choose the plan that suits them best.

2. Our analysis indicates a substantially increased need for upfront equity contributions by developers. This could make it harder for smaller but reliable developers in Tashkent to compete. Technically, in addition to proposal #1 above, this sideeffect can be countervailed by having only a fractional reservation of funds in escrow accounts on advance payments received (like in India, where the fractional reservation quota for escrow accounts is set at 70% of the funds receivable by developers).

3. A step-by-step (milestone-based) approach to releasing tied escrow funds, like in India and South Africa, could also be an option. Funds from escrow accounts can be released in proportion to the stages of project completion, as certified by independent auditors, not necessarily at the end of the construction process.

4. Fair regulation of the level of the interest rate charged on project finance advanced to the developer by the escrow bank (for instance, in proportion to the actual cost of the service) will help counter the risks of having the developers pass through the costs of the escrow scheme to the apartment buyers.

#### Appendix

A nominal 3-statement financial modelling methodology has been used to develop a financial model for a notional mixed-use business-class development in Central Tashkent costing \$87 mln. (net of VAT) in terms of investment costs (with a total built area of 60,000 sq.m., 60% of which is represented by a residential space). The fact that the subject development has a 40% commercial space component sold outright through salepurchase contracts unaffected by escrows will moderate the findings, making them more conservative and also applicable to mixed-use developments generally. The model construction costs, and their timing patterns are referenced against international unit construction cost estimators, such as CoreLogic and Co-Invest, and moderated in light of the actual experience with building costs in Tashkent.

The residential *baseline* scenario<sup>7</sup> is bv a represented DDY investment scheme, which distributes residential cash collections almost evenly over the construction period with a slight bias towards later periods and allows for up to 15% offplan discounts (Lines 50-51 and 55-56 of the DDY model). The cash collections on DDY contracts represent the developer's advances in an accounting sense, whereas the developer recognizes the development revenue upon the apartment title registration. Set against this situation is the *alternative escrow scenario*<sup>8</sup>, whereby the developer receives and recognizes as revenue the residential unit funds from apartment buyers only at the end of the construction and registration process (the associated interest accrued by the escrow bank on escrow balances held by it over the interim freeze period is assumed to compensate the developer for inflation, earning the developer o% real interest rate).

Additionally, we explore two funding scenarios: i) 100% of investment costs covered by investor's equity (0% loans), and ii) 50% of investment costs (except for land and initial cash balances) covered by escrow bank loans. Our model estimates the developer's NPV (FCFE) and IRR(FCFE) and is additionally equipped with an apportionment procedure that allocates a certain fraction (20% by default) of the developer's free cash flows (FCFEs and FCFFs) to the share of project

<sup>7</sup>See the DDY model in MS Excel: <u>https://</u> <u>disk.yandex.ru/i/y2jCRo2GEb-Hkg</u> <sup>8</sup>See the Escrow model in MS Excel: <u>https://</u> disk.yandex.ru/i/zMI-CoBxBhSTIQ Table A1. Key Parameters of the financial model

Parameter	Description	Additional Comments	
Model type and de-	Nominal 3-statement,	Key inflation assumptions:	
scription	sum-denominated mod-	Inflation for construction	
	el, with the unit of	costs:15% p.a.	
	measurement being	Inflation on the primary	
	13,000 sum (equivalent	apartment and commercial	
	to approx. \$1 as at the	property market -15% p.a.	
	analysis date-	(the assumption of zero real	
	10/02/2025), projected	growth of the price level	
	at a quarterly frequen-	over the next 2 years)	
	су.		
Model duration	The forecast period is	Two overall construction	
(forecast period)	made up of 12 quarterly	phases are set apart at six-	
	intervals. Each construc-	month interval.	
	tion phase takes 2 years		
	(8 quarters)		
Additional features of	The model accounts for	It is assumed that any munic-	
the model	the initial land acquisi-	ipal commitments to infra-	
	tion, Tashkent central	structure and service devel-	
	zone land tax, VAT tim-	opments do not encumber	
	ing and offsets, as well	the developer.	
	as for the profit taxa-	The interest rate on escrow	
	tion and Tax-loss Carry	bank loans is assumed at 24%	
	forwards.	p.a., while the depository	
		rate of interest on escrow	
		balances is assumed to be	
		accrued to compensate for	
		inflation (i.e. 15% p.a).	
Model outputs	FCFEs, FCFFs overall;	The model also provides	
	FCFFs split between the	proformas of the three ac-	
	building and land com-	counting statements and re-	
	ponents, DCF-based de-	lated ratios.	
	velopment land valua-	Development land valuation	
	tions, and the associat-	is based on capitalizing a cer-	
	ed project efficiency	tain proportion of positive-	
	metrics (NPV(FCFE),IRR	valued FCFFs and FCFEs	
	(FCFE))	from the project.	

#### DISCLAIMER

The study's findings, interpretations, views, conclusions, and recommendations, as contained in this publication, reflect the authors' and do not necessarily reflect the official opinion of WIUT or CPRO.

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