TOSHKENT DAVLAT IQTISODIYOT UNIVERSITETI HUZURIDAGI ILMIY DARAJALAR BERUVCHI DSC.03/10.12.2019.I.16.01 RAQAMLI ILMIY KENGASH

TOSHKENT DAVLAT IQTISODIYOT UNIVERSITETI

ABDUG'ANIYEV ABDULAZIZ ALISHER O'G'LI

INVESTITSIYALARNI FOND BOZORI ORQALI MOLIYALASHTIRISHNI TAKOMILLASHTIRISH

08.00.07 – Moliya, pul muomalasi va kredit

Iqtisodiyot fanlari bo'yicha falsafa doktori (PhD) dissertatsiyasi AVTOREFERATI

Toshkent – 2025

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Оглавление автореферата диссертации доктора философии (PhD) по экономическим наукам

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Ilmiy rahbar:	**Tojiyev Rahmatilla Raxmonovich**
	iqtisodiyot fanlari nomzodi, professor
Rasmiy opponetlar:	**Xudoyqulov Xurshid Xurramovich**
	iqtisodiyot fanlari doktori, professor
	Raxmonov Dilshod Alijonovich
	iqtisodiyot fanlari doktori, professor
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Dissertatsiya bilan Toshkent davlat iqtisodiyot universitetining Axborot-resurs markazida tanishish mumkin (1744 raqam bilan ro'yxatga olingan). Manzil: 100066, Toshkent shahri, Islom Karimov ko'chasi, 49-uy. Tel.: (99871) 239-28-75, faks: (99871) 239-28-75; e-mail: tdiu@tsue.uz

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S.U. Mexmonov
Ilmiy darajalar beruvchi ilmiy kengash raisi i.f.d., professor

U.V. Gafurov
Ilmiy darajalar beruvchi ilmiy kengash kotibi i.f.d., professor

S.K. Xudoyqulov
Ilmiy darajalar beruvchi Ilmiy kengash qoshidagi Ilmiy seminar raisi i.f.d., professor

KIRISH (falsafa doktori (PhD) dissertatsiyasi annotatsiyasi)

Dissertatsiya mavzusining dolzarbligi va zarurati. Jahon iqtisodiyotini harakatga keltiruvchi asosiy drayverlardan biri kapital bozorining rivojlanishi hisoblanadi, ko'pchilik mamlakatlar iqtisodiyoti asosan fond bozorlariga tayanadi va kapital bozorlari taraqqiy etgan mamlakatlarda mahalliy biznes uchun milliardlab xorijiy investitsiyalarni osongina jalb qilish mumkin. Xalqaro miqyosda fond bozori orqali investitsiyalarni moliyalashtirish iqtisodiy o'sishning eng muhim manbalaridan hisoblanadi. Investorlar uchun esa likvid va daromadli aktivlarga sarmoya kiritish imkonini yaratadi. 2024-yilda dunyo bo'yicha fond bozori kapitalizatsiyasi 130 trillion AQSh dollaridan o'sdi, global YaIMning o'rtacha 100–120 foizini tashkil etdi, 1500 dan ortiq subyektlar IPO orqali umumiy qiymati 250 milliard dollardan ortiq kapital jalb qilgan bo'lib, bu esa fond bozori global investitsion faoliyatda muhim o'rin egallayotganini namoyon etadi[1]. Investisiyalarni fond bozori orqali moliyalashtirishni takomillashtirish, kapitalning samarali taqsimlanishi, investisiya muhitining shaffofligi va bozor mexanizmlari orqali iqtisodiy o'sish sur'atlarini rag'batlantirishda muhim omil hisoblanadi. Bu jarayon moliyaviy resurslarni to'g'ridan-to'g'ri iqtisodiyotning real sektoriga yo'naltirish imkonini yaratib, innovatsion loyihalar va xususiy sektor faolligini kengaytirishga xizmat qiladi. Shu bilan birga, fond bozori infratuzilmasini rivojlantirish, korporativ boshqaruv tizimini mustahkamlash va institusional investorlar ishtirokini kengaytirish orqali investitsiya faoliyatining barqarorligi va xavfsizligi ta'minlanadi. Natijada, milliy iqtisodiyotlarning moliyaviy barqarorligi kuchayib, xalqaro kapital oqimlarini jalb etish imkoniyatlari kengayadi.

Jahonda investitsiyalarni fond bozori orqali moliyalashtirishni takomillashtirish bo'yicha amalga oshirilayotgan ilmiy tadqiqotlarning ustuvor yo'nalishlari sifatida kapital bozorining institutsional asoslarini kuchaytirish, korporativ shaffoflikni ta'minlash va hisobdorlikni oshirish orqali investorlar ishonchini mustahkamlash, moliyaviy vositalarning diversifikasiyasini ta'minlash, raqamli texnologiyalar va blokcheyn asosida fond amaliyotlarini avtomatlashtirish, shuningdek, kichik va o'rta biznes subyektlarining kapital bozori orqali moliya resurslariga chiqishini yengillashtirish masalalari muhim ahamiyat kasb etmoqda. Bundan tashqari, makroiqtisodiy barqarorlik va huquqiy muhitni yaxshilash orqali xalqaro investitsiya oqimlarini jalb qilish, shuningdek, ESG mezonlari asosida barqaror moliyalashtirish mexanizmlarini joriy etish ham zamonaviy tadqiqotlarning dolzarb yo'nalishlaridan biriga aylanmoqda.

O'zbekistonda investitsiyalarni fond bozori orqali moliyalashtirishni takomillashtirish bo'yicha belgilangan ustuvor vazifalar qatorida kapital bozorining institutsional rivojlanishini ta'minlash, xususiy va davlat korxonalarini aksiyalashtirish jarayonlarini jadallashtirish, shaffoflik va hisobdorlik mezonlarini joriy etish orqali investorlar ishonchini mustahkamlash hamda yangi moliyaviy

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[1] https://www.bloomberg.com/news/articles/2025-08-22/e-commerce-firm-pattern-files-for-ipo-showing-revenue-growth

instrumentlarni – korporativ obligatsiyalar, investitsiya fondlari, REIT va IPO mexanizmlarini rivojlantirish chora-tadbirlari amalga oshirilmoqda. Shu bilan birga, milliy tijorat banklarining fond bozoriga chiqishini tartibga solish, xalqaro moliyaviy hisobot standartlarini keng joriy etish, raqamli platformalar orqali brokerlik xizmatlarini kengaytirish va aholi hamda institutsional investorlarni jalb qilish orqali bozorning likvidligini oshirishga qaratilgan islohotlar izchil ravishda amalga oshirilmoqda. Bunday chora-tadbirlar moliya sektorida samaradorlik va raqobatbardoshlikni ta'minlashga qaratilgan bo'lib, iqtisodiyotni diversifikasiya qilish va xususiy sektor faolligini oshirishda muhim ahamiyat kasb etadi. Fond bozori rivojlanishining hozirgi bosqichidagi asosiy tendensiya investitsiya mahsulotlarini diversifikatsiya qilish maqsadida zamonaviy moliyaviy vositalarni yaratish orqali infratuzilmani takomillashtirishdan iborat. Bundan tashqari, aktivlarni tokenizatsiya qilish maqsadida blokcheyn texnologiyasini joriy etish O'zbekiston Respublikasida kapital bozori infratuzilmasini sezilarli darajada takomillashtiradi.

Mazkur dissertatsiya ishi O'zbekiston Respublikasi Prezidentining 2024-yil 21-fevraldagi PF-37-son "O'zbekiston-2030" strategiyasini "Yoshlar va biznesni qo'llab-quvvatlash yilida amalga oshirishga oid davlat dasturi to'g'risida"gi, 2023-yil 11-sentyabrdagi PF-158-son ""O'zbekiston – 2030" strategiyasi to'g'risida"gi farmonlari, 2023-yil 2-sentyabrdagi PQ-291-son "Kapital bozorini rivojlantirishning qo'shimcha chora-tadbirlari to'g'risida"gi, 2022-yil 17-yanvardagi PQ-90-son "Kapital bozorini qo'llab-quvvatlashning samarali mexanizmlarini amalga oshirishga doir qo'shimcha chora-tadbirlar to'g'risida"gi, 2021-yil 13-apreldagi PQ-6207-son "Kapital bozorini yanada rivojlantirish chora-tadbirlari to'g'risida"gi, 2018-yil 16-iyuldagi PQ-3857-son "Xalqaro moliya institutlari va xorijiy hukumat moliya tashkilotlari ishtirokidagi loyihalarni tayyorlash va amalga oshirish samaradorligini oshirish chora-tadbirlari to'g'risida"gi, 2018-yil 21-iyuldagi PQ-3877-son "Tashqi moliyalashtirish manbalarini diversifikatsiyalash bo'yicha qo'shimcha chora-tadbirlar to'g'risida"gi qarorlari hamda mazkur sohaga oid boshqa me'yoriy-huquqiy hujjatlarda belgilangan vazifalarni amalga oshirishda mazkur dissertatsiya ishi muayyan darajada xizmat qiladi.

Tadqiqotning respublikada fan va texnoligiyalar rivojlantirishining ustuvor yo'nalishlariga mosligi. Mazkur tadqiqot respublikamizdagi fan va texnologiyalar taraqqiyotining «Demokratik va huquqiy jamiyatni ma'naviy-axloqiy va madaniy rivojlantirish, innovatsion iqtisodiyotni shakllantirish» mavzusidagi ustuvor yo'nalishiga muvofiq bajarilgan.

Muammoning o'rganilganlik darajasi. Qimmatli qog'ozlar bozori orqali kapital bozorining rivojlanishi ko'plab xorijiy olim va tadqiqotchilar, shuningdek, o'zbekistonlik olimlar tomonidan o'rganilib, ilmiy-amaliy takliflar kiritilmoqda. Xorijiy olimlardan T.B.Atje, N.C.Voghouei, X.K.Robinson, Yu.Peia, I.M.Roszbach, S.V.Kitanovich, K.E.Krstich, J.Levin, F.Villiamson, R.Huybens, A.Smit, X.Bek singari olimlarning tadqiqotlarini alohida ta'kidlash joiz[2].

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[2] Aitken, M. J., Harris, F. H., & Ji, S. (2009a). Trade-Based manipulation and market efficiency: A cross-market comparison. Paper presented at 22nd Australasian Finance and Banking Conference, November 18, 2009, Sydney, 6

O‘zbekistonda fond bozorini rivojlantirishning dolzarb masalalari X.Xudoyqulov, A.Ibodullayev, Sh.Mustafoqulov, A.Burxonov, X.Qurbonov, N.Karimov, M.Eshov, S.Elmirzayev, B.Xodiyev, M.Hamidulin, B.Toshmurodova singari olim va amaliyotchilarning tadqiqot ishlarida yoritib berilgan[3].

Ammo bu ishlarda "sekyuritizatsiya" jarayoni, derivativlarni joriy etish, yagona reestr texnologiyasi haqida, ya'ni obligatsiyalarni tokenlashtirish masalalar batafsil o‘rganilmagan. Bu esa o‘z navbatida, investitsiyalarni fond bozori orqali moliyalashtirishвф mazkur mavzuning alohida dolzarbligini bildiradi.

Dissertatsiya tadqiqotining dissertasiya bajarilgan oliy ta'lim muassasasining ilmiy tadqiqot ishlari rejasi bilan bog‘liqligi. Dissertasiya ishi mavzusi Toshkent davlat iqtisodiyot universitetining ilmiy-tadqiqot ishlari rejasiga muvofiq "Bozor raqobati sharoitida real sektor tarmoqlari va korxonalarini rivojlantirishning ilmiy-metodik bazasini takomillashtirish" ilmiy loyihasi doirasida bajarilgan.

Tadqiqotning maqsadi fond bozorlari infratuzilmasini takomillashtirish bo‘yicha xalqaro tajribani o‘rganish orqali O‘zbekistonda fond bozori infratuzilmasini takomillashtirish bo‘yicha ilmiy-amaliy taklif va tavsiyalar ishlab chiqishdan iborat.

Tadqiqotning vazifalari:

O‘zbekistonda fond bozori infratuzilmasini takomillashtirish konsepsiyasini o‘rganish;

qimmatli qog‘ozlar bozorini rivojlantirish metodologiyasini o‘rganish;

qimmatli qog‘ozlar bozorining iqtisodiy o‘sishini harakatlantiruvchi omili sifatida tahlil qilish;

O‘zbekistonda fond bozori rivojlanishining hozirgi holatini o‘rganish;

zamonaviy moliyaviy vositalarning kapital bozorining umumiy infratuzilmasiga ta'sirini aniqlash;

tijorat banklari tomonidan yangi kredit talabnomalarini moliyalashtirish uchun qo‘shimcha pul oqimlarini yaratish maqsadida bank kreditlarini "Ipoteka bilan ta'minlangan qimmatli qog‘ozlar" singari asosiy daromadli aktivlarga konvertatsiya vositasi sifatida "sekyuritizatsiya" tushunchasini o‘rganish;

Australia. Retrieved from http://www.cmcrc.com/index.php/rd/academicpapers/academic-papers. Accessed on September 30, 2011. Cherian, J. A., & Jarrow, R. A. (1995). Market manipulation. In R. A. Jarrow, V. Maksimovic, & W. T. Ziemba (Eds.), North-Holland handbooks in operations research and management science (Vol. 9, pp. 611–630). Amsterdam: Elsevier. Schumer, C. E. (2009, July 27). Schumer urges ban on so-called 'flash orders' that give privileged traders sneak peek at stock sales before other investors. Retrieved from http://www.schumer.senate.gov/new_website/record.cfm? id5316252. Accessed on June 12, 2012.

[3] Фонд бозори активларини баҳолаш моделлари таҳлили ва уларнинг назариялари Худойқулов Х.Х. // Иқтисодиёт ва инновацион технологиялар. 6-сон, ноябрь-декабрь, 2017 йил. Прогноз бу- башоратми? Худойқулов С.К. // Иқтисодиёт ва инновацион технологиялар. 1-сон, январь-февраль, 2018 йил. The Role and Importance of Monetary Policy in the Country's Economy// Ibodullaev A.A. Academic Journal of Digital Economics and Stability (2022). Развитие рынка организованных ценных бумаг в Узбекистане. Ибодуллаев А.А. Бюллетень науки и практики (2021). Уюшган қимматли қоғозлар бозорининг таркибий тузилмасида "Тошкент" Республика фонд биржасининг тутган ўрни. Ибодуллаев А.А. Development issues of innovative economy in the agricultural sector (2021). ANALYSIS OF INDICATORS OF THE REPUBLICAN EXCHANGE" TASHKENT"// A. Ibodullayev International Finance and Accounting (2020). Ходиев Б.Ю. Ўзбекистонда корпоратив бошқарув тизимининг ривожланиши синергик самарага эришиш омили сифатида. /Иқтисодиётни модернизациялаш шароитида Ўзбекистонда корпоратив бошқарув тизимини такомиллаштириш истиқболлари. Республика илмий-амалий анжумани маърузалари тўплами.

"Toshkent" fond birjasi orqali Oʻzbekiston Respublikasida sekyuritizasiya qoʻllanilishining samarasini aniqlash boʻyicha empirik tadqiqot oʻtkazish;

foiz stavkalarining oʻzgarishi, aholi sonining oʻsishi va ipoteka kreditlarining taqsimlanishi oʻrtasidagi bogʻliqlikni va shuning uchun ularning Oʻzbekiston Respublikasida sekyuritizasiya yoki ipoteka qimmatli qogʻozlarini yaratish jarayoniga qanday taʼsir qilishini ekonometrik tahlil orqali hisoblab chiqish.

Tadqiqotning obyekti "Toshkent" fond birjasi hisoblanadi.

Tadqiqotning predmeti Oʻzbekistonda fond bozorlarini rivojlantirishning moliyaviy-iqtisodiy mexanizmlarini takomillashtirish jarayonlari hisoblanadi.

Tadqiqotning usullari. Tadqiqot jarayonida tahlil va sintez, taqqoslash, guruhlash, tizimli va iqtisodiy-statistik tahlil, ekonometrik modellashtirish, istiqbolli prognozlash usullaridan foydalanilgan.

Tadqiqotning ilmiy yangiligi quyidagilardan iborat:

investitsiyalarni fond bozori orqali moliyalashtirishni "Toshkent" fond birjasi koʻmagida Sanoat qurilish bankida (SQB) ipoteka bilan taʼminlangan qimmatli qogʻozlarni sekyuritizasiyalash jarayonini joriy etish orqali takomillashtirish taklifi asoslangan;

kompaniyalar tomonidan oʻz investitsion loyihasi uchun kapitalni jalb etishda mazkur loyiha umumiy qiymatining 40 foizini bank krediti, 60 foizini esa "Toshkent" fond birjasi orqali amalga oshiriluvchi kompaniya aksiyalarini sotish yoki obligatsiyalar chiqarish orqali taʼminlashga yoʻnaltirilgan "Oʻrta va yirik xususiy kompaniyalar uchun 60/40 nisbat asosida moliyalashtirish dasturi"ni yaratish taklifi ishlab chiqilgan;

davlat obligatsiyalari, korporativ obligatsiyalar singari asosiy daromadli aktivlarni tokenlash uchun aktivlar bilan bogʻliq operatsiyalarni qayd etuvchi raqamli tizimni anglatuvchi taqsimlangan reestr texnologiyasini (DLT) joriy etish orqali investisiyalarni fond bozori orqali moliyalashtirishni takomillashtirish asoslangan;

AJ "Sanoat Qurilish Bank"ning ipoteka bilan taʼminlangan obligatsiya turkumini joriy etish va sifat jihatidan baholashning koʻp omilli balans ekonometrik modeli asosida 2027-yilga qadar ipoteka bilan taʼminlangan obligatsiyalarni joriy etishning prognoz koʻrsatkichlari ishlab chiqilgan.

Tadqiqotning amaliy natijasi quyidagilardan iborat:

sekyuritizatsiya jarayoni va uni fond bozori orqali yaratishning oʻziga xos xususiyatlari tizimli tahlil qilingan;

Oʻzbekistonda fond bozorini tartibga solishning institusional islohotlari oʻrganilgan;

fond bozorini rivojlantirish samaradorligiga taʼsir etuvchi omillar baholangan;

Oʻzbekistonda zamonaviy moliyaviy qimmatli qogʻozlarni joriy etish orqali fond bozorini rivojlantirishning taklif etilayotgan strategik maqsadlari va tiklanish shartlari oʻrganilgan;

bozordagi oʻzgaruvchanlikdan xejirlash va aksiyalar boʻyicha kompleks vositalarni yaratish taklif etilgan.

Tadqiqot natijalarining ishonchliligi. Tadqiqotda qo‘llanilgan uslubiy yondashuv va usullarning maqsadga muvofiqligi, ma'lumotlarning rasmiy manbalar orqali, jumladan, O‘zbekiston Respublikasi Milliy statistika qo‘mitasi, "Toshkent" fond birjasi, O‘zbekiston Respublikasi Markaziy banki, Istiqbolli loyihalar milliy agentligining statistik ma'lumotlari va davriy hisobotlaridan olinganligi, keltirilgan tahlillar va tajriba-sinov ishlari samaradorligining matematik-statistika usullari vositasida asoslanganligi, xulosa, taklif va tavsiyalarning amaliyotga joriy etilganligi, olingan natijalarning vakolatli tuzilmalar tomonidan tasdiqlanganligi bilan belgilanadi.

Tadqiqot natijalarining ilmiy va amaliy ahamiyati. Tadqiqot natijalarining ilmiy ahamiyati shundan iboratki, ishlab chiqilgan ilmiy xulosa va takliflardan kelgusida O‘zbekiston fond bozorini rivojlantirishning strategik yo‘nalishlarini amalga oshirishda foydalanish mumkin.

Tadqiqot natijalarining amaliy ahamiyati dissertasiyada ilgari surilgan amaliy ahamiyatga ega taklif va tavsiyalar, shuningdek, dissertasiya ishining uslubiy ishlanmalariga, fond bozorini rivojlantirishning maqsadli kompleks dasturlarini ishlab chiqish, fond bozori likvidligini oshirish maqsadida investisiya mahsulotlarini kengaytirish sohasidagi tadqiqotlarga asoslanadi.

Tadqiqot natijalarining joriy qilinishi. Fond bozorlari infratuzilmasini takomillashtirish bo‘yicha xalqaro tajribani o‘rganish orqali O‘zbekistonda fond bozori infratuzilmasini takomillashtirish bo‘yicha ishlab chiqilgan ilmiy-amaliy taklif va tavsiyalar asosida:

investisiyalarni fond bozori orqali moliyalashtirishni "Toshkent" fond birjasi ko‘magida Sanoat qurilish bankida (SQB) ipoteka bilan ta'minlangan qimmatli qog‘ozlarni "sekyuritizasiyalash" jarayonini joriy etish orqali takomillashtirish taklifi AJ "Sanoat Qurilish Bank" tomonidan amaliyotga joiy etilgan (AJ "Sanoat Qurilish Bank"ning 2025-yil 12-martdagi 01-13/5005-son ma'lumotnomasi). Mazkur ilmiy taklifning amaliyotga joriy etilishi natijasida kapital bozorini rivojlantirish, yangi investision instrumentlarni joriy qilish va portfel investision salohiyatini oshirish imkoni yaratilgan;

kompaniyalar tomonidan o‘z investision loyihasi uchun kapitalni jalb etishda mazkur loyiha umumiy qiymatining 40 foizini bank krediti, 60 foizini esa Toshkent fond birjasi orqali amalga oshiriluvchi kompaniya aksiyalarini sotish yoki obligasiyalar chiqarish orqali ta'minlashga yo‘naltirilgan "O‘rta va yirik xususiy kompaniyalar uchun 60/40 nisbat asosida moliyalashtirish dasturi"ni yaratish taklifi AJ "Sanoat Qurilish Bank" tomonidan amaliyotga joiy etilgan (AJ "Sanoat Qurilish Bank"ning 2025-yil 12-martdagi 01-13/5005-son ma'lumotnomasi). Mazkur ilmiy taklifning amaliyotga joriy etilishi natijasida o‘rta va yirik xususiy kompaniyalar uchun moliyalashtirish dasturini yaratish imkoni taqdim etilgan;

davlat obligasiyalari, korporativ obligasiyalar kabi asosiy daromadli aktivlarni tokenlash uchun aktivlar bilan bog‘liq operasiyalarni qayd etadigan raqamli tizimni anglatuvchi taqsimlangan reestr texnologiyasini (DLT) joriy etish orqali investisiyalarni fond bozori orqali moliyalashtirishni takomillashtirish taklifi AJ "Sanoat Qurilish Bank" tomonidan amaliyotga joiy etilgan (AJ "Sanoat Qurilish Bank"ning 2025-yil 12-martdagi 01-13/5005-son ma'lumotnomasi). Mazkur ilmiy

taklifning amaliyotga joriy etilishi natijasida chakana investorlar uchun qulay shaklda joriy etish, smart-kontraktlar orqali hisob-kitoblarni butunlay avtomatlashitirish, butun jarayonni aqlli shartnomalar asosida amalga oshirish orqali barcha ishtirokchilar hech qanday vositachi ishtirokisiz yoki vaqtni yo'qotmasdan darhol natijaga ishonch hosil qilish imkoni yaratilgan;

AJ "Sanoat Qurilish Bank"ning ipoteka bilan ta'minlangan obligasiya turkumini joriy etish va sifat jihatidan baholashning ko'p omilli balans ekonometrik modeli asosida 2027-yilga qadar ipoteka bilan ta'minlangan obligasiyalarni joriy etishning prognoz ko'rsatkichlari bo'yicha taklif AJ "Sanoat Qurilish Bank" tomonidan amaliyotga joiy etilgan (AJ "Sanoat Qurilish Bank"ning 2025-yil 12-martdagi
01-13/5005-son ma'lumotnomasi). Mazkur ilmiy taklifning amaliyotga joriy etilishi natijasida ipoteka bilan ta'minlangan obligasiya turkumini joriy-etish uchun va sifat jihatidan baholashning ko'p omilli balans ekonometrik modeli asosida oxirgi 20 yil davomida (2004-2024) respublika bo'yicha ajratilgan ipoteka kreditlarini (y) ergashuvchi omil va asosiy foiz stavkasining o'zgarishi (2004-2024) (x_1) ta'sir qiluvchi, shu jumladan, aholining o'sishi (2004-2024) (x_2) ta'sir qiluvchi omil sifatida tahlil qilinib, unga ko'ra ipoteka bilan ta'minlangan obligasiyalarni joriy etish maqsadga muvofiq deb topilgan.

Tadqiqot natijalarining aprobatsiyasi. Mazkur tadqiqot natijalari 2 ta xalqaro va 4 ta respublika miqyosidagi ilmiy-amaliy anjumanlarda muhokamadan o'tkazilgan.

Tadqiqot natijalarining e'lon qilinganligi. Dissertatsiya mavzusi bo'yicha jami 15 ta ilmiy ish, O'zbekiston Respublikasi Oliy attestasiya komissiyasining doktorlik dissertasiyalari asosiy ilmiy natijalarini chop etish uchun tavsiya etilgan ilmiy nashrlarda 9 ta ilmiy maqola, jumladan 4 tasi respublika va 5 ta xorijiy jurnallarda nashr etilgan.

Dissertatsiyaning tuzilishi va hajmi. Dissertatsiya ishi tarkibi kirish, 3 ta bob, xulosa va takliflar, foydalanilgan adabiyotlar ro'yxati va ilovalardan tashkil topgan. Dissertatsiya hajmi 110 betdan iborat.

DISSERTATSIYANING ASOSIY MAZMUNI

Kirish qismida dissertasiya mavzusining dolzarbligi va zarurati asoslangan, tadqiqotning maqsadi va asosiy vazifalari, obyekti va predmeti shakllantirilgan, respublikada fan va texnologiyalari rivojlanishining ustuvor yo'nalishlariga mosligi ko'rsatilgan, tadqiqotning ilmiy yangiligi va amaliy natijalari bayon qilingan, tadqiqot natijalarining ilmiy va amaliy ahamiyati yoritib berilgan, tadqiqot natijalarini amaliyotga joriy qilish, ularning sinovdan o'tganligi, nashr etilgan ishlar va dissertasiya tuzilishi bo'yicha ma'lumotlar keltirilgan.

Dissertatsiyaning **"Korxonalar tomonidan aksiyalar va korporativ obligatsiyalar chiqarish orqali investisiyalarni jalb etishni rag'batlantirish yo'llari"** deb nomlangan birinchi bobida kapital bozori rivojlanishining ilmiy asoslari va uning iqtisodiyotdagi o'rni, shuningdek, birjaga kirish yoki "Toshkent" fond birjasiga korporativ obligatsiyalar chiqarish orqali kapitalni qanday jalb qilish mumkinligi ko'rib chiqilgan. Kapital bozorlarining rivojlanishiga oid juda ko'p

nazariy izlanishlar olib borilgan, korxonalarni moliyalashtirish bosqichlari ham batafsil o'rganilgan tadqiqotlar mavjud. Birinchi bosqichda O'zbekistonda yaxshi rivojlangan bank kreditlari asosiy ahamiyatga ega hisoblanadi. Ikkinchi bosqich – fond bozorini moliyalashtirish, ya'ni tadbirkorlik subyektlarini o'z loyihalarini moliyalashtirish uchun aksiya va obligatsiyalar kabi qimmatli qog'ozlarni chiqarish orqali kapital jalb qilishda kapital bozorining rivojlanishi korporativ nazoratni amalga oshirish orqali biznesda resurslar to'g'ri taqsimlanishi va mamlakat ichidagi jamg'armalar harakatchanligini ta'minlaydi. Tadqiqotda Toshkent fond birjasi tomonidan ikki asosiy aksiyalar toifasini joriy etish taklif qilingan: "ichki" va "tashqi". "Ichki" toifa UZS (so'm)da kotirovka qilinadigan va asosan mahalliy fuqarolar uchun mo'ljallangan aksiyalarni anglatadi. "Tashqi" esa, aksiyalar AQSh dollarida savdoga qo'yiladigan va asosan xorijiy investorlar uchun mo'ljallangan toifani bildiradi. Ya'ni, mahalliy investorlar faqat mahalliy brokerlik kompaniyalari orqali brokerlik hisob varaqlari ochishlari kerak bo'ladi. "Ichki" rejim taqdim etiladi, ya'ni ular UZSda aksiyalarga sarmoya kiritadilar (1-rasm).
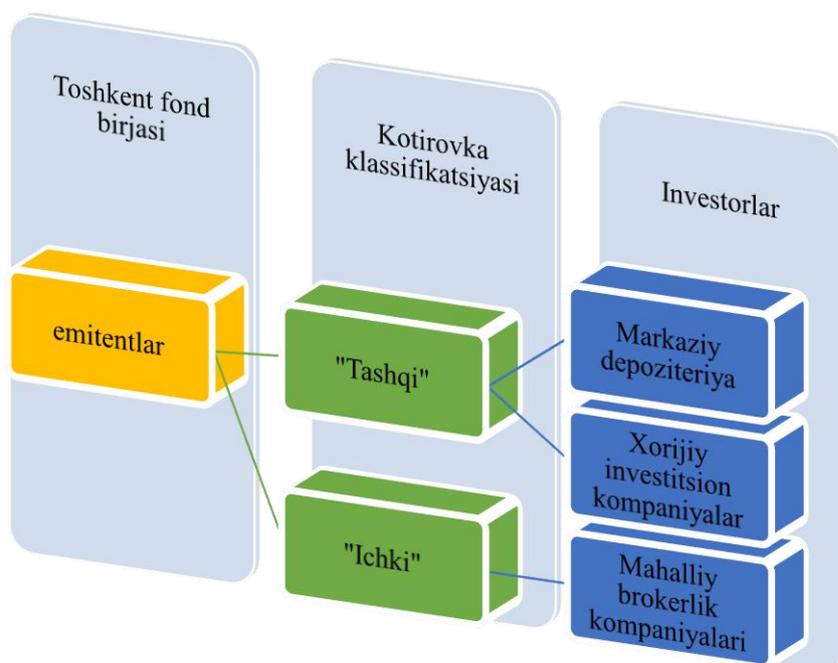
1-rasm. – **Toshkent fond birjasida aksiyalarning turlanishi**[4]

1-rasmda Xorijiy investorlar JSC "Markaziy depozitariy"da "Xorijiy foyda oluvchi shaxs" sifatida ro'yxatdan o'tishlari lozim bo'ladi. Toshkent fond birjasida aksiyalarni ikkita asosiy sinfga — "Ichki" va "Tashqi" sinflarga ajratish mexanizmini ko'rsatadi. "Ichki" aksiyalar asosan mahalliy investorlar uchun mo'ljallangan bo'lib, UZS (so'm)da kotirovka qilinadi va faqat mahalliy brokerlik kompaniyalari orqali hisobvaraqlar ochgan fuqarolar tomonidan sotib olinishi mumkin.

Mahalliy jamg'armalarni fond bozoriga yo'naltirishga, mamlakatda moliyaviy savodxonlik darajasini oshirishga olib keladi. Ayni paytda O'zbekistonda

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[4] Muallif ishlanmasi

kompaniyalar naqd pul oqimini rag'batlantirish va o'z tadbirkorlik faoliyatini yaxshilash uchun asosan bank kreditlariga tayanadi, bu esa moliyalashtirish imkoniyatlari cheklanganligiga olib keladi, chunki fond bozori yangi biznes loyihalarini amalga oshirish uchun mablag' jalb qilish, shuningdek, investorlar kapitalini rag'batlantirish borasida nafaqat biznes uchun, balki mahalliy investorlar uchun ham keng imkoniyatlar yaratishi mumkin. Bundan tashqari, mahalliy korxonalar xorijiy fond birjalariga chiqish orqali xorijiy mablag'larni jalb etishlari mumkin, bu esa xorijiy valyuta kirib kelishini ta'minlaydi. Mamlakatimizda fond bozori faoliyatining qonunchilik bazasini takomillashtirish bo'yicha ko'pgina chora-tadbirlar amalga oshirilgan.

Xususan, O'zbekiston Respublikasi Prezidentining 2022-yil 17-yanvarda qabul qilingan "Kapital bozorini qo'llab-quvvatlashning samarali mexanizmlarini amalga oshirishga doir qo'shimcha chora-tadbirlar to'g'risida"gi PQ-90-son qarorida "Kapital bozorini yanada rivojlantirish, kapital bozori orqali davlat aksiyalarini xususiylashtirish amaliyotini kengaytirish, davlatning qimmatli qog'ozlarga investisiyalarini rag'batlantirish va moliya bozorida sog'lom raqobat muhitini yaratish maqsadida ushbu aksiyalar ommaviy taklif qilingan taqdirda, korxona xodimlariga aksiyalarni sotib olishda imtiyozli huquqlar berish choralari ko'riladi (ESOP)". Fond bozorining rivojlanishi aksiyalar indeksining vujudga kelishini ta'minlaydi. Shu sababli mamlakatimiz iqtisodiyoti holatini aks ettiruvchi mezon sifatida aksiyalar milliy indeksini yaratish juda muhim, chunki hamma rivojlangan mamlakatlar milliy aksiya indekslariga ega, masalan, Yaponiyada Nikkei 225, Germaniyada Dax, Buyuk Britaniyada FTSE va AQShda S&P 500 tahlilchilar aksiyalar indeksi asosida mamlakatdagi mavjud iqtisodiy vaziyatni o'rganadi va hatto kelajakdagi o'zgarishlarni prognoz qilish imkoniyatiga ega bo'ladi.

Dissertatsiyaning **"Toshkent" fond birjasi faoliyati tahlili va uning qimmatli qog'ozlar chiqarishda xo'jalik yurituvchi subyektlarni qo'llab-quvvatlashi"** deb nomlangan ikkinchi bobida "Toshkent" fond birjasi faoliyati batafsil yoritilgan, tadqiqot obyektining SWOT tahlili o'tkazilgan. "Toshkent" fond birjasiga mahalliy korxonalarning kirishini rag'batlantirish yo'llari o'rganildi. So'ngra bo'limning ikkinchi yarmida tijorat banklarining kredit portfellarini sekyuritizasiya qilish masalalari muhokama qilinib, jarayonda "Toshkent" fond birjasining o'rni tahlil qilingan, dissertasiya obyekti O'zbekistondagi tijorat banklarini ipoteka bilan ta'minlangan qimmatli qog'ozlar, ko'chmas mulk, shuningdek, aktivlar bilan ta'minlangan qimmatli qog'ozlar (avto, debitor qarzdorlik, kredit kartalari bo'yicha va biznes kartalari chiqarish orqali kreditlarni moliyalashtirish uchun kapital jalb qilishni rag'batlantirish imkoniyatlari ko'rib chiqilgan. Mazkur bobning eng muhim qismi "Toshkent" fond birjasining ijobiy, salbiy tomonlari, yuzaga kelishi mumkin bo'lgan imkoniyatlar, shuningdek, bartaraf etilishi mumkin bo'lgan tahdidlarni aniqlash uchun SWOT tahlilini o'tkazish hisoblanadi (2-rasm).

Yuqoridagi SWOT tahliliga nazar tashlansa, "Toshkent" fond birjasining kuchli tomonlari haqiqatan ham boshqa parametrlardan ustun ekanligini ko'rish mumkin, boshqacha aytganda, infratuzilmadagi o'zgarishlar, chakana investisiyalarning jadal rivojlanishi, moliyaviy texnologiyalarning tez o'sishi va

Koreya fond birjasi bilan hamkorlik singari tadqiqot predmeti bilan bog'liq 4 ta afzallik mavjud.

Ichki	
Kuchli tomonlar	**Kamchiliklari**
"Toshkent" fond birjasining mavjud afzalliklari	"Toshkent" fond birjasida mavjud kamchiliklar
- infratuzilmadagi o'zgarishlar; - chakana investisiyalarning o'sishi; - moliyaviy texnologiyalarning tez o'sishi; - Koreya fond birjasi bilan hamkorlik	- UCI Milliy indeksi haqida ma'lumot yo'qligi; - Startap loyihalar bozorining yo'qligi
Tashqi	
Imkoniyatlar	**Tahdidlar**
"Toshkent" fond birjasi manfaati yo'lida foydalanish mumkin bo'lgan barcha mavjud imkoniyatlar	"Toshkent" fond birjasi faoliyatiga to'sqinlik qiluvchi mavjud tahdidlar
- qimmatli qog'ozlar markaziy depozitariysini qayta tuzilishi; - "O'zbekiston respublika valyuta birjasi" AJ huzurida Milliy kliring markazi tashkil etilganligi[5]	- moliyaviy savodxonlik darajasi pastligi; - kapital bozorida kasbiy professionallik yetishmasligi; - milliy valyutaning qadrsizlanishi

2- rasm. "Toshkent" fond birjasining SWOT tahlili[6]

Birinchidan, O'zbekistonda moliyaviy savodsizlik yuqoriligi bilan bog'liq katta muammo mavjud, chunki ko'pchilik insonlar kelajakdagi iqtisodiy noaniqliklardan himoyalanish uchun qanday qilib investisiya qilish yoki pulni tejash ko'nikmalariga ega emas, shuning uchun bu muammoning javobi mamlakat bo'ylab maktab o'quv dasturlariga moliya, shuningdek, investisiya fanlarini kiritish orqali moliyaviy bilimlarni rivojlantirishdir. Kapital bozorida professionallikning yetishmasligi ham "Toshkent" fond birjasi faoliyatini takomillashtirishda bir qator to'siqlarni keltirib chiqarmoqda. Masalan, O'zbekistonda kapital bozorida yetarli darajada yuqori malakali xodimlar yo'qligi, boshqacha aytganda, bu mahalliy oliy o'quv yurtlarida iqtisodiyot va moliya ixtisosligi bo'yicha o'qitiladigan investisiya bilan bog'liq fanlar, ya'ni sekyuritizasiya, aktivlarni boshqarish, faravonlikni boshqarish, qimmatli qog'ozlarni boshqarish va boshqa fanlarning yo'qligi bilan bog'liq.

Milliy valyutaning kuchli devalvatsiyasi kuzatilmoqda, bu esa xorijiy investorlarning O'zbekiston qimmatli qog'ozlariga investitsiya kiritishni to'xtatmoqda, albatta, bu muammoni pul-kredit siyosatining ayrim choralarini ko'rish, masalan, foiz stavkasini oshirish, valyuta intervensiyasi (devalvatsiyaga qarshi qisqa muddatli yechim) yoki eksportga yo'naltirilgan ishlab chiqarishni rag'batlantirish yo'li bilan hal qilish mumkin. Xulosa qilib aytganda, bu tahdidlarni, zaif tomonlarni yuqorida aytib o'tilgan takliflar yordamida "Toshkent" fond birjasi va butun kapital bozori manfaati uchun bartaraf etish mumkin.

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[5] https :// lex . uz
[6] Muallif ishlanmasi

Mazkur bobning ikkinchi yarmida "Toshkent" fond birjasi orqali O'zbekistonda sekyuritizasiya jarayonini tashkil etish usullari o'rganilgan. Lekin birinchi navbatda, sekyuritizasiya asoslarini, boshqacha aytganda, bu nimani anglatishi, aslida qanday ishlashi va boshqa tegishli xususiyatlarni ko'rib chiqish maqsadga muvofiq. Boshqacha aytganda, sekyuritizasiya jarayoni aktivlarni birlashtiradi va ularni foizli qimmatli qog'ozlarga qayta paketlaydi[7].

Emitent keyinchalik moliyaviy aktivlarni, odatda ipoteka kreditlarini, iste'mol kreditlarini yoki hatto tijorat kreditlarini birlashtirish orqali qimmatli qog'ozlarni sotishni rejalashtiradi. Investorlar bunday qimmatli qog'ozlarni sotib olgandan so'ng, ular asosiy (birinchi to'lov) va asosiy aktivlar bo'yicha foiz to'lovlarini oladilar. Mohiyatan, O'zbekiston qimmatli qog'ozlar bozoriga qo'llash mumkin bo'lgan sekyuritizasiya jarayonining 3 bosqichi mavjud. Bunda O'zbekistonda urbanizasiya jarayonini rag'batlantirish natijasida turar-joy qurilishi sohasida uy-joyga talab taklifdan ko'pligi kuzatiladi.

Yuqorida aytib o'tilganidek, sekyuritizasiya jarayonining aslida uch bosqichi mavjud (3-rasm).
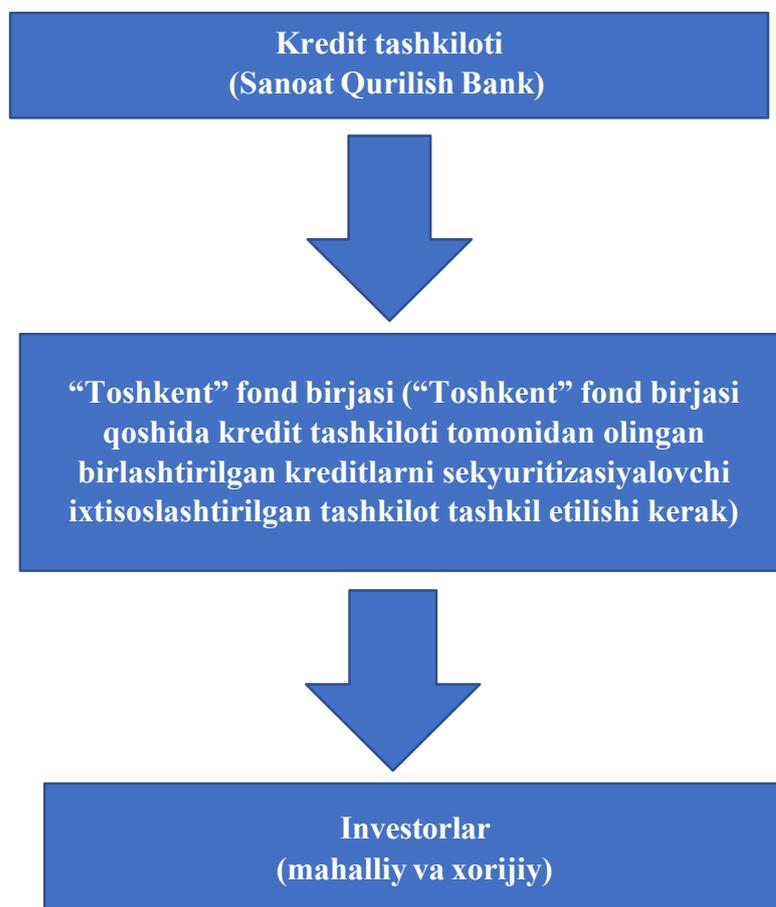
3- rasm. Toshkent fond birjasida sekyuritizatsiya jarayonining tuzilishi[8]

Birinchidan, kredit muassasasi (ba'zi manbalarda kreditning asoschisi sifatida ta'kidlanadi) kredit portfelini (asosan, yuqori kredit reytingiga ega bo'lgan ipoteka

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[7] https://www.iiste.org/Journals/index.php/JEDS/article/download/35130/36133
[8] Muallif ishlanmasi

kreditlari) Ixtisoslashtirilgan tashkilotga yuborishga tayyorlash uchun balansdan ajratib oladi. Keyin "Toshkent" fond birjasi tasarrufida bo'ladigan Ixtisoslashtirilgan tashkilot, ya'ni "Toshkent" fond birjasida Ixtisoslashtirilgan tashkilot bo'limi tashkil etilishi kerak. Ixtisoslashgan tashkilot kredit portfelini birlashtiradi va uni ipoteka bilan ta'minlangan qimmatli qog'ozlarga (MBS, ipoteka bilan ta'minlangan qimmatli qog'ozlar) sekyuritizasiya qiladi. Nihoyat, bu ipoteka bilan ta'minlangan qimmatli qog'ozlar investorlarga (ham mahalliy, ham xorijiy) taklif etiladi. Biroq qarzni to'lash imkoniyati bo'lmagan, ya'ni defolt bo'lgan holatida, ipoteka (ko'chmas mulk) garov sifatida ishlaydi, boshqacha aytganda, investor o'rniga uyni oladi. Kredit tashkiloti ushbu kreditlar bilan bog'liq kredit xavfining kamida 5 foizi uchun javobgar bo'lishi kerak. Bu shuni anglatadiki, ipoteka bilan ta'minlangan qimmatli qog'ozlar qiymatining 5 foizi garovga (mulk) qo'shimcha ravishda investorga (defolt holati yuz bersa) to'lanishi kerak.

Ipoteka kreditlarining kelajakdagi tendensiyalarini tahlil qilish uchun ba'zi ekonometrik va statistik vositalardan foydalangan holda empirik tadqiqot o'tkazildi, chunki ular dissertasiyada ipoteka bilan ta'minlangan qimmatli qog'ozlar uchun asosiy aktivlar hisoblanadi. O'zbekistonda 2004-yildan 2024-yilgacha so'nggi 20 yil davomida ajratilgan ipoteka kreditlari bo'yicha ba'zi ma'lumotlariga ko'ra o'sha davrlar uchun foiz stavkalarining o'zgarishi, ma'lumki, foiz stavkalaridan kelib chiqqan holda, ipoteka kreditlari to'g'rilanadi va nihoyat, aholi soni oshishiga aholining o'sishi ham sabab bo'lgan. Empirik tadqiqotda bog'liq o'zgaruvchi (Y) ipoteka kreditlari bo'lib, ikkita mustaqil o'zgaruvchi (X_1) – foiz stavkalari, (X_2) – aholi soni oshishi mavjud. Tadqiqot ishida qo'llash uchun 5 ta ekonometrik vosita tanlangan: chiziqli regressiya, korrelyasiya matrisasi, grafik tarqalish matrisasi, grafik gistogramma va grafik matrisa.

Avvalo, bu boshqa o'zgaruvchining qiymatiga, Y va X_1, X_2 o'rtasidagi munosabatlarga asoslangan o'zgaruvchining qiymatini prognoz qilish uchun qo'llaniluvchi chiziqli regressiyadir.

$$ Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2, \tag{1} $$

bu yerda: Y – ipoteka kreditlari; X_1 – foiz stavkalari; X_2 – aholi soni oshishi.

4-rasmda chiziqli regressiya modelidan ko'rinib turibdiki, natijaviy o'zgaruvchi (Y) va erkli o'zgaruvchilar (X_1; X_2) o'rtasidagi munosabatni ko'rsatadi. Umuman, erksiz o'zgaruvchi (Y) va erkli o'zgaruvchilar (X_1; X_2) dagi harakatlar o'rtasidagi bog'liqlikni tushunish uchun ochish kerak bo'lgan 4 ta eng muhim komponent mavjud. Birinchidan, determinasiya koeffisienti mavjud (Koef.), u kovariatlar (X_1; X_2) bilan izohlangan navtijaviy o'zgaruvchisi (Y) dagi umumiy o'zgarishlar ulushini ko'rsatadi, boshqacha aytganda, (X_1; X_2) ning bir birlik o'zgarishi (Y) ning bir birlik o'zgarishiga olib keladi. Modelga ko'ra, agar X_1 1 %ga

oshsa, Y 2,4 %gacha ko'tarilishi aniq, ammo X_1 1 % o'sishiga nisbatan Y ning 0,3 %ga oshishiga olib keladi

```
      Source |       SS           df       MS      Number of obs   =        14
-------------+------------------------------      F(2, 11)        =     57.64
       Model | 485.796285          2 242.898143   Prob > F        =    0.0000
    Residual | 46.3522362         11 4.21383966   R-squared       =    0.9129
-------------+------------------------------      Adj R-squared   =    0.8971
       Total | 532.148521         13 40.9345016   Root MSE        =    2.0528

-------------+----------------------------------------------------------------
           y |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
          x1 |   .2679006   .2278001     1.18   0.264    -.2334841    .7692853
          x2 |   2.379383   .2288033    10.40   0.000      1.87579    2.882976
       _cons |  -75.05947   7.773388    -9.66   0.000    -92.16858   -57.95035
-------------+----------------------------------------------------------------
```

4- rasm Chiziqli regressiya modelining chiqishini talqin qilinishi[9]

Boshqacha qilib aytilsa, Y (ipoteka) va X_2 (aholi o'sishi) o'rtasida kuchli bog'liqlik mavjud, shuning uchun agar aholi soni 1 %ga oshsa, bu ipoteka taqsimotining 2,4 %ga o'sishiga olib keladi, kuzatuv shuni ko'rsatadiki, Y (ipoteka) va X_1 (foiz stavkasi) o'rtasida zaif bog'liqlik mavjud, shuning uchun foiz stavkasi bir marta ko'tariladi. Ipoteka kreditlarining taqsimlanishi 0,3 %ga oshadi.

Ikkinchidan, standart xato (Std.Err.) populyasiyada Y va X o'rtasida haqiqiy bog'liqlik mavjudligini aniqlashda asosiy o'ringa ega. Bu tadqiqot (Y) va (X_1; X_2) o'rtasida ijobiy munosabat mavjudligini aniqlaydi, bu mos ravishda 0,2278001 va 0,2288033. Batafsilroq, (Y) ipoteka kreditlari va (X_1) foiz stavkalari, (X_2) o'z navbatida aholi soni oshishi o'rtasida muqobil gipoteza (H_A) mavjud. Ayni paytda, t-qiymati komponenti bilan bog'liq holda, (Y) ipoteka kreditlari va (X_2) aholi soni oshishi o'rtasida muqobil gipoteza (H_A) yoki statistik jihatdan muhim bog'liqlik mavjudligini ko'rish mumkin, bu 10,4 ni tashkil etadi, bu 1,96 dan sezilarli darajada yuqori bo'lib, 95 % ishonchlilikni tasdiqlaydi. Boshqa tomondan, (Y) va (X_1) uchun natija nol gipotezani (H_0) ko'rsatadi, boshqacha aytganda, (Y) ipoteka va (X_1) foiz stavkalari o'rtasida statistik jihatdan ahamiyatli bog'liqlik yo'q, bu 1,18 ni tashkil etadi, bu 1,96 dan kam, natija 95 % ishonchlilikni rad etadi.

Ehtimollik qiymati yoki P> |t| ga e'tibor berishga majbur qiladigan yana bir komponent bor. Har bir koeffitsiyent noldan farq qiladigan gipotezani sinab ko'radigan ikki tomonlama p-qiymatlari. Nazariyaga asoslanib, X (erkli o'zgaruvchi) va Y (erksiz o'zgaruvchi) o'rtasidagi statistik jihatdan ahamiyatli munosabatni yoki muqobil gipotezani (H_A) isbotlash uchun p-qiymati 0,05 dan kam bo'lishi kerak. Biroq, p-qiymati natijasi (Y) ipoteka va (X_1) foiz stavkalari o'rtasida nol gipoteza (H_0) mavjudligini ko'rsatadi, chunki ma'lumotlarga asoslangan p-qiymati (Y) va (X_1) 0,264 ni tashkil etadi, bu 0,05 koeffitsiyentidan kattaroqdir.

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[9] Muallif ishlanmasi

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Boshqa tomondan, erksiz o'zgaruvchi (Y) va erkli o'zgaruvchi (X_2) muqobil gipotezaga (H_A) ega bo'lib ko'rinadi yoki ular o'rtasida 0,000 ga teng bo'lgan statistik jihatdan muhim bog'liqlik mavjud bo'lib, bu yuqori ahamiyatlilikni anglatadi.

Xulosa qilib aytish mumkinki, chiziqli regressiya modelining 4 ta komponenti (Y) bog'liq o'zgaruvchi va (X_2) mustaqil o'zgaruvchi o'rtasidagi muqobil gipotezani (H_A) namoyish etadi, ya'ni aholi o'sishi foiz stavkalarining o'zgarishiga emas, balki ipoteka kreditlarining taqsimlanishiga kuchli ta'sir ko'rsatadi.

Keyinchalik, bu ikki o'zgaruvchi o'rtasidagi korrelyatsiya koeffitsiyentlarini ko'rsatuvchi korrelyasiya matrisasi keladi, bu matrisa o'zgaruvchilari to'g'ri chiziqda qanchalik kuchli va qaysi yo'nalishda bog'langanligini baholash uchun xizmat qiladi.

```
                y        x1       x2

        -------------------------------------
        y   |  1.0000
        x1  |  0.2378   1.0000
        x2  |  0.8797   0.1413   1.0000
```

5-rasm Korrelatsion matrisa[10]

Korrelyatsiya matritsasi tahlilidan ko'rinib turibdiki, (y) bog'liq o'zgaruvchi va (X_1; X_2) erkli o'zgaruvchilar o'rtasida korrelyasiya yo'q. Shu bilan birga, $0,8797 \approx 0,9$ bo'lgan bog'liq o'zgaruvchi (Y) va mustaqil o'zgaruvchi (X_2) o'rtasidagi korrelyasiya (Y) va (X_1) o'rtasidagi $0,2378 \approx 0,2$ korrelyasiya koeffisientidan kattaroqdir. Ya'ni (U) ipoteka va (X_1) foiz stavkalari o'rtasidagi bog'liqlikdan ko'ra (Y) ipoteka va (X_2) aholi o'sishi o'rtasida haqiqiy bog'liqlik bor. Uchinchisi – o'zgaruvchilar kombinasiyasi o'rtasidagi ikki o'lchovli munosabatlarni ko'rish uchun ishlatiladigan yoyilish diagrammasi matrisasi. Chizma asosan javob o'zgaruvchisi (Y) va tushuntirish o'zgaruvchilari (X_1; X_2) o'rtasidagi o'zaro bog'liqlikni tekshiradi. Yuqorida aytib o'tilganidek, qaram o'zgaruvchi (y) – ipoteka kreditlari; mustaqil o'zgaruvchi (X_1) – foiz stavkalari; ikkinchi mustaqil o'zgaruvchi (X_2) aholi o'sishi bo'lib qoldi. Quyida batafsil talqin qilingan yoyilish diarammasi matrisasi keltirilgan (5-rasm).

6-rasmda birinchi ustunda (Y) erksiz o'zgaruvchi ipoteka kreditlari X o'qi, ikkinchi ustunda (X_1; X_2), mustaqil o'zgaruvchan foiz stavkalari X o'qi, uchinchi va oxirgi ustunda (X_2) aholi sonining o'sishi X o'qi. Umuman, ipoteka kreditlari bo'lgan (Y) va aholi o'sishi (X_2) o'rtasida o'zaro bog'liqlik mavjudligini ko'rish mumkin. Boshqacha aytganda, birinchi ustunda ipoteka kreditlarining ko'payishi (Y) aholi soni oshishiga (X_2) sabab bo'lishi aniq ko'rinib turibdi, uchinchi ustunda ham xuddi shunday tendensiya mavjud bo'lib, bu yerda aholi soni oshishi (X_2) ipoteka kreditlari taqsimotining (Y) o'sishiga olib keladi.

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[10] Muallif ishlanmasi

Biroq ipoteka (Y) va foiz stavkalari (X_1) o'rtasida o'zaro bog'liqlik yo'q, hatto matrisadan ko'rinib turibdiki, erkli o'zgaruvchi (X_1) qanchalik o'zgarmasin, erksiz o'zgaruvchi bo'lgan ipoteka (Y) taqsimotiga kamroq ta'sir qiladi. Xuddi shu narsa birinchi ustundagi (Y) ipoteka uchun ham amal qiladi, u (X_1) foiz stavkalari bilan bog'liq bo'lish ehtimoli kamroq.
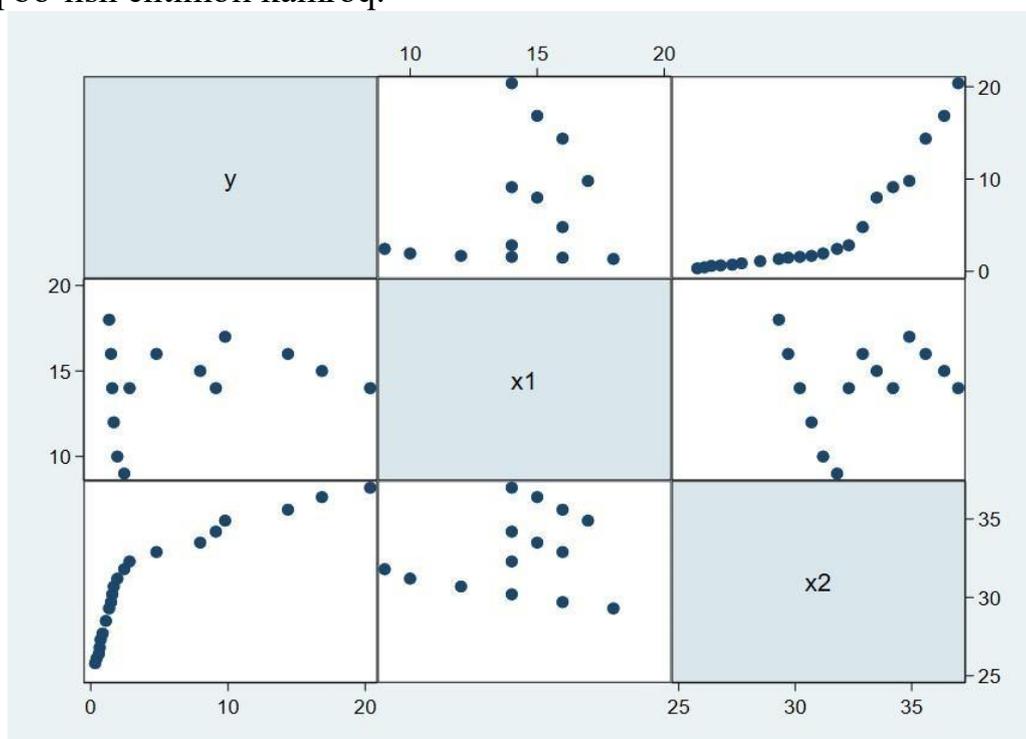
6-rasm. Tarqalish matritsasining talqini[11]

Umuman, tarqalish matrisasiga asoslanib, (Y) va (X_2) o'rtasida o'zaro bog'liqlik mavjud. Aniqroq aytilsa, ipoteka kreditlari va aholi o'sishi o'rtasida muqobil gipoteza (H_A) mavjud.

Erksiz o'zgaruvchi (Y) o'rtasidagi haqiqiy munosabatni ifodalaydi. Batafsilroq aytilsa, aholi soni oshishi (X_2) va ipoteka kreditlari (Y) o'rtasida muqobil gipoteza (H_A) mavjud, chunki aholi soni ko'payar ekan, O'zbekistonda foiz stavkalarining o'zgarishidan qat'iy nazar, ipoteka kreditlari taqsimotida ham xuddi shunday o'sish tendensiyasi kuzatiladi, bu esa sekyuritizatsiya jarayonining yuqori salohiyatini bildiradi. Xulosa qilib aytganda, ekonometrik tahlilga asoslanib, ta'kidlash kerakki, ipoteka bilan ta'minlangan qimmatli qog'ozlar yaratilishi tijorat banklari uchun ipoteka kreditlarini moliyalashtirish uchun mablag' jalb qilishning yangi yo'llarini ochishi mumkin.

"Toshkent fond birjasi infratuzilmasi va O'zbekistonda kapital bozorini takomillashtirish chora-tadbirlari" deb nomlangan uchinchi bobda UCI (Uzbekistan Composite Index) likvidligini oshirish yo'llari ko'rib chiqilgan. UCI (Uzbekistan Composite Index) qiymatini kuzatib boruvchi ETF (Birja savdo fondlari) ning joriy etilishi xorijiy va mahalliy investorlarni UCI (Uzbekistan Composite Index)ga investitsiya kiritish uchun jalb qilish uchun istiqbolli tanlov bo'ladi. Lekin birinchi navbatda, ETFlarning mohiyatini batafsil tushuntirish lozim.

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[11] Muallif ishlanmasi

Barclays Bank ma'lumotlariga ko'ra: "Birja fondlari (ETF) keng ko'lamli bozorlarga ta'sir qilishni ta'minlovchi ommaviy investisiyalarning mashhur turidir. Birja fondlari (ETF) diversifikasiyalangan, ammo arzon portfelni yaratmoqchi bo'lgan investorlar orasida mashhurdir. ETFlar investorlarga butun dunyo bo'ylab bozorlarning keng doirasiga kirishni taklif qiladi".

ETFning hamma xususiyatlari UCI (Uzbekistan Composite Index) qo'llanilishi uchun juda mos keladi, boshqacha aytganda, UCI (Uzbekistan Composite Index) qiymatini kuzatib boruvchi ETFni yaratish O'zbekistonda umumiy kapital bozori infratuzilmasini takomillashtirishga olib keladi". Bundan tashqari, ko'pgina chakana mahalliy investorlar o'zlarida mavjud bo'lgan mablag'larni tasarruf etish jiddiy cheklangan, buning sababi O'zbekistonda moliya institutlari tomonidan investisiya mahsulotlari juda cheklangan. Bundan tashqari, mahalliy chakana investorlar o'z jamg'armalarini bitta aksiya yoki obligasiyaga investisiya qilishga to'liq ishonchlari komil emas, shuning uchun UCI (Uzbekistan Composite Index) ETFning joriy etilishi mahalliy chakana investorlarni UCI (Uzbekistan Composite Index) fond indeksiga investitsiya kiritishga jalb qilishi mumkin, chunki ETFlar tabiatan investisiya mahsulotlarining xavfli turlari bo'lib, mahalliy chakana investorlarga mos keladi.
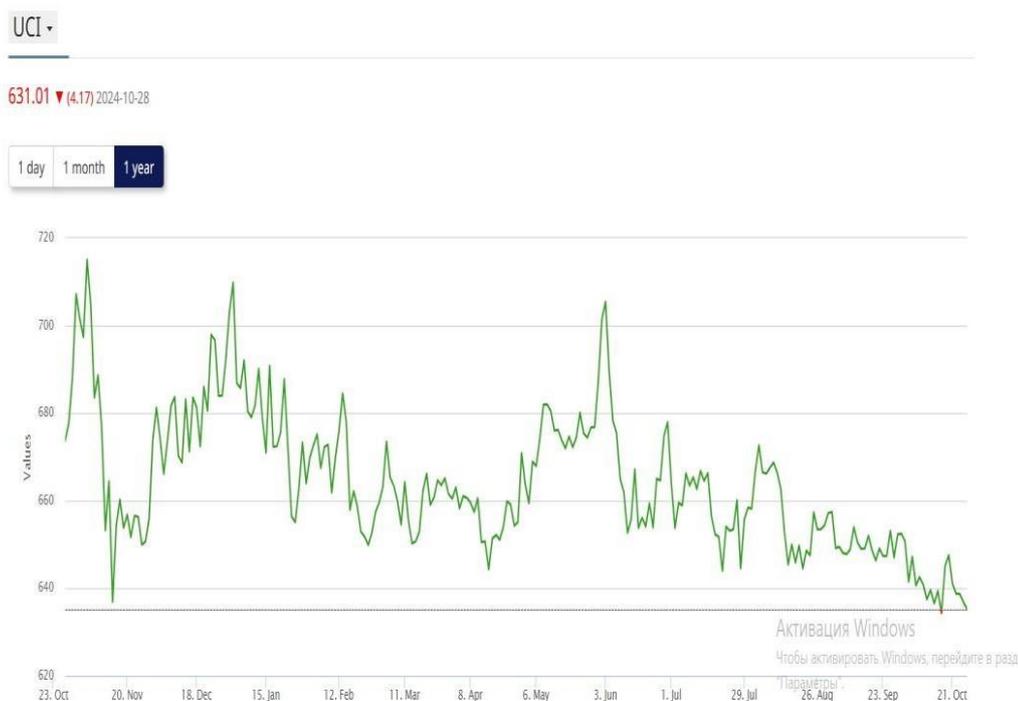
7- rasm. "Toshkent" fond birjasidagi tebranishlar vizual chiziqli diagrammasi ("Toshkent" fond birjasi veb-sayti)[12]

Umuman, nazariyaga asoslanib, 7-rasmda bir yil davomida bir necha katta tebranishlar bo'lganini yoki ular aytganidek, O'zbekiston fond bozorida turbulentlik sodir bo'lganini ko'rsatadi, bu esa iqtisodiyotda yuqori volatillik mavjudligini anglatadi. Jumladan 2023-yil 23-oktyabr va 2024-yil 21-oktyabr oralig'ida UCI (Uzbekistan Composite Index) qiymati keskin tebranib turganini va deyarli 680 dan

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[12]Ma'lumotlar https://uzse.uz/price_indices saytidan to'plangan

640 ga biroz pastga tushganini ko'rish mumkin. Uni baholash uchun hatto aniq parametr ham yo'q, chunki qiymat mavhum tushunchadir. Grafikni o'rganayotganda, fond birjasidagi holatni real ifodalovchi ko'rsatkichlar bilan bog'liq hech qanday aniq ma'lumot topish mumkin emas. Bundan tashqari, ochiq qiziqish, hajm, o'rtacha hajm, kunlik diapazon kabi asosiy texnik tahlil ko'rsatkichlari taqdim etilmaydi. Bunda Candle, Baseline, Mountain va Bar singari boshqa mavjud diagramma formatlari yetishmasligi namoyon bo'ladi.

Yana bir kamchilik shundaki, yillik ma'lumotlar haqiqatan ham O'zbekiston iqtisodiyoti haqida noto'g'ri tasavvur beradi. Aniqrog'i, O'zbekiston iqtisodiyoti va UCI (Uzbekistan Composite Index) o'rtasida hech qanday bog'liqlik mavjud emas. Indeks, shuning uchun UCI (Uzbekistan Composite Index) qiymatining harakati hatto UCI (Uzbekistan Composite Index) qiymatining taqdim etilgan yillik tebranishlar o'rtasida aniq bog'liqlik yo'q, shuning uchun bu holda investorlar 1 yillik davrdagi ulkan tebranishlardan havfsirashlari mumkin, bu mamlakat iqtisodiy beqarorlik va jadval bo'yicha defolt xavfi yuqori ekanligini anglatadi.

8-rasmda UCI benchmark fond indeksi mamlakatdagi biznes sektoridagi iqtisodiy qisqarish yoki qisqarishni ko'rsatadi. Shu sababli, birinchidan, jadval NAPP tomonidan tartibga solinadigan "Regulatory Sandbox" orqali UCI ETF ishga tushirilgunga qadar vaqtincha to'xtatilishi kerak.

Uchinchi bobning ikkinchi paragrafida blokcheyn texnologiyasidan foydalangan holda asosiy daromadli aktivlarni yoki "Toshkent" fond birjasi obligatsiyalari bozorini rag'batlantirish yo'llarini, boshqacha aytganda, taqsimlangan kitob texnologiyasi yoki qisqacha DLT yordamida korporativ va davlat obligatsiyalarining likvidligini qanday oshirish mexanizmi o'rganildi.
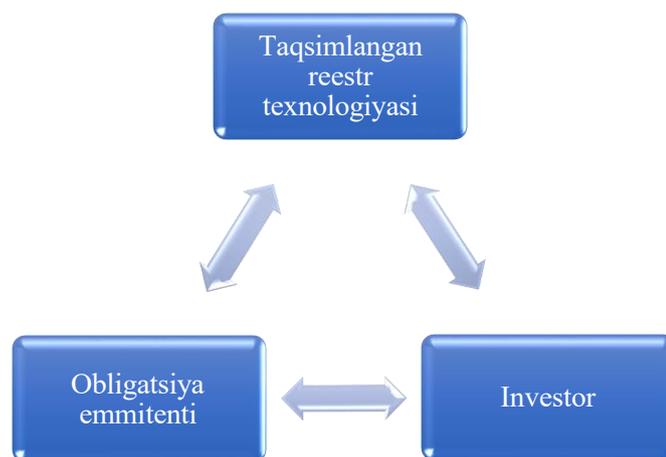
8-rasm. Taqsimlangan reestr texnologiyasidan (DLT) foydalangan holda blokcheynga asoslangan qayd etilgan daromadli tuzilma[13]

Albatta, "Toshkent" fond birjasi rahbariyati ushbu innovasion tizimni kapital bozori ishtirokchilari orasida tatbiq etish maqsadida Istiqbolli loyihalar milliy

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[13] Muallif ishlanmasi

agentligi (ILMM) koʻmagida "Regulatory Sandbox" tuzilmasi orqali taqsimlangan buxgalteriya hisobi texnologiyasi loyihasini ishga tushirishi kerak. Ammo dastlabki bosqichda davlat obligatsiyalarini tokenlash va taqsimlangan reestr texnologiyasiga joylashtirish kerak boʻladi, boshqacha aytganda, eksperiment sifatida davlat obligatsiyalari ularni aholiga qisman miqdorda sotish uchun tokenizasiya qilinishi kerak, chunki koʻplab chakana investorlar obligatsiyalar birligining yuqori narxi tufayli obligatsiyalarni sotib olish imkoniyati mavjud emas.

Shu sababli, tokenlashtirilgan qisqa muddatli davlat obligasiyalarini 30 kunlik toʻlov muddati bilan nol kupon bilan chiqarish kerak, albatta, oylik inflyatsiya darajasini hisobga olgan holda nominal qiymatni tuzatish kerak. Aniqrogʻi, investor tokenlashtirilgan obligatsiyalarni arzonlashtirilgan narxda sotib olishi mumkin va bu tokenlashtirilgan obligatsiyalar nominal qiymatida sotib olinadi, buning bir nechta afzalliklari mavjud: birinchidan, obligatsiyalar tokenlashtiriladi, ikkinchidan, tranzaksiya jarayonlarida hech qanday moliyaviy vositachi mavjud emas, ya'ni tranzaksiya xarajatlari yoʻq, bu esa investorlarning likvidligini oshirishi mumkin, uchinchidan, obligatsiyalarning yuqori likvidligi, toʻrtinchidan, hisob-kitob qilish qulayligi, boshqacha aytganda, hisob-kitob jarayoni an'anaviy obligatsiyalar operasiyalarida odat boʻlganidek, kun emas, bir necha daqiqa davom etishi mumkin.

Nihoyat, beshinchidan – shaffoflik va xavfsizlik, ya'ni har bir tranzaksiya barcha jarayonlarni nazorat qilish uchun taqsimlangan buxgalteriya hisobi texnologiyasining har bir ishtirokchisiga koʻrinadigan boʻladi va, albatta, har bir foydalanuvchiga shaxsiy va ochiq kabi ikki turdagi kalitlar taqdim etiladi. Masalan, nominal qiymati 45 ming soʻm va toʻlov muddati 10,2 % boʻlgan 30 kunlik nol kuponli obligatsiya, bu 2024-yil oktabr oyidagi yillik inflyatsiya stavkasini belgilaydi [14]. Albatta, hamma jarayonlar taqsimlangan reestr texnologiyasidan foydalangan holda amalga oshiriladi, boshqacha aytganda, bu nol kuponli obligatsiyalar tokenlashtiriladi va taqsimlangan kitob texnologiyasiga joylashtiriladi. Berilgan namunaning oldindan belgilangan kelajakdagi qiymatini (FV) aniqlash uchun Future Value (FV) formulasidan foydalangan holda aniq tushuntirish mavjud.

Nominal qiymati yoki (PV) – 45 000 сўм
Muddatgacha boʻlgan daromad (r) – 10,2 %
m – 30 kun

$$FV = PV(1+r)^{-t}$$

Javob:
FV = 45 000(1 + 0,102)
FV = 49 590 soʻm

Shunday qilib, yuqoridagi hisob-kitoblarga asoslanib, sof foyda 4590 soʻmni tashkil etadi, albatta, 30 kundan keyin tokenlashtirilgan obligatsiyalar egasi asosiy qarzni qoʻshimcha foyda oladi, aqlli shartnomalar investorning elektron hamyoniga

[14] https://daryo.uz/en/2024/11/01/uzbekistans-annual-inflation-climbs-to-102%25-in-october#:~:text=Year%2Don%2Dyear%20inflation%20has,lower%20rates%20in%20previous%20years.

mablag'larni avtomatik tarzda o'tkazadi. Nazariy jihatdan u shunday ishlaydi va emitentga o'xshab, mazkur holatda obligatsiyalarni chiqarish uchun mas'ul bo'lgan davlat organlari hamma funksiyalarni joylashtirishi yoki, aytaylik, tokenlashtirilgan obligatsiyalar bilan bog'liq zarur algoritmlarni o'z elektron hamyonlarida taqsimlangan reestr texnologiyasi asosida o'rnatishi kerak, shuning uchun aqlli shartnomalar yuqorida aytib o'tilgan vazifalarni bajarishga majbur bo'ladi, chunki u yerda oldindan emitentning vazifalarini bajarishi mumkin emas. Hisob-kitob jarayonlarida uchinchi shaxslar bilan o'zaro munosabatlar, ya'ni hamma operatsiyalar aqlli shartnomalar orqali avtomatik ravishda amalga oshiriladi.

Uchinchi bobning uchinchi paragrafi esa portfelni bozor o'zgaruvchanligidan himoya qilish uchun kapital derivativlarini joriy etishga bag'ishlangan. Aniqroq aytilsa, "Toshkent" fond birjasidagi aksiyalar uchun choraklik fyuchers shartnomalari eng mos ko'rinadi va albatta, keng ma'lumki, fyuchers shartnomalari egalariga o'z pozisiyalarini xejirlash maqsadida opsion shartnomalarini yozishga ruxsat berilgan, yuqorida aytib o'tilganidek shunday ishlaydi. Batafsilroq aytadigan bo'lsak, fyuchers shartnomalari choraklik fyuchers turlariga bo'linadi, ya'ni ularning amal qilish muddati bor-yo'g'i 3 oy bo'lib, jami 4 ta choraklik fyuchers shartnomalari bo'ladi, shuning uchun birinchisining amal qilish muddati mart oyining uchinchi jumasida, ikkinchisi – iyun oyining uchinchi jumasida, uchinchisi – sentyabr oyining oxirgi juma kunida, to'rtinchisi – dekabr oyining oxirgi juma kunida tugaydi.

Mehnat sharoitlariga kelsak, fyuchersda uzoq pozitsiyalarga ega investorga quyidagi shartlar taqdim etiladi, masalan, pozitsiyani qoplash, pozitsiyani tugatish, ya'ni bitimdan chiqish; Roll Over, bu eskisini yangisi bilan almashtirish orqali pozitsiyani kengaytirish: oxirgisi esa hisob-kitob bo'lib, u holda investor asosiy kapitalni oldindan belgilangan narxda sotib olish uchun javobgar bo'ladi. "Toshkent" fond birjasida birja fyuchers shartnomasining bahosi va baholanishi, shuning uchun fyuchers shartnomalari boshlang'ich qiymati nolga teng bo'ladi va uning narxi $F_0(T)$ boshida belgilanadi. Fyuchers narxi, bizning holatimizda $F_0(T)$, aksiyaning spot narxiga yoki UCI indeksiga teng bo'ladi. Hajmi har bir shartnomada aks ettirilgan asosiy aksiyaning yetkazib beriladigan miqdori bo'ladi, shuning uchun bitta fyuchers shartnomasida oldindan belgilangan asosiy aksiyaning 100 ta aksiyalari bo'ladi. Birja fyuchers shartnomasini baholash formulasi mavjud:

Fyuchers narxi = Qimmatli qog'ozlar narxi + opsion foizlar qiymati – Naqd pul taqsimoti yoki $F_0 = S_0 (1+rt) – C_t,$

bu yerda: F_0 - fyuchers narxi; S_0 – asosiy aktivning narxi; r – t davri uchun yillik risksiz Stavka; t – Fyuchers shartnomasi muddati, C_t – naqd pul taqsimoti (dividendlar yoki foizlar) muddatigacha

Masalan, yuqorida aytib o'tilgan fyuchers shartnomalari narxini belgilash formulasi bizning mahalliy aksiyalarimiz uchun qo'llanilishi mumkin. Shunday qilib, biz misol tariqasida O'zRTXBning 3499,99 so'm (11.02.2025-yil) dagi oddiy

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birja savdosini oldik, boshqacha aytganda, S0 = 3499,99 so'm va t davridagi risksiz yillik stavka uchun Markaziy bank foiz stavkasi ko'rib chiqiladi, bu 13,5 %ni tashkil etadi, shuning uchun r = 13 ga nisbatan r = 13.

Fyuchers shartnomasi yoki amal qilish muddati, 21-mart, yaroqlilik muddati misol sifatida tanlangan. Nihoyat, C_t, ya'ni muddatiga qadar naqd pul to'lovlari (dividendlar yoki foizlar) bu yerda, muallif O'zRTXB oddiy aksiyadorlik jamiyatini tanlagani sababli, yaqinda muassasa o'z oddiy aksiyadorlariga joriy 2025-yil uchun dividendlar to'lamasligini e'lon qildi, shuning uchun Ct = 0. Yuqoridagi formula asosida barcha o'zgaruvchilar almashtirilsa, quyidagi natijaga erishish mumkin:

$$F_0 = 3499,99(1+21,135), F_0 = 77\ 427,28\ so'm$$

Aniqroq aytilsa, O'zRTXBning 100 dona oddiy aksiyasi bo'yicha fyuchers shartnomasining bir pozisiyasi 77 427,28 so'mni tashkil etadi, bu esa investorga 21-mart kuni har bir oddiy aksiya uchun 3499,99 so'mlik 100 dona oddiy aksiyalarni sotib olish imkonini beradi. Ya'ni, investor O'zRTXBning fyuchers shartnomasini amal qilish muddati tugashi bilan bajarishi kerak bo'ladi, ya'ni 100 dona oddiy aksiyalarni sotib oladi va bu investorga 349 999 so'mga tushadi. Shunday qilib, O'zRTXBning 100 ta oddiy aksiyasiga bitta fyuchers shartnomasi bo'yicha uzoq pozisiyani sotib olish investorga 77 427,28 so'mga tushadi, biroq shuni yodda tutish kerakki, fyuchers shartnomalari bo'yicha har qanday pozisiyani egallash investorni asosiy aktivlarni sotib olish yoki sotish majburiyatini oladi.

9-rasm. Birja fyucherslari qanday ishlashini tasvirlash[15]

9-rasmda birja fyucherslari shunday ishlaydi. Fyuchers shartnomalarining funksiyasini tushunish birinchi navbatda, "yetkazib berish narxi" atamasi har ikki tomonning narxini bildiradi: xaridor va sotuvchi bitim tuzishga rozi bo'lishadi, boshqacha aytganda, asosiy aktiv (kapital) sotuvchidan xaridorga o'tkaziladi va bu jarayon amal qilish muddati tugashi bilan sodir bo'ladi, bu esa investorning uzoq muddatli pozisiyasiga bog'liq holda, albatta, zarar yoki daromad keltiradi. Uning

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[15] https :// corporate finance institute. com / resurslar / derivativlar / kapital - fyuchers - shartnoma /

taxminlari to'g'ri ko'rinsa, nihoyat, boshlang'ich marja yoki oldindan to'lov odatda umumiy savdoning 10 %ni tashkil qiladi.

XULOSA

Tadqiqotlar natijasida bir qator xulosa va takliflar ishlab chiqildi. Ulardan "Toshkent" fond birjasidagi qimmatli qog'ozlar jozibadorligini oshirish va uning infratuzilmasini takomillashtirishda keng foydalanish mumkin. Ushbu masala yuzasidan bir qator iqtisodchilarning fikr-mulohazalarini umumlashtirish hamda tizimda ro'y berayotgan tarkibiy va sifat o'zgarishlarini tahlil qilish asosida quyidagi umumiy xulosalar ishlab chiqildi:

1. Birinchi bobda aytib o'tilganidek, "Majors" da uchta toifa yaratilishi kerak, bular yirik bozor kapitallashuviga ega yirik kompaniyalar yoki hatto O'zbekistonda tan olingan korporatsiyalar bo'ladi, kichik toifadagi kompaniyalar o'rta va kichik biznesni qamrab oladi, albatta, bunda bozor kapitallashuvi nisbatan kichik hisoblanadi. Bundan ko'rinib turibdiki, "Start-up" loyihalar faqat hali subyektlar hisoblanmagan boshlang'ich loyihalar hisoblanadi.

2. "Toshkent" fond birjasida "Ichki" va "Tashqi" ikkita asosiy toifadagi aksiyalarni joriy etish yo'li bilan ro'yxatga olingan aksiyalarning ikkita asosiy toifasi yaratilganligini qayd etish lozim. "Ichki" so'mdagi birja kotirovkasini mahalliy fuqarolar uchun nazarda tutadi. "Tashqi"ga kelsak, bu holda aksiyalar, ayniqsa, xorijiy investorlar uchun AQSh dollarida sotiladi. Batafsilroq aytilsa, mahalliy investorlar mahalliy brokerlik firmalari orqali brokerlik hisob varaqlarini ochishi shart va tabiiyki, mahalliy investorlarga qimmatli qog'ozlarga (ulushlarga) so'mlik mablag' kiritib, "Ichki" rejim taqdim etiladi. Shu bilan birga, xorijiy investorlar "Qimmatli qog'ozlar markaziy depozitariysi" AJda "Xorijiy manfaatdor mulkdor (benifarlar)" sifatida ro'yxatdan o'tishi shart.

3. O'zbekistonda moliyaviy ilmsizlik muammosi keng tarqalgan, chunki ko'pchilik fuqorolarimiz kelajakdagi iqtisodiy noaniqliklardan himoyalanish uchun qanday qilib investisiya qilish yoki pulni tejash bo'yicha bilimga ega emas, shuning uchun bu muammoning yechimi butun mamlakat bo'ylab o'rta maktab o'quv dasturlariga moliya, shuningdek, investisiya fanlarini kiritish orqali moliyaviy savodxonlikni oshirishdir. So'ngra kapital bozorida professionallik darajasi yetishmasligi "Toshkent" fond birjasi faoliyatini yaxshilashga ma'lum to'siqlarni keltirib chiqarmoqda. Masalan, O'zbekistonda kapital bozorida yetarli darajada yuqori malakali xodimlar yo'qligi, boshqacha aytganda, bu mahalliy oliy o'quv yurtlarida iqtisod va moliya ixtisosligi bo'yicha o'qitiladigan investisiya bilan bog'liq fanlar, ya'ni sekyuritizatsiya, aktivlarni boshqarish, boyliklarni boshqarish, qimmatli qog'ozlarni boshqarish va boshqa fanlar yo'qligi bilan bog'liq.

4. O'tkazilgan ekonometrik tahlilga ko'ra, uchta ekonometrik vositadan ikkitasi erkli o'zgaruvchi (X_2) va erksiz o'zgaruvchi (Y) o'rtasidagi haqiqiy munosabatni ifodalaydi, batafsilroq aytganda, aholining o'sishi (X_2) va ipoteka kreditlari (Y) o'rtasida muqobil gipoteza (H_A) mavjud, chunki aholi sonining oshish tendensiyasi o'sish sur'atlarining oshishiga bog'liq holda davom etadi. O'zbekistonda foiz

stavkalarining o‘zgarishi, ya’ni sekyuritizatsiya jarayonining yuqori salohiyati, sodda qilib aytganda, endi ekonometrik tahlil asosida shuni ta’kidlash kerakki, ipoteka qimmatli qog‘ozlarini yaratish tijorat banklari uchun ipoteka kreditlarini moliyalashtirish uchun mablag‘ jalb qilishning yangi yo‘llarini ochishi mumkin.

5. O‘rta va yirik xususiy kompaniyalar uchun 60/40 moliyalashtirish nisbati asosida moliyalashtirish dasturini yaratish kerak, aniqrog‘i, o‘z loyihasi uchun kapital jalb etmoqchi bo‘lgan kompaniya o‘z loyihasidagi taxminiy umumiy qiymatning qariyb 40 foizini o‘z zimmasiga olishi mumkin, qolgan 60 foizi esa o‘z aksiyalarini sotish yoki obligatsiyalar chiqarish yo‘li bilan ommaga e’lon qilinishi, ammo bularning barchasi investisiyalar orqali amalga oshirilishi kerak. Bundan tashqari, “Toshkent” fond birjasi rahbariyati tomonidan mahalliy tadbirkorlik subyektlarini korporativ kreditlardan tashqari mablag‘ izlashga undash uchun anderrayting xarajatlarining bir qismini yoki hatto to‘liq qoplanishi orqali IPO jarayonini osonlashtirish bo‘yicha bir qator chora-tadbirlar ko‘rish kerak.

Tadqiqotda, yuqoridagi takliflarning amalda tatbiq etilishi nafaqat mamlakat iqtisodiyotining rivojlanishi, balki fond bozori va umuman, kapital bozorining takomillashuviga ham olib keladi.

SCIENTIFIC COUNCIL AWARDING OF THE SCIENTIFIC DEGREES DSc.03/10.12.2019.I.16.01 AT THE TASHKENT STATE UNIVERSITY OF ECONOMICS

TASHKENT STATE UNIVERSITY OF ECONOMICS

ABDUGANIEV ABDULAZIZ ALISHER UGLI

IMPROVING FINANCING OF INVESTMENTS THROUGH THE STOCK MARKET

08.00.07 – Finance, money circulation and credit

ABSTRACT
of the dissertation of the Doctor of philosophy (PhD) on economic sciences

Tashkent – 2025

The topic of the dissertation for the degree of Doctor of Philosophy (PhD) in Economics is registered with the Higher Attestation Commission under No. B2024.1.PhD/Iqt3729.

The dissertation was completed at the Tashkent State University of Economics.

The dissertation abstract is posted in three languages (Uzbek, English, Russian (summary)) on the website of the Scientific Council (www.tsue.uz) and on the Information and Educational Portal "ZiyoNet" (www.ziyonet.uz).

Scientific Director:	**Tozhiev Rakhmatilla Rakhmonovich** candidate of economic sciences, professor
Official opponents:	**Khudoykulov Khurshid Khurramovich** doctor of economic sciences, professor
	Rakhmonov Dilshod Alijonovich doctor of economic sciences, professor
Leading organization:	**Tashkent International Kimyo University**

The defense of the dissertation will take place on "*02* *09*" 2025 at "*16* *00*" hours at the meeting of the Scientific Council DSc.03/10.12.2019.I.16.01 at Tashkent State University of Economics. Address: Islam Karimov street, 49, Tashkent city, 100003. Tel.: (99871) 239-01-49, fax: (99871) 239-41-23, e-mail: tdiu@tsue.uz.

The dissertation can be found at the Information and Resource Center of Tashkent State University of Economics (registered under number *1745*). (Address: 100003, Tashkent city, Islam Karimov street, 49. Tel.: (99871) 239-28-75, fax: (99871) 239-28-75, e-mail: tdiu@tsue.uz.

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S.U. Mekhmonov
Chairman of the Scientific Council for Awarding Academic Degrees, Doctor of Economics, Professor

U.V. Gafurov
Secretary of the Scientific Council for Awarding Academic Degrees, Doctor of Economics, Professor

S.K. Khudoykulov
Chairman of the scientific seminar at the Scientific Council for Awarding Academic Degrees, Doctor of Economics, Professor

INTRODUCTION (abstract of the thesis of the Doctor of Philosophy (PhD))

Relevance and importance of the dissertation topic. Capital market development is one of the main drivers of the global economy, in other words, nowadays many economies are heavily reliant on the stock markets, and countries with well-developed capital markets can easily attract billions of foreign investments for their local businesses. Internationally, financing investments through the stock market is one of the most important sources of economic growth. For investors, it provides an opportunity to invest in liquid and profitable assets. In 2024, the capitalization of the global stock market exceeded 130 trillion US dollars, accounting for an average of 100-120 percent of global GDP, and more than 1,500 entities raised a total of more than 250 billion dollars in capital through IPOs, which demonstrates the important role of the stock market in global investment activity[16]. Today, in order to attract foreign investments, there should be well-developed stock market, which means with good infrastructure, a range of investment products for all sorts of portfolios, as well as a stable local currency to protect investors' capital. Many foreign institutional investors have become interested to invest into the Tashkent Stock Exchange, besides there have been made several contributions to develop the stock market and enhance local financial securities' liquidity. Moreover, stock market boosts cash-flow to businesses in order to finance own projects resulting in prosperity of innovation and production growth in a country, but there is a flip side of a coin that connotes positive and negative effects. This viewpoint supports the motion that capital market development precedes economic growth, which implies that the causation relationship is that there are activities in capital markets that can favorably or adversely affect the growth of key economic system indicators.

The relevance of the dissertation research is related to find out ways to advance the Tashkent Stock Exchange by boosting the liquidity of its stocks as well as bonds. What is more, one of the main priorities of this work is to take measures to supplement hedging financial instruments such as derivatives for the purpose of protecting investors' portfolios against future uncertainties. Apart from this, there have been taken some steps on how to improve the liquidity of the Uzbekistan Composite Index (UCI) by means of introducing ETF or Exchange Traded Funds that would track the UCI value in order to attract cash inflows from local investors, that is to say, make local retail investors interested to invest into the Tashkent Stock Exchange, mainly into the UCI.

The head of our state mentioned about how significant is the capital market development in the country's prosperity. And now our country has become one of the centers of financial market in the Central Asia, even there are some initiatives in Presidential Decree № 291 referring to spur local investment programs among citizens of the Republic of Uzbekistan by providing citizens with the right to make voluntary funded pension contributions to purchase securities on the local stock

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[16] https://www.bloomberg.com/news/articles/2025-08-22/e-commerce-firm-pattern-files-for-ipo-showing-revenue-growth

market. At the same time, citizens can independently dispose of additional income received from the purchase and sale of securities and in the form of dividends (interest), also until they reach retirement age. What is more, measures for granting a preemptive right to purchase shares to employees of enterprises in the event of a public offering of these shares as part of an employee stock ownership plan (ESOP) introduced by the enterprise also mentioned in it. At the same time, in the legitimate document there is a point about "their funds, not exceeding their monthly salary and equivalent payments, allocated for the purchase of shares, are exempt from personal income tax".

The main trend at the current stage of the stock market development is to improve infrastructure by means of creating contemporary financial instruments in order to diversify investment products. Besides, the establishment of blockchain technology for the purpose of asset tokenization would considerably advance the infrastructure of the capital market in the Republic of Uzbekistan.

Presidential Decree № 6207 "The measures of further development of the capital market" accepted on 13th April 2021 "the share of freely traded securities in relation to GDP is extremely low accounted for 0.3% only". In other words, there should be taken steps to extend the figure at least to 1% of GDP. Besides, the liquidity of stocks at "Toshkent" Stock Exchange is significantly low making it harder for publicly traded companies to attract funds since there are some obstacles needed to prevented, such as financial illiteracy of most people. In the Presidential Decree № 90 "On additional measures to implement effective mechanisms to support the capital market" accepted on 17th January 2022, it serves to a certain extent in the implementation of the tasks specified in the following decision: "In order to further develop the capital market, expand the practice of privatization of blocks of state shares through the capital market, stimulate public investment in securities and create a healthy competitive environment in the financial market.

Compliance of the research with the priorities of the development of science and technology of the republic. The dissertation was completed in accordance with the priority direction of the republican science and technology development. "Formation of a system of innovative ideas and ways of their implementation in the social, legal, economic, cultural, spiritual and educational development of the information society and democratic state".

Level of study of the problem. The capital market development through the stock market is being studied by many foreign scientists and researchers, as well as Uzbek scientists, and scientific and practical proposals are being made.

Among foreign scientist, Atje T.B., Voghouei N.C., Robinson H.K., Peia Y.U., Roszbach I.M. It is worth noting the researches of scientists such as Kitanović S.W., Krstić Q.E., Levine J.P., Williamson F.G., Huybens R.V., Smith A.S., Beck X.L., and others[1].

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[1] Aitken, M. J., Harris, F. H., & Ji, S. (2009a). Trade-Based manipulation and market efficiency: A cross-market comparison. Paper presented at 22nd Australasian Finance and Banking Conference, November 18, 2009, Sydney, Australia. Retrieved from http://www.cmcrc.com/index.php/rd/academicpapers/academic-papers. Accessed on September 30, 2011. Cherian, J. A., & Jarrow, R. A. (1995). Market manipulation. In R. A. Jarrow, V. Maksimovic, & W. T. Ziemba (Eds.), North-Holland handbooks in operations research and management science (Vol. 9, pp. 611–

Current issues of stock market development in Uzbekistan Kh.Khudoykulov, A.Ibodullaev, R.R.Tojiev, Sh.Mustafakulov, A.Burkhanov, Kh.Kurbonov, N.Karimov, M.Eshov, S.Elmirzaev, B.Khodiev, M.Khamidulin, B.Toshmurodova revealed in the works of scientists and practitioners[2].

Levine and Zervos disclosed that: "There is a strong positive correlation between stock market and economic growth and consequently the most countries with good economic background have advanced their economies by scaling up the role of stock markets in financing businesses".

The connection of the dissertation research with the scientific research plans of the higher educational institution where the dissertation was completed. The subject of this dissertation was carried out in accordance with the research plan of the Tashkent State University of Economics within the framework of the scientific project "Improving the scientific methodological basis of the development of real sector industries and enterprises in the conditions of market competition".

The purpose of the study is to study the ways of improving the infrastructure of the stock market in Uzbekistan, in our case the research object is the Tashkent Stock Exchange, by researching the international experience of the improving the infrastructure of stock markets, and to develop scientific and practical proposals for improving the infrastructure of the Tashkent Stock Exchange based on this information.

Tasks of the research:

Researching the concept of improving stock market infrastructure in the Uzbekistan;

Studying the methodology of stock market development;

Analysis of stock market as a driving factor for the economic growth;

To study the current state of development of the stock market in Uzbekistan;

Determining the impact of the contemporary financial instruments on the general capital market infrastructure;

Studying the concept of "Securitization" as a tool for converting bank loans into fixed-income assets such as "Mortgage-Backed Securities", for the purpose of attracting extra cash inflow for the commercial banks so as to fund new loan applications;

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630). Amsterdam: Elsevier. Schumer, C. E. (2009, July 27). Schumer urges ban on so-called 'flash orders' that give privileged traders sneak peek at stock sales before other investors. Retrieved from http://www.schumer.senate.gov/new_website/record.cfm? id5316252. Accessed on June 12, 2012.

[2] Фонд бозори активларини баҳолаш моделлари таҳлили ва уларнинг назариялари Худойкулов Х.Х. // Иқтисодиёт ва инновацион технологиялар. 6-сон, ноябрь-декабрь, 2017 йил. Прогноз бу- башоратми? Худойкулов С.К. // Иқтисодиёт ва инновацион технологиялар. 1-сон, январь-февраль, 2018 йил. The Role and Importance of Monetary Policy in the Country's Economy// Ibodullaev A.A. Academic Journal of Digital Economics and Stability (2022). Развитие рынка организованных ценных бумаг в Узбекистане. Ибодуллаев А.А. Бюллетень науки и практики (2021). Уюшган қимматли қоғозлар бозорининг таркибий тузилмасида "Тошкент" Республика фонд биржасининг тутган ўрни. Ибодуллаев А.А. Development issues of innovative economy in the agricultural sector (2021). ANALYSIS OF INDICATORS OF THE REPUBLICAN EXCHANGE" TASHKENT"// A. Ibodullayev International Finance and Accounting (2020). Ходиев Б.Ю. Ўзбекистонда корпоратив бошқарув тизимининг ривожланиши синергик самарага эришиш омили сифатида. /Иқтисодиётни модернизациялаш шароитида Ўзбекистонда корпоратив бошқарув тизимини такомиллаштириш истиқболлари. Республика илмий-амалий анжумани маърузалари тўплами.

Conducting an empirical research for the purpose of finding out the application of the Securitization in the Republic of Uzbekistan by means of the Tashkent Stock Exchange

Calculation of the relationship between the interest rate fluctuation, the population growth as well as mortgage loans allocation and consequently how they affect the Securitization process or creating mortgage-backed securities in the Republic of Uzbekistan through econometric analysis.

The object of the study is the Tashkent Stock Exchange

The subject of the research is improving the overall infrastructure of the Tashkent Stock Exchange.

Research methods. Methods such as systematic and economic-statistical analysis, econometric modeling, analysis were used in the research process.

The scientific novelty of the research is as follows:

The securitization process of the Mortgage-Backed Securities in Industrial Construction Bank (SQB) with the assistance of Tashkent Stock Exchange. In general, there are actually three stages of the securitization process.

The creation of a funding program for middle and large private companies based on the 60/40 funding ratio. To be more precise, a company willing to raise capital for its project, would be allowed to take out only 40% of estimated its total project's cost and the rest of 60% would have to go public by selling its stocks or issuing bonds, but in any all these operations would be accomplished through the Tashkent Stock Exchange.

The introduction of distributed ledger technology or briefly (DLT) in order to tokenize fixed-income assets like government bonds as well as corporate bonds. the distributed ledger technology, it refers to a digital system that records transactions related to assets.

The establishment of equity derivatives at the Tashkent Stock Exchange. Having said that, unfortunately, the absence of equity derivatives at the Tashkent Stock Exchange may lead investors to a high-risk exposure and market volatility could cause huge losses to the investors' portfolios.

The practical result of the research is as follows:

A systematic analysis of the securitization process and the characteristics of its creation by means of the stock market was conducted;

Institutional reforms of the stock market regulation in Uzbekistan were studied;

factors affecting the effectiveness of the stock market development were evaluated;

the proposed strategic goals and the revival of the stock market development in Uzbekistan by means of the introduction of contemporary financial securities studied;

Hedging against market volatility and establishing equity derivatives is proposed.

Reliability of research results. The methodological approach and methods used in the research, appropriateness of the data, official sources of the data, including Statistical Agency under the President of the Republic of Uzbekistan,

Tashkent Stock Exchange, Central Bank of Uzbekistan, National Agency of Perspective Projects. It is explained by the fact that the information was obtained from the sources, that the conclusions, proposals and recommendations were approved at the regional and international level, and that certain scientific results were put into practice.

Scientific and practical significance of research results. The scientific significance of the research results is explained by the fact that the developed scientific conclusions and proposals can be used in the future implementation of strategic directions for the stock market development in Uzbekistan.

The practical significance of the research results is based on the proposals and recommendations of practical importance put forward in the dissertation, as well as the methodological developments of the dissertation, research in the development of targeted comprehensive programs for the stock market development, and the expansion of investment products for the purpose of boosting the stock market liquidity.

Approval of research results. The results of the research were presented in 9 scientific articles, of which 4 republics and 5 international journals included in the list of the Higher Attestation Commission were published and discussed at 1 international and 4 republic scientific-practical conferences.

Publication of research results. A total of 9 scientific works were published on the topic of the dissertation, of which 4 articles were published in republican scientific journals and 5 in foreign journals recommended for publication of the main results by the High Attestation Commission of the Republic of Uzbekistan. 1 article was published at international scientific-practical conference, 4 articles were published at national scientific-practical conference, 1 article was published in the Scopus database.

The structure and scope of the dissertation. The content of the dissertation consists of introduction, 3 chapters, conclusion, list of used literature and appendices. Its total volume is 110 pages.

MAIN CONTENT OF THE DISSERTATION

The Introduction substantiates the relevance and demand for the conducted research, defines the purpose and objectives, object, subject and methods of the research, their compliance with the priority areas of development of science and technology of the republic, and also presents the scientific novelty and practical results of the work, determines the reliability and implementation of the research results, provides data on the testing of the research results, published works, the structure and volume of the dissertation.

In the first chapter of the PhD thesis, entitled as **"Ways of stimulating businesses to attract investment by issuing stocks and corporate bonds",** explored scientific basis of capital market development and its role in the economy, besides how companies could raise capital by means of going public or issuing corporate bonds at the Tashkent Stock Exchange. There have been made so many theoretical contributions to the development of a capital market, even there are

financing stages of businesses. First and foremost, banking loans are fundamental in the first phase which is well-advanced in Uzbekistan. In greater detail, the second stage being stock market funding, that is to say, it is time to encourage enterprises to raise capital by issuing securities such as stocks and bonds in order to finance own projects. What is more, capital market development is reported to mobilize savings within a country after resources allocated properly into businesses by exerting corporate control.

Simultaneously, it would lead to mobilize local people's savings to the stock market, improving financial education within the country. In these days, in Uzbekistan, companies heavily rely on banking loans to spur cash-flow and enhance own business operations which result in restricted financing opportunities, since the stock market could provide a wide range of opportunities not only for businesses but also for local investors when it comes to raise funds for new entrepreneurial projects as well as boost investors' capital. Besides, local businesses could raise foreign funds by going public to foreign stock exchanges leading to foreign currencies in. In particular, several steps have been taken to improve legislative basis of the functioning of stock market.

For instance, in the Presidential Decree № 90 "On additional measures to implement effective mechanisms to support the capital market" accepted on 17th January 2022. "In order to further develop the capital market, expand the practice of privatization of blocks of state shares through the capital market, stimulate public investment in securities and create a healthy competitive environment in the financial market. Apart from this, measures for granting a preemptive right to purchase shares to employees of enterprises in the event of a public offering of these shares as part of an employee stock ownership plan (ESOP) introduced by the enterprise. A stock market development does coincide with the creation of an equity index. To be more precise, it is crucial to create national equity index as a benchmark which would reflect overall economic condition in our country since all well-developed countries possess own national equity indices such as Nikkei 225 in Japan, Dax in Germany, FTSE in the United Kingdom, as well as S&P 500 in the United States. Based on equity indices (benchmarks), analysts do examine economic situation in a country, even they anticipate what it is going to happen in the near future.

In the second chapter of the PhD thesis, entitled as **"Analysis of Tashkent Stock Exchange and its support for businesses",** disclosed Tashkent Stock Exchange in a detail, in other words, SWOT analysis of the research object will be conducted. Further, attempts will be done to look for potential support of Tashkent Stock Exchange to local businesses in ways of encouraging them to go public. Then, the securitization of commercial banks' loan portfolios will be covered in the second half of this paragraph, and a role of Tashkent Stock Exchange in this process, to put it another way, how the thesis object might spur the commercial banks of Uzbekistan to raise capital to fund loans by issuing mortgage-backed securities (real-estate) as well as asset-backed securities (auto, credit card receivables and business loans), will be analyzed too. The most significant part of this paragraph is to make SWOT

analysis of Tashkent Stock Exchange, in order to find out pros, cons, probable opportunities as well as upcoming threats which could be eliminated.

By looking at the SWOT analysis above, it can be seen that the strengths of Tashkent Stock Exchange do outweigh the rest parameters, in other words, there are actually four advantages related to the thesis object like infrastructural change, boom in retail investment, rapid growth in financial technologies, and of course collaboration with Korean Stock Exchange.

First and foremost, there is a huge issue related to the high financial illiteracy in Uzbekistan since a majority of people are not educated how to invest or to save money for hedging future economic uncertainties, so the answer for this problem is to spread [17] out financial literacy by introducing finance as well as investment disciplines in school curriculums within the whole country.

SWOT analysis

Internal	
Strengths	**Weaknesses**
All existing advantages of Tashkent Stock Exchange	All existing disadvantages of Tashkent Stock Exchange
- infrastructural changes; - retail investment boom; - rapid growth of fintech; - cooperation with Korean Stock Exchange	- the lack of information about National Index UCI; - the absence of startup market
External	
Opportunities	**Threats**
All existing opportunities that could be used for the benefit of Tashkent Stock Exchange	All existing threats that could be eliminated for the benefit of Tashkent Stock Exchange
- transformation of Central Securities Depository; - creation of National Clearing Center upon JSC "Uzbek Republican Currency Exchange"[3]	- high rate of financial illiteracy; - less professionalism in the capital market; - depreciation of national currency

Figure 1. SWOT analysis of the Tashkent Stock Exchange[4]

Then, the lack of professionalism in the capital market causes some obstacles to improve the function of Tashkent Stock Exchange. For instance, the absence of sufficient highly-qualified employees on the capital market in Uzbekistan, in other words, it is because of the absence of investment related disciplines taught at local universities with majors in economics and finance like securitization, asset management, wealth management, securities management and others. Finally, there is a strong local currency devaluation keeping foreign investors away from investing into Uzbek securities, certainly this problem could be solved by taking some monetary policy actions like raising interest rate, currency intervention (short-term

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[17] http://economy-lib.com

[3] https://lex.uz

[4] Author's development

solution against devaluation) or boosting export-oriented manufacturing. Shortly, all these threats, weaknesses could be overcome through suggestions, which have been mentioned above, for the benefit of Tashkent Stock Exchange and the whole capital market.

Second half of this part is exploring the ways of fixing up securitization process in Uzbekistan by means of Tashkent Stock Exchange. But first it is worth to run through securitization basics, in other words, how it means, how it actually works and other related functions. To put it briefly, the securitization process pools assets and repackages them into interest bearing securities[5].

After, an issuer plans a marketable security by merging financial assets, widely mortgage loans, consumer loans or even commercial loans as well. Once investors have purchased these securities, they would receive the principal (down payment) and interest payments of the underlying assets. In essence, there are generally three stages of the securitization process that could be applied to our stock market since there have been made many contributions to spur urbanization in Uzbekistan, in other words, home demand outweighs home construction supply.

As mentioned above, there are actually three stages of the securitization process (Figure 2).
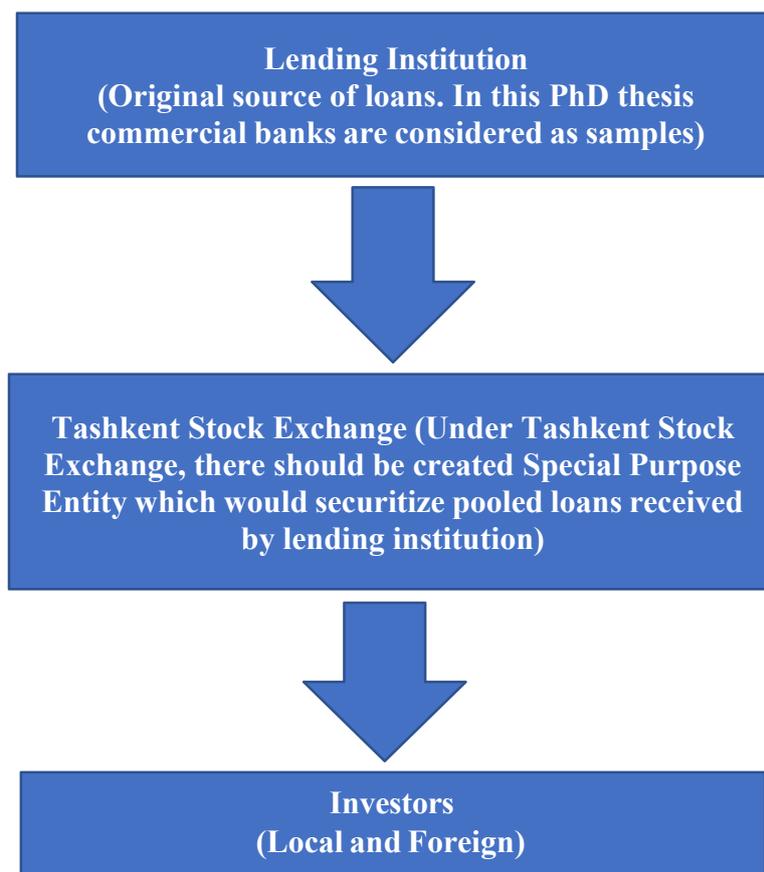

Figure 2. Structure of the securitization process[6]

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[5] https://www.iiste.org/Journals/index.php/JEDS/article/download/35130/36133
[6] Author's development

Firstly, a lending institution (in some sources it has been emphasized as a loan originator) does extract loan portfolio (mainly mortgage loans with high credit ratings) from balance sheet so as to prepare it to sending to Special Purpose Entity. Next, the Special Purpose Entity which would be under the Tashkent Stock Exchange control, that is to say, there should be created the Special Purpose Entity department in the Tashkent Stock Exchange.

The Special Purpose Entity would pool loan portfolio and it would be securitized into securities backed by mortgages (MBS, mortgage-backed securities). Finally, those mortgage-backed securities would be offered to investors (local as well as foreign ones). However, in case of default, mortgage (real-estate) comes out as a collateral, to put it another way, an investor would receive home instead. Last but not least, lender institution would have to remain responsible for at least 5% of the credit risk attached to these loans this means 5% of the mortgage-backed securities would have to be paid out to an investor (in case of default) in addition with collateral (real estate).

We have carried out an empirical research, by using some econometric as well as statistical tools in order to analyze future trend of mortgage loans as they are considered underlying assets for mortgage-backed securities in this thesis. In greater detail, I took out some data of allocated mortgage loans within Uzbekistan for last 20 years between 2004 and 2024 (for the first half of the year), the variation of interest rates for the same periods as it is well-known based on the interest rates, mortgage loans would adjust, last but not least, population growth was also added since population growth does lead to mortgage loans rise. In this empiric research, dependent (Y) is Mortgage loans, and there are two independent variables (X_1) is Interest rates, (X_2) is Population growth. Thus, five econometric tools were selected to apply in this work: linear regression, correlation matrix, a scatter graphic matrix, a graphical histogram, as well as a graphical matrix.

First and foremost is the Linear Regression used to predict the value of variable based on the value another variable, the relationship between Y and X_1, X_2.

$$y = \beta_0 + \beta_1 x_1 + \beta_2 x_2, \tag{1}$$

where: y – mortgage loans; x_1 – interest rates; x_2 – population growth

```
      Source |       SS           df       MS      Number of obs   =        14
-------------+----------------------------------   F(2, 11)        =     57.64
       Model |  485.796285         2   242.898143   Prob > F        =     0.0000
    Residual |  46.3522362        11   4.21383966   R-squared       =     0.9129
-------------+----------------------------------   Adj R-squared   =     0.8971
       Total |  532.148521        13   40.9345016   Root MSE        =     2.0528


-------------+----------------------------------------------------------------
           y |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
          x1 |   .2679006   .2278001     1.18   0.264    -.2334841    .7692853
          x2 |   2.379383   .2288033    10.40   0.000     1.87579    2.882976
       _cons |  -75.05947   7.773388    -9.66   0.000    -92.16858   -57.95035
-------------+----------------------------------------------------------------
```

Fgure 3. Interpretation of Linear Regression Model Output[18]

As it is visible from the linear regression model indicating relationship between response variable (y) as well as explanatory variables (x_1; x_2). In general, there are four the most significant components that should be disclosed so that to grasp the correlation between the movements of dependent variable (y) and independent variables (x_1; x_2). Firstly, it is Coefficient of Determination (Coef.) that shows the portion of the total variation in the response variable (y) explained by covariates (x_1; x_2), in simple terms, one unit change in (x_1; x_2) causes with x unit change in (y).

According to model, it is obvious that if x_2 increases to 1%, then y would rise to 2.4 %, but regarding a growth of x_1 to 1% would result in 0.3% rise in y. In other words, there is a strong correlation between y (mortgage loans) and x_2 (population growth) thus if population grows to 1%, and that would cause 2.4 % increase of mortgage loans allocation, while the observation depicts that there is a weak correlation between y (mortgage loans) as well as x_1 (interest rate) consequently as long as interest rate reaches 1% it would lead to the allocation of mortgage loans rise by 0.3 %.

Second is a standard error (Std.Err.) does play key role in determining whether there is a true relationship between y and x in the population. In this work, it is certain that there is a positive relationship between (y) and (x_1; x_2) accounting for .2278001 and .2288033 respectively. In greater detail, there is an alternative hypothesis (H_A) between (y) mortgage loans as well as (x_1) interest rates, (x_2) population growth in turn. Meanwhile, regarding t-value component, it can be seen that there is an alternative hypothesis (H_A) or a statistically significant relationship between (y) mortgage loans and (x_2) population growth being 10.4 which is considerably higher than 1.96 to prove 95 % confidence. On the other hand, the result for (y) and (x_1) shows a null hypothesis (H_0), to put it another way, there is no statistically significant relationship between (y) mortgage loans as well as (x_1) interest rates made up 1.18 which is less than 1.96, briefly the outcome disproves 95% confidence.

Last but not least, there is one more component that makes pay attention to which is probability value or $P > |t|$ two tailed p-values that test the hypothesis that each coefficient is different from zero 0. Based on the theory, we need to have p-value less than 0.05 in order to prove a statistically significant relationship or an alternative hypothesis (H_A) between x (independent variable) and y (dependent variable). However, the outcome of p-value does unveil that there is a null hypothesis (H_0) between (y) mortgage loans as well as (x_1) interest rates since relied on data p-value of (y) and (x_1) is 0.264 which is greater than 0.05 coefficient. On the other hand, it is visible that a dependent variable (y) and independent variable (x_2) do appear to have an alternative hypothesis (H_A) or a statistically significant relationship exists among them constituted 0.000 which implies high significance.

In conclusion, four components of linear regression model demonstrate an alternative hypothesis (H_A) between (y) dependent variable and (x_2) independent

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[18] Author's development

variable meaning population growth highly influence mortgage loans allocation rather than interest rates variation.

```
                 y        x1       x2
      _____

      y  |  1.0000
      x1 |  0.2378   1.0000
      x2 |  0.8797   0.1413   1.0000
```

Figure 4. Cross Correlation Matrix[19]

Next is the correlation matrix showing the correlation coefficients between two variables to measure how strong and in which direction they (variables) are linked in a straight line.

In the correlation matrix analysis, it is clear to note that there is no correlation at all between (y) dependent variable as well as (x_1; x_2) independent variables. However, a correlation between dependent variable (y) and independent variable (x_2), amounting to $0.8797 \approx 0.9$, which is more than the coefficient of correlation between (y) and (x_1) made up $0.2378 \approx 0.2$. That is to say, there is more probable true relationship between (y) mortgage loans as well as (x_2) population growth rather than the correlation between (y) mortgage loans and (x_1) interest rates.

The third is a scatter plot matrix used to visualize bivariate relationships between combinations of variables. This graphic, in essence, explores cross-correlations among response variable (y) and explanatory variables (x_1; x_2). As mentioned above, dependent variable (y) is mortgage loans; independent variable (x_1) is interest rates; and a second independent variable (x_2) remained population growth. There is a below illustrated scatter plot matrix with detailed interpretation.
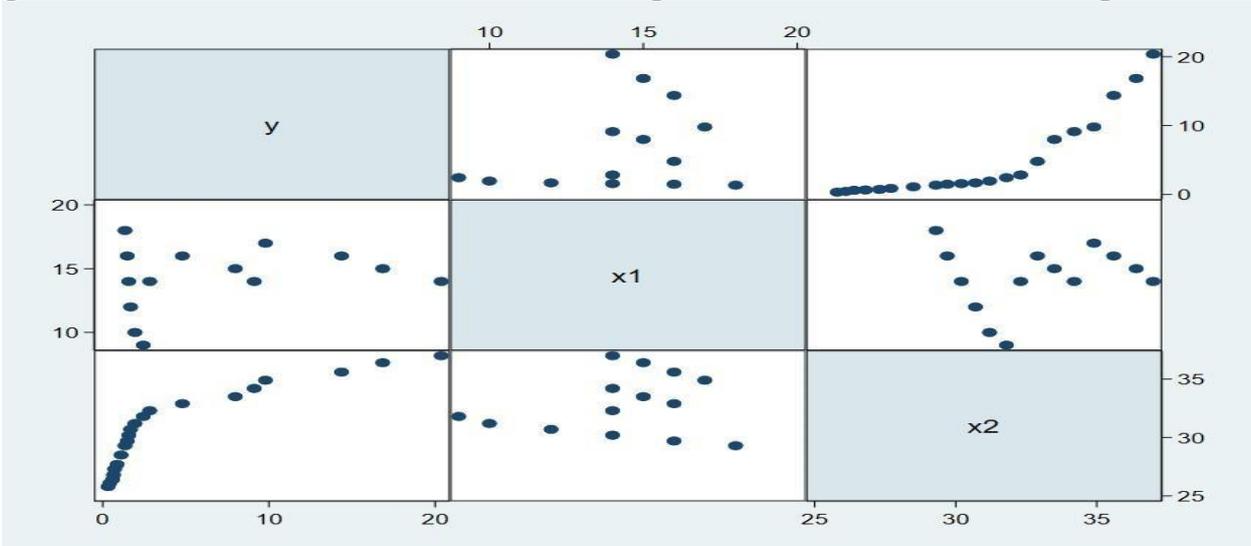
Figure 5. The interpretation of the scatter plot matrix[20]

In the first column (y) dependent variable mortgage loans is x-axis, in the second column (x_1 or x_1) independent variable interest rates is x-axis and in the last third column (x_2 or x_2) population growth is x-axis. Overall, it can be seen that there is a cross-correlation between (y) which is mortgage loans, as well as (x_2) population growth. In other words, in the first column, it is clear that an increase of mortgage loans (y) causes a growth of population (x_2), simultaneously there is a similar trend in the third column where population growth (x_2), results in hiking mortgage loans allocation (y). However, cross-correlation does not exist among mortgage loans (y) and interest rates (x_1), even it is obvious from matrix that no matter how far independent variable (x_1) varies, there would be less effect on mortgage loans allocation (y) being dependent variable. The same is true for (y) mortgage loans in the first column, it is less likely correlated with (x_1) interest rates. In all, based on the scatter plot matrix, there is a cross-correlation between (y) and (x_2). To be more precise, an alternative hypothesis (H_A) exists between mortgage loans and population growth.

To sum up, two out of three econometric tools do represent true relationship between independent variable (x_2) and dependent variable (y), in greater detail, there is an alternative hypothesis (H_A) between population growth (x_2), as well as mortgage loans (y) since as long as number of population is growing, the similar upward trend would be seen in the allocation of mortgage loans regardless of the interest rates variation in Uzbekistan translating into a high potential of securitization process, in simple terms, now based on the econometric analyses, it is noteworthy that a creation of mortgage-backed securities could open new ways of fund raising for commercial banks to finance mortgage loans.

In the third chapter of the PhD thesis, entitled as **«Measures to improve the Tashkent Stock Exchange and Capital Market infrastructures in Uzbekistan»** studied ways to boost the liquidity of UCI (Uzbekistan Composite Index). The introduction of ETFs (Exchange Traded Funds) tracking UCI value would be a promising choice to make foreign and local investors interested to invest into the Uzbekistan Composite Index. But first it is worth to disclose the crux of ETFs in detail. According to the Barclays Bank information: "Exchange-traded funds (ETFs) are a popular type of collective investment that provide access to a wide range of markets. Exchange-traded funds (ETFs) are popular among investors looking to build a diversified but low-cost portfolio. ETFs offer investors access to a wide range of markets around the world usually at low cost. Most ETFs are passive investments, meaning they simply aim to track the performance of an underlying group of investments."[21] As being mentioned above, all ETF features highly suit to apply to the national equity index (UCI), in other words, the creation of ETF tracking the UCI value, would lead to improving the overall Capital Market infrastructure in Uzbekistan. Besides, many retail local investors are highly restricted in terms of funds they possess, and there is a limited number of investment

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[20] Author's development
[21] https://www.barclays.co.uk/smart-investor/investments-explained/funds-etfs-and-investment-trusts/what-is-an-etf.

products provided by the financial institutions in Uzbekistan. Furthermore, local retail investors are not fully confident to put their savings into a single stock or bond, due to being risk-averse, therefore by introducing the ETF on the Uzbekistan Composite Index, could result in engaging local retail investors to make investments to the UCI equity index since by its nature, the ETFs considered as less risky types of investment products that would fit our local retail investors.

Figure 6. Visual line chart, taken a screenshot from the Tashkent Stock Exchange website[7]

In general, based on the theory, the overall picture does illustrate that during one year there have been several huge swings, or that being said turbulence has taken place in the equity market of Uzbekistan, meaning the existence of high volatility in the economy. And it can be seen that within October 23th (2023) till October 21th (2024) the UCI value had fluctuated dramatically and from nearly 680 fallen to just below 640. And even there is no specific parameter to measure since value is the abstract concept. While exploring the graph, I personally (a researcher) could not manage to find out any specific information related to the values. What is more, no main technical analysis indicators provided such as Open interest, Volume, Average volume, Day's range. And the absence of other graph formats availability, such as Candle, Baseline, Mountain, as well as Bar. One more downside is that annual data does represent misconception about the economy of Uzbekistan.

To be more precise, there is no any correlation between Uzbekistan's economy and the Uzbekistan Composite Index value, hence the UCI value movements are implausible even based on the provided annual UCI value variations, so in this case, investors could be scared by the huge swings within a 1-year period that means a country has faced economic instability and high risk of default in terms of the graph. And finally, according to the graph above, the UCI benchmark equity index is pointing out the economic contraction or decreasing business sector within the

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[7] Data gathered from https://uzse.uz/price_indices

country. For this reason, firstly, the graph should be suspended temporarily until the launch of ETF on the UCI by means of the Regulatory Sandbox regulated by the NAPP.

In the second part of the third chapter, we are about to explore the ways of stimulating fixed-income assets or bond market of the Tashkent Stock Exchange via blockchain technology, in other words, how to increase the liquidity of corporate and government bonds by means of distributed ledger technology or briefly (DLT).
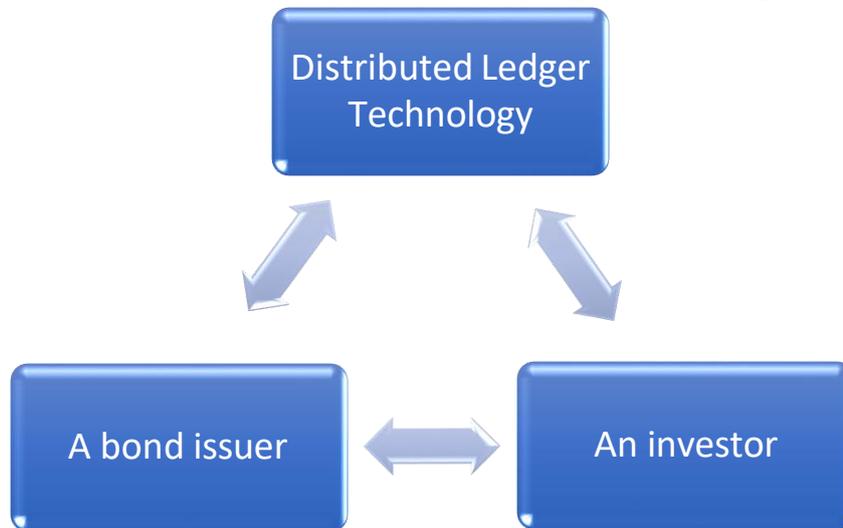

Figure 7. The structure of the Blockchain-based Fixed-income Unit through Distributed Ledger Technology (DLT)[22]

Certainly, prior to commence the investigation of steps to introduce the blockchain technology to tokenize the fixed-income assets, first and foremost, we would like to walk a reader through the gist of asset tokenization, distributed ledger technology, smart contracts or a blockchain technology at all, since this state-of-the art technology might be unfamiliar to many people, even some economists and financiers are reported to have misconceptions about it.

Certainly, the Tashkent Stock Exchange management should launch Distributed Ledger Technology project with an assistance of the National Agency of Perspective Project (NAPP) via "Regulatory Sandbox" framework in order to apply this innovative system within Capital Market participants. But in the initial phase, government bonds would be necessary to be tokenized and placed on the Distributed Ledger Technology, to put it another way, as an experiment, government bonds should be tokenized in order to sell out them to the public in the fractional amount since many retail investors cannot afford to purchase bonds due to the high price of a single unit of a bond.

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[22] Author's development

Consequently, it would be necessary to issue tokenized short-term zero-coupon government bonds with a maturity of 30 days certainly a face value should be adjusted to a monthly inflation rate. To be more precise, an investor could purchase tokenized bonds at discount price and those tokenized bonds would mature at a face value, nothing is unusual here only there are several benefits: the first is bonds would be tokenized, the second is no financial intermediary in the transaction processes, meaning there is no transaction cost which could save investors as well as bond issuers returns, the third is an enhanced liquidity of bonds, the forth is the ease of settlement, in other words, settlement process might take a few minutes not days as it is accepted with a transaction of traditional bonds. And last but not least, the fifth is a transparency and security, that is to say, every transaction would be displayed for each member of Distributed Ledger Technology in order to take under control all processes and of course every user would be given two types of keys like private and public ones.

For instance, a 30-day zero-coupon bond with a face value of 45 000 UZS and YTD (yield to maturity) of 10.2 % which is annual inflation rate by October 2024[8]. Surely, all processes would be accomplished via the Distributed Ledger Technology, to put it another way, those zero-coupon bonds would be tokenized and placed at the Distributed Ledger Technology. There is a clear explanation with the exploitation of the Future Value formula (FV) in order to define pre-determined Future Value (FV) of the given sample.

Face Value or (PV) – 45 000 UZS
Yield to maturity (r) – 10.2%
t – 30 days

$$FV = PV(1+r)^{-t}$$

Answer:
FV = 45 000(1 + 0.102)
FV = 49 590 UZS

Thus, based on the calculation above, a net return would be 4 590 UZS, of course, in 30 days a tokenized bond holder would receive principal plus profit, smart contracts would automatically transfer the funds to the investor's e-wallet. This is how it works theoretically and similarly issuer, in our case, government authorities being responsible to issue bonds would have to place all functions or let's say fix up necessary algorithms related to tokenized bonds to their e-wallets at the Distributed Ledger Technology, consequently smart-contracts would be liable to accomplish all pre-determined tasks by the issuer and as it can be mentioned above there would be no third-party interactions in the settlement processes which means all transactions would be done automatically through the smart-contracts.

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[8] https://daryo.uz/en/2024/11/01/uzbekistans-annual-inflation-climbs-to-102%25-in-october#:~:text=Year%2Don%2Dyear%20inflation%20has,lower%20rates%20in%20previous%20years.

And the final part of the third chapter is about the introduction of equity derivatives in order to hedge portfolio against market volatility. To be more accurate, quarterly futures contracts would appear to be the most appropriate to the stocks at the Tashkent Stock Exchange, and of course as it is widely known the futures contracts holders are permitted to write option contracts for the purpose of hedging own positions, similarly this would operate in the same manner as highlighted above. In greater detail, futures contracts would be divided into quarter-futures types, meaning lifespan would be only 3 months, and there would be in total 4 quarter futures contracts, so the first one would expire on the third Friday of March, the second would expire on the third Friday of June, the third would expire on the third Friday of September and the last one would expire on the same day of December.

Regarding the terms of work, an investor having long on futures positions, would be provided following conditions such as offset the position, liquidating the position, that is to say, exiting a trade; rollover which states to prolong position by replacing the old one to the newest: and final is the settlement, in this case, the investor would be in charge of purchasing the underlying equity at predetermined price. Pricing and valuation of futures contract on the equities at the Tashkent Stock Exchange, so the futures contracts would carry zero initial value and its price f0(T) would be established at inception. The futures price, in our case it is f0(T) would equal the spot price of the equity or the UCI index. The size would be deliverable number of underlying shares represented in each contract, then a single futures contract would have 100 shares of the predetermined underlying stock. There is a formula on how to value futures contract on equities:

Futures Price = Security Price + Interest Opportunity Cost – Cash Distributions Or $F_0 = S_0 (1+rt) – C_t$,

where: F_0 – Futures Price; S_0 – Price of underlying asset; r – Annualized risk-free rate to period t; t – Maturity of futures contract; C_t – Cash distributions (dividends or interest) to maturity

For instance, mentioned above pricing futures contract formula could be applied to our local equities. Thus, we have taken as a sample common share of UZEX traded at 3499.99 UZS (11.02.2025), in other words, $S_0 = 3499.99$ UZS, and for annualized risk-free rate to period t considered central bank interest rate which is 13.5 %, so r = 13.5 %, regarding t that is maturity of futures contract or expiration date, as an example 21st March expiry date opted. Finally, C_t which is cash distributions (dividends or interest) to maturity, here as we have selected common share of UZEX, the institution has recently announced not to pay out dividends for its common shareholders for this year 2025, therefore $C_t = 0$. If we put all variables based on the formula above, there would following output:

$F_0 = 3499.99(1+21.135)$, $F_0 = 77\ 427.28$ UZS

To be more precise, a single futures contract position precise for the UZEX 100 common share stocks would cost 77 427.28 UZS, allowing an investor to purchase

100 common stocks of UZEX on March 21ˢᵗ, at the strike price of 3499.99 each common stock. In other words, the investor would have to exercise the futures contract on UZEX on expiration date, which means purchasing 100 common stocks and it would cost in total 349 999 UZS for the investor. Thus, going long for a single futures contract for UZEX 100 common stocks would cost 77 427.28 UZS for the investor, however it is important to keep in mind that having taken any positions in futures contracts would oblige the investor to buy or sell the underlying assets.
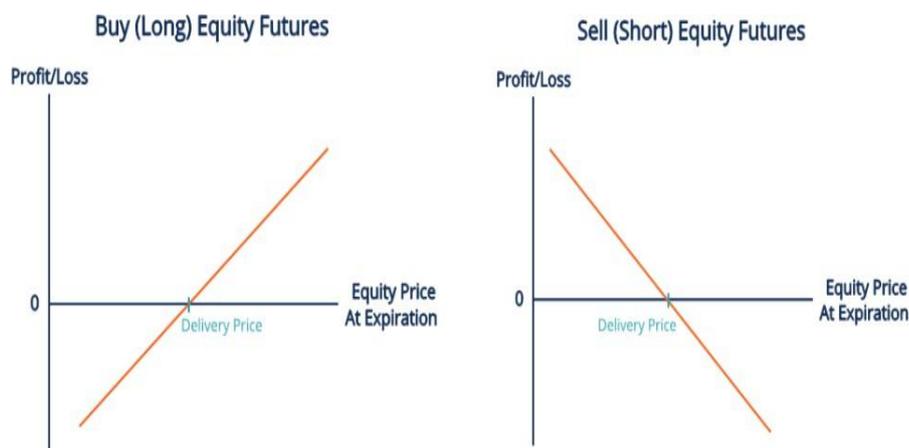

Figure 8. The picture of how equity futures work[9]

As it visible above how equity futures work (figure 6). In general, the function of futures contracts is not daunting task to comprehend, so firstly the term Delivery Price connotes the price at which both parties: buyer as well as seller agree to make the deal happen, to put it another way, the underlying asset (equity) is handed over from seller to buyer, and this process takes place at expiration which is equal to 0. Of course, based on the position long or short the investor makes profit as long as his or her assumptions appear to be correct. Last but not least, initial margin or upfront fee generally costs 10 % out of the entire deal.

CONCLUSION

As a result of the conducted research, a number of conclusions and proposals were developed. They can be widely used in order to improve the attractiveness of securities on the Tashkent Stock Exchange and increase its infrastructure. Based on the generalization of the opinions of a number of economists on this issue, the analysis of structural and qualitative changes occurring in the system, the following generalized conclusions were developed:

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[9] https://corporatefinanceinstitute.com/resources/derivatives/equity-futures-contract/

1. As mentioned in the third part of the first chapter, there should be created three categories in "Majors", there would be large companies with big market capitalization or even considered as well-recognized corporations in Uzbekistan, "Minors" category would cover medium-sized and small businesses, of course relatively small market capitalization. Finally, "Starters" there would be only startup projects which have not been entities yet.

2. What is more, it is noteworthy to create two main categories of quoted stocks at Toshkent Stock Exchange by introducing two main classes of stock such as "Internal" as well as "External". In other words, "Internal" would refer to quoting stocks in UZS certainly for local citizens. Regarding "External", in this case, stocks would trade in USD especially for foreign investors. In greater detail, local investors should open brokerage accounts through local brokerage firms, and of course local investors would be provided "Internal" mode, investing in UZS to securities (stocks). Meanwhile, foreign investors should be registered as "Foreign Beneficial Owner" at JSC "Central Securities Depository".

3. Next is a huge issue related to the high financial illiteracy in Uzbekistan since a majority of people are not educated how to invest or to save money for hedging future economic uncertainties, so the answer for this problem is to spread out financial literacy by introducing finance as well as investment disciplines in school curriculums within the whole country. Then, the lack of professionalism in the capital market causes some obstacles to improve the function of Tashkent Stock Exchange. For instance, the absence of sufficient highly-qualified employees on the capital market in Uzbekistan, in other words, it is because of the absence of investment related disciplines taught at local universities with majors in economics and finance like securitization, asset management, wealth management, securities management and others.

4. According to the econometric analysis of the first part of the second chapter, two out of three econometric tools do represent true relationship between independent variable (x_2) and dependent variable (y), in greater detail, there is an alternative hypothesis (H_A) between population growth (x_2), as well as mortgage loans (y) since as long as number of population is growing, the similar upward trend would be seen in the allocation of mortgage loans regardless of the interest rates variation in Uzbekistan translating into a high potential of securitization process, in simple terms, now based on the econometric analyses, it is noteworthy that a creation of mortgage-backed securities could open new ways of fund raising for commercial banks to finance mortgage loans.

5. It is necessary to create a funding program for middle and large private companies based on the 60/40 funding ratio, to be more precise, a company willing to raise capital for its project, would be allowed to take out only 40% of estimated its total project's cost and the rest of 60% would have to go public by selling its stocks or issuing bonds, but in any all these operations would be accomplished through the Tashkent Stock Exchange. What is more, there should be taken some action to assist in an IPO process from the authorities of the Tashkent Stock

Exchange by covering underwriting outlays partly or even fully so as to stimulate local enterprises to seek out funds beyond corporate loans.

According to the author, the implementation of the above proposals in practice leads not only to the development of the country's economy, but also to the improvement of the stock market and the capital market in general.

НАУЧНЫЙ СОВЕТ DSC.03/10.12.2019.I.16.01 ПО ПРИСУЖДЕНИЮ УЧЕНЫХ СТЕПЕНЕЙ ПРИ ТАШКЕНТСКОМ ГОСУДАРСТВЕННОМ ЭКОНОМИЧЕСКОМ УНИВЕРСИТЕТЕ

ТАШКЕНТСКИЙ ГОСУДАРСТВЕННЫЙ ЭКОНОМИЧЕСКИЙ УНИВЕРСИТЕТ

АБДУҒАНИЕВ АБДУЛАЗИЗ АЛИШЕР ЎҒЛИ

СОВЕРШЕНСТВОВАНИЕ ФИНАНСИРОВАНИЯ ИНВЕСТИЦИЙ ЧЕРЕЗ ФОНДОВЫЙ РЫНОК

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АВТОРЕФЕРАТ
диссертации на соискание ученой степени доктора философии (PhD) по экономическим наукам

Ташкент – 2025

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Научный руководитель:	**Тожиев Рахматилла Рахмонович** кандидат экономических наук, профессор
Официальные оппоненты:	**Худойкулов Хуршид Хуррамович** доктор экономических наук, профессор
	Рахмонов Дилшод Алижонович доктор экономических наук, профессор
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С.У. Мехмонов
Председатель Научного совета по присуждению ученых степеней, д.э.н., профессор

У.В. Гафуров
Секретарь Научного совета по присуждению ученых степеней, д.э.н., профессор

С.К. Худойкулов
Председатель научного семинара при Научном совете по присуждению ученых степеней, д.э.н., профессор

ВВЕДЕНИЕ (автореферат диссертации доктора философии (PhD))

Актуальность и востребованность темы диссертации. Актуальность и востребованность темы диссертации. Одним из основных драйверов мировой экономики является развитие рынка капитала. Другими словами, сегодня экономики большинства стран опираются преимущественно на фондовые рынки, а в странах с развитыми рынками капитала легко привлечь миллиарды иностранных инвестиций для местного бизнеса. На международном уровне финансирование инвестиций через фондовый рынок является одним из важнейших источников экономического роста. Для инвесторов это возможность вкладывать средства в ликвидные и доходные активы. В 2024 году капитализация мирового фондового рынка превысила 130 триллионов долларов США, что составляет в среднем 100–120 процентов мирового ВВП, а более 1500 компаний привлекли в общей сложности более 250 миллиардов долларов капитала посредством IPO, что свидетельствует о важной роли фондового рынка в мировой инвестиционной активности [23]. Улучшение финансирования инвестиций через фондовый рынок является важным фактором стимулирования экономического роста за счет эффективного распределения капитала, прозрачности инвестиционной среды и рыночных механизмов. Этот процесс позволяет направлять финансовые ресурсы непосредственно в реальный сектор экономики, тем самым расширяя инновационные проекты и активность частного сектора. При этом стабильность и безопасность инвестиционной деятельности обеспечиваются развитием инфраструктуры фондового рынка, укреплением системы корпоративного управления и расширением участия институциональных инвесторов. В результате повышается финансовая устойчивость национальных экономик и расширяются возможности привлечения международного капитала.

Приоритетными направлениями научных исследований по совершенствованию финансирования инвестиций через фондовый рынок в мире являются укрепление институциональной основы рынка капитала, укрепление доверия инвесторов путем обеспечения корпоративной прозрачности и повышения подотчетности, обеспечение диверсификации финансовых инструментов, автоматизация фондовых операций на основе цифровых технологий и блокчейна, а также упрощение доступа к финансовым ресурсам через рынок капитала для субъектов малого и среднего бизнеса. Кроме того, привлечение международных инвестиционных потоков путем улучшения макроэкономической стабильности и правовой среды, а также внедрение механизмов устойчивого финансирования на основе критериев ESG также становятся одними из актуальных направлений современных исследований.

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[23] https://www.bloomberg.com/news/articles/2025-08-22/e-commerce-firm-pattern-files-for-ipo-showing-revenue-growth

Среди приоритетных задач, поставленных для совершенствования финансирования инвестиций через фондовый рынок в Узбекистане, принимаются меры по обеспечению институционального развития рынка капитала, ускорению процессов акционирования частных и государственных предприятий, укреплению доверия инвесторов путем внедрения критериев прозрачности и подотчетности, а также разработке новых финансовых инструментов – корпоративных облигаций, инвестиционных фондов, REIT и механизмов IPO. Одновременно последовательно реализуются реформы, направленные на регулирование выхода национальных коммерческих банков на фондовый рынок, широкое внедрение международных стандартов финансовой отчетности, расширение брокерских услуг через цифровые платформы, повышение ликвидности рынка за счет привлечения населения и институциональных инвесторов. Такие меры направлены на обеспечение эффективности и конкурентоспособности финансового сектора, имеют большое значение для диверсификации экономики и повышения активности частного сектора. Основной тенденцией на современном этапе развития фондового рынка является совершенствование инфраструктуры путем создания современных финансовых инструментов в целях диверсификации инвестиционных продуктов. Кроме того, внедрение технологии блокчейн в целях токенизации активов позволит существенно улучшить инфраструктуру рынка капитала в Республике Узбекистан.

Диссертационная работа в определенной степени послужит реализации задач, изложенных в указах Президента Республики Узбекистан №УП-37 «О Государственной программе по реализации Стратегии «Узбекистан-2030» в Год поддержки молодежи и бизнеса» от 21 февраля 2024 года, №УП-158 «О Стратегии «Узбекистан – 2030» от 11 сентября 2023 года, постановлениях № ПП-291 «О дополнительных мерах по развитию рынка капитала» от 2 сентября 2023 года, №ПП-90 «О дополнительных мерах по внедрению эффективных механизмов поддержки рынка капитала» от 17 января 2022 года, №ПП-6207 «О мерах по дальнейшему развитию рынка капитала» от 13 апреля 2021 года, №ПП-3857 «О мерах по повышению эффективности подготовки и проведения Проекты с участием международных финансовых институтов и иностранных государственных финансовых организаций» от 16 июля 2018 года, № ПП-3877 «О дополнительных мерах по диверсификации источников внешнего финансирования» от 21 июля 2018 года и других нормативно-правовых актах в данной сфере.

Соответствие исследования приоритетам развития науки и технологии в республике. Диссертация выполнена в соответствии с приоритетным направлением развития науки и технологии в республике «Формирование системы инновационных идей и пути их реализации в социальном, правовом, экономическом, культурном, духовном и образовательном развитии информационного общества и демократического государства».

Степень изученности проблемы. Развитие рынка капитала через фондовый рынок изучается многими зарубежными учеными и исследователями, а также узбекскими учеными, и вносятся научные и практические предложения.

Стоит отметить исследования таких ученых, как Atje T.B., Voghouei N.C., Robinson H.K., Peia Y.U., Roszbach I.M. Kitanović S.W., Krstić Q.E., Levine J.P., Williamson F.G., Huybens R.V., Smith A.S., Beck X.L. и другие[1].

Актуальные вопросы развития фондового рынка в Узбекистане освещены в трудах ученых и практиков, таких как Х.Худойкулов, А.Ибодуллаев, Р.Р.Тоджиев, Ш.Мустафакулов, А.Бурханов, Х.Курбонов, Н.Каримов, М.Эшов, С.Элмирзаев, Б.Ходиев, М.Хамидулин, Б.Тошмуродова[2].

Однако в данных работах не рассматривается подробно процесс «секьюритизации», внедрение деривативов, технология единого реестра, то есть токенизация облигаций. Это, в свою очередь, свидетельствует об особой актуальности данной темы в сфере финансирования инвестиций через фондовый рынок.

Связь диссертационного исследования с планом научно-исследовательских работ вуза, в котором выполнена диссертация. Тема диссертации выполнена в соответствии с планом НИР Ташкентского государственного экономического университета в рамках научного проекта «Совершенствование научно-методологической базы развития отраслей и предприятий реального сектора в условиях рыночной конкуренции».

Целью исследования является изучение путей совершенствования инфраструктуры фондового рынка в Узбекистане, в нашем случае объектом исследования является Ташкентская фондовая биржа, путем изучения международного опыта совершенствования инфраструктуры фондовых рынков, и разработка на основе этой информации научно-практических предложений по совершенствованию инфраструктуры Ташкентской фондовой биржи.

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[1] Aitken, M. J., Harris, F. H., & Ji, S. (2009a). Trade-Based manipulation and market efficiency: A cross-market comparison. Paper presented at 22nd Australasian Finance and Banking Conference, November 18, 2009, Sydney, Australia. Retrieved from http://www.cmcrc.com/index.php/rd/academicpapers/academic-papers. Accessed on September 30, 2011. Cherian, J. A., & Jarrow, R. A. (1995). Market manipulation. In R. A. Jarrow, V. Maksimovic, & W. T. Ziemba (Eds.), North-Holland handbooks in operations research and management science (Vol. 9, pp. 611–630). Amsterdam: Elsevier. Schumer, C. E. (2009, July 27). Schumer urges ban on so-called 'flash orders' that give privileged traders sneak peek at stock sales before other investors. Retrieved from http://www.schumer.senate.gov/new_website/record.cfm? id5316252. Accessed on June 12, 2012.

[2] Фонд бозори активларини баҳолаш моделлари таҳлили ва уларнинг назариялари Худойқулов Х.Х. // Иқтисодиёт ва инновацион технологиялар. 6-сон, ноябрь-декабрь, 2017 йил. Прогноз бу- башоратми? Худойқулов С.К. // Иқтисодиёт ва инновацион технологиялар. 1-сон, январь-февраль, 2018 йил. The Role and Importance of Monetary Policy in the Country's Economy// Ibodullaev A.A. Academic Journal of Digital Economics and Stability (2022). Развитие рынка организованных ценных бумаг в Узбекистане. Ибодуллаев А.А. Бюллетень науки и практики (2021). Уюшган қимматли қоғозлар бозорининг таркибий тузилмасида "Тошкент" Республика фонд биржасининг тутган ўрни. Ибодуллаев А.А. Development issues of innovative economy in the agricultural sector (2021). ANALYSIS OF INDICATORS OF THE REPUBLICAN EXCHANGE" TASHKENT"// A. Ibodullayev International Finance and Accounting (2020). Ходиев Б.Ю. Ўзбекистонда корпоратив бошқарув тизимининг ривожланиши синергик самарага эришиш омили сифатида. /Иқтисодиётни модернизациялаш шароитида Ўзбекистонда корпоратив бошқарув тизимини такомиллаштириш истиқболлари. Республика илмий-амалий анжумани маърузалари тўплами.

Задачи исследования:

исследование концепции совершенствования инфраструктуры фондового рынка в Узбекистане;

изучение методологии развития фондового рынка;

анализ фондового рынка как движущего фактора экономического роста;

изучение текущего состояния развития фондового рынка в Узбекистане;

определение влияния современных финансовых инструментов на общую инфраструктуру рынка капитала;

изучение концепции «Секьюритизации» как инструмента конвертации банковских кредитов в активы с фиксированным доходом, такие как «Ипотечные ценные бумаги», с целью привлечения дополнительных денежных потоков для коммерческих банков с целью финансирования новых кредитных заявок;

проведение эмпирического исследования с целью выяснения применения секьюритизации в Республике Узбекистан посредством Ташкентской фондовой биржи;

расчет взаимосвязи между колебаниями процентных ставок, ростом населения, а также распределением ипотечных кредитов и, следовательно, как они влияют на процесс секьюритизации или создания ипотечных ценных бумаг в Республике Узбекистан посредством эконометрического анализа.

Объектом исследования является фондовая биржа «Ташкент».

Предметом исследования является совершенствование общей инфраструктуры фондовой биржи «Ташкент».

Методы исследования. В процессе исследования использовались такие методы, как систематический и экономико-статистический анализ, эконометрическое моделирование, анализ.

Научная новизна исследования заключается в следующем:

обосновано предложение по совершенствованию финансирования инвестиций через фондовый рынок путем внедрения процесса секьюритизации ипотечных ценных бумаг в Промышленно-строительном банке (ПСБ) при поддержке Фондовой биржи «Тошкент»;

разработано предложение по созданию «Программы финансирования 60/40 для средних и крупных частных компаний», направленной на обеспечение 40% от общей стоимости проекта за счет банковского кредита и 60% за счет продажи акций компаний или выпуска облигаций через фондовую биржу «Ташкент» при привлечении компаниями капитала для своих инвестиционных проектов;

обосновано предложение по совершенствованию финансирования инвестиций через фондовый рынок путем внедрения технологии распределенного реестра (DLT), которая представляет собой цифровую систему, регистрирующую транзакции, связанные с активами, для токенизации активов с фиксированной доходностью, таких как государственные облигации и корпоративные облигации;

разработаны прогнозные показатели внедрения ипотечных облигаций до 2027 года на основе многофакторной балансовой эконометрической модели внедрения и качественной оценки портфеля ипотечных облигаций АО «Sanoat Qurilish Bank».

Практический результат исследования заключается в следующем:

проведен системный анализ процесса секьюритизации и особенностей его создания посредством фондового рынка;

изучены институциональные реформы регулирования фондового рынка в Узбекистане;

оценены факторы, влияющие на эффективность развития фондового рынка;

исследованы предлагаемые стратегические цели и возрождение развития фондового рынка в Узбекистане посредством внедрения современных финансовых ценных бумаг;

предложено хеджирование от волатильности рынка и создание производных инструментов на акции.

Достоверность результатов исследования. Методологический подход и методы, использованные в исследовании, адекватность данных, официальные источники данных, в том числе Агентство по статистике при Президенте Республики Узбекистан, фондовая биржа «Ташкент», Центральный банк Узбекистана, Национальное агентство перспективных проектов. Это объясняется тем, что информация получена из источников, выводы, предложения и рекомендации апробированы на региональном и международном уровне, а отдельные научные результаты внедрены в практику.

Научно-практическая значимость результатов исследования. Научная значимость результатов исследования обусловлена тем, что разработанные научные выводы и предложения могут быть использованы в дальнейшей реализации стратегических направлений развития фондового рынка Узбекистана.

Практическая значимость результатов исследования основана на выдвинутых в диссертации предложениях и рекомендациях, имеющих практическое значение, а также методических разработках диссертации, исследованиях в области разработки целевых комплексных программ развития фондового рынка, расширения инвестиционных продуктов в целях повышения ликвидности фондового рынка.

Внедрение результатов исследования. На основе изучения международного опыта совершенствования инфраструктуры фондовых рынков разработаны научно-практические предложения и рекомендации по совершенствованию инфраструктуры фондового рынка Узбекистана:

предложение по совершенствованию финансирования инвестиций через фондовый рынок путем внедрения процесса секьюритизации ипотечных ценных бумаг в Промышленно-строительном банке (ПСБ) при поддержке Фондовой биржи «Тошкент» реализовано АО «Sanoat Qurilish Bank» (справка

№01-13/5005 АО «Sanoat Qurilish Bank» от 12 марта 2025 года). В результате внедрения данного научного предложения стало возможным развитие рынка капитала, внедрение новых инвестиционных инструментов, повышение инвестиционного потенциала портфеля;

предложение по созданию «Программы финансирования 60/40 для средних и крупных частных компаний», направленной на обеспечение 40% от общей стоимости проекта за счет банковского кредита и 60% за счет продажи акций компаний или выпуска облигаций через фондовую биржу «Ташкент» при привлечении компаниями капитала для своих инвестиционных проектов реализовано АО «Sanoat Qurilish Bank» (справка №01-13/5005 АО «Sanoat Qurilish Bank» от 12 марта 2025 года). В результате внедрения данного научного предложения стало возможным развитие рынка капитала, внедрение новых инвестиционных инструментов, повышение инвестиционного потенциала портфеля;

предложение по совершенствованию финансирования инвестиций через фондовый рынок путем внедрения технологии распределенного реестра (DLT), которая представляет собой цифровую систему, регистрирующую транзакции, связанные с активами, для токенизации активов с фиксированной доходностью, таких как государственные облигации и корпоративные облигации реализовано АО «Sanoat Qurilish Bank» (справка №01-13/5005 АО «Sanoat Qurilish Bank» от 12 марта 2025 года). В результате внедрения данного научного предложения появилась возможность реализовать его в удобной форме для розничных инвесторов, полностью автоматизировать расчеты посредством смарт-контрактов, а также реализовать весь процесс на основе смарт-контрактов, что позволит всем участникам быть уверенными в мгновенном результате без привлечения посредников и потери времени;

предложение по прогнозным показателям внедрения ипотечных облигаций до 2027 года на основе многофакторной балансовой эконометрической модели внедрения и качественной оценки портфеля ипотечных облигаций АО «Sanoat Qurilish Bank» реализовано АО «Sanoat Qurilish Bank» (справка №01-13/5005 АО «Sanoat Qurilish Bank» от 12 марта 2025 года). В результате реализации данного научного предложения на основе многофакторной балансовой эконометрической модели внедрения и качественной оценки серии ипотечных облигаций проанализированы в качестве следящего фактора (у) ипотечные кредиты, выданные по республике за последние 20 лет (2004-2024 гг.), а в качестве влияющего фактора – изменение базовой процентной ставки (2004-2024 гг.) (x_1), в том числе прирост населения (2004-2024 гг.) (x_2), и признано целесообразным внедрение ипотечных облигаций.

Апробация результатов исследования. Результаты исследования изложены в 9 научных статьях, из них в 4 республиканских и 5 международных журналах, входящих в перечень ВАК, опубликованы и обсуждены на 1 международной и 4 республиканских научно-практических конференциях.

Публикация результатов исследования. По теме диссертации опубликовано 15 научных работ, 9 статей в журналах, рекомендованных Высшей аттестационной комиссией Республики Узбекистан для публикации основных результатов, из них 4 республиканских научных журналах и 5 в зарубежных журналах.

Структура и объем диссертации. Содержание диссертации состоит из введения, 3 глав, заключения, списка использованной литературы и приложений. Общий объем составляет 110 страниц.

E'LON QILINGAN ISHLAR RO'YXATI
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