

UDC 336.22:334.722(574)

Amangeldi Aidana

Grade 11 student

Supervisor: Onayev Ainabek

Republican Physics and Mathematics School

(Astana, Kazakhstan)

DID SMALL BUSINESS IN KAZAKHSTAN REALLY SHRINK IN 2026? THE NEW TAX CODE, REGIONAL TAX RATES AND THE FALL IN THE NUMBER OF INDIVIDUAL ENTREPRENEURS

Abstract: From 1 January 2026 Kazakhstan has a new Tax Code. The basic rate of the simplified declaration regime for small business became 4%, and every local council (maslikhat) could lower or raise it by up to half, so different regions chose different rates. At the same time, official statistics showed that the number of active small and medium enterprises (SMEs) fell by 8.8% between 1 January and 1 September 2026. In this study I asked whether the regions that chose lower rates kept more of their businesses, and where the fall actually came from. I used 28 monthly releases of the Bureau of National Statistics (June 2024 - September 2026) and the list of maslikhat decisions for all 20 regions. In the same months of 2025 the number of active SMEs grew by 5.0%, so the change in 2026 was about 13.7 percentage points worse than a year before. The whole fall was in individual entrepreneurs, whose number dropped by 11.3% (203,398 units), while legal entities grew by 3.2%. Almost all of the fall happened between January and May 2026 and then stopped. Three groups of activities, transport (taxi and couriers), renting of housing and personal services, held 30% of individual entrepreneurs but gave 74% of the fall, and these are the activities allowed in the new special tax regime for the self-employed, which can be used only by people who are not registered as entrepreneurs. The regional rates did not explain the fall: regions with a 2% and a 3% rate in their regional centre lost a similar share of SMEs (median -7.8% and -9.2%, $p = 0.34$). My conclusion is that most of the fall is a change in how people are registered after the new tax rules, and not a mass closure of businesses, and that SME counts for 2026 cannot be compared with earlier years without taking this into account.

Keywords: small and medium enterprises; individual entrepreneurs; self-employment; tax reform; local taxes; business register; Kazakhstan

1. Introduction

I have always been interested in how economic decisions are made in Kazakhstan and whether they actually change something. The new Tax Code, which came into force on 1 January 2026, gave me a rare example where such a decision was made separately in each region. For small businesses that use the simplified declaration, the Code sets a basic rate of 4% of income, but local representative bodies (maslikhats) can lower or raise it by up to 50% depending on the type of activity and the location [1]. Most of them lowered it. For example, the maslikhats of Astana and Almaty set 3%, and Shymkent set 2% [2]. So every region made its own choice, and it is possible to compare what happened to business in regions with different rates.

When my mentor and I looked at the official statistics, the first picture was alarming. According to the Bureau of National Statistics, the number of active SMEs in Kazakhstan was

2,175,605 on 1 January 2026 and 1,984,663 on 1 September 2026, which is 8.8% less [3]. In some regions the fall was bigger: -13.1% in Kostanay region and -12.3% in West Kazakhstan. If this were a real closure of almost 200 thousand businesses in eight months, it would be one of the most important economic events of the year.

There are studies about how simpler and lower taxes change the number of registered small firms. In Brazil, the SIMPLES scheme, which reduced and simplified taxes for micro-firms, increased the share of firms that operate formally [4, 5]. A review of reforms in developing countries found that making registration easier usually gives only a modest increase in the number of formal firms [6]. Tax thresholds and special regimes also decide which firms register and in what form [7]. From these studies I expected that a lower regional rate would keep more businesses registered.

However, the statistics releases themselves contain a footnote. It says that the fall in the number of individual entrepreneurs is connected with their transfer to the special tax regime for the self-employed, introduced by the new Tax Code from 1 January 2026 [3]. This changed my question. In this study I asked:

- How did the number of active SMEs, individual entrepreneurs and legal entities change between January and September 2026, compared with the same months of 2025?
- Did the regions with lower simplified declaration rates lose fewer SMEs?
- In which types of activity did individual entrepreneurs disappear, and does this match the activities allowed for the self-employed?

2. What changed in the tax rules

Three changes in the new Tax Code are important for this study.

The simplified declaration. Individual entrepreneurs and small companies with income up to 600,000 monthly calculation indices (MCI) per year can use the special tax regime based on the simplified declaration [8]. In the new Code the rate is 4%, and a maslikhat can change it by up to 50%, so the possible range is from 2% to 6%. The decision had to be made not later than 1 December 2025 and came into force on 1 January 2026 [1]. The old Tax Code had a different rate and a different set of taxes for this regime, so in this study I compare regions only with each other and not with the old rate.

The regime for the self-employed. The new Code created a separate special tax regime for the self-employed. A self-employed person is defined as an individual who is not an individual entrepreneur, does not employ workers, earns not more than 300 MCI per month and works in one of the activities from a government list [9]. The individual income tax rate in this regime is 0%, and the person pays only social payments through a special mobile application [10]. The list approved by the Government contains 40 activities, including taxi services, courier activity, delivery of ready food, renting of own or rented housing, hairdressers and beauty salons, and many kinds of repair [11]. The important point is that a person cannot be self-employed and an individual entrepreneur at the same time.

The end of the patent and mobile application regimes. The old regimes based on a patent and on a special mobile application were cancelled. Entrepreneurs who used them had to submit a notification about their new tax regime by 1 March 2026. Those who did not were removed from registration as individual entrepreneurs automatically, with the date of removal 1 January 2026 [12].

3. Data and methods

Statistics. I used the monthly releases of the Bureau of National Statistics "Main indicators of the number of entities in the Republic of Kazakhstan" [3]. From each release I took

Table 1 (registered and active legal entities, individual entrepreneurs and SMEs for the whole country), Table 5 (individual entrepreneurs by type of activity) and Table 9 (registered and active SMEs by region). I downloaded all 28 releases from 1 June 2024 to 1 September 2026 with Python. In the Bureau's register, a unit is "active" if its situation code shows economic activity, and these codes are updated every month, partly with information from the State Revenue Committee about inactive taxpayers [13]. In all calculations I used active units.

Regional rates. For each of the 17 regions and three cities of republican significance I took the rate set by the maslikhat of the regional centre (for example, Semey for Abai region and Taldykorgan for Zhetisu) from a list of maslikhat decisions updated on 7 August 2026 [2], and checked that every decision, its date and number were in this list. Ten regions had 2% in their regional centre and ten had 3%. Because district maslikhats inside a region could choose a different rate, I also calculated the share of the listed maslikhats of each region that chose 2%.

Comparison with the previous year. The number of entrepreneurs changes during the year, so a fall from January to September could partly be seasonal. To avoid this, I compared the change from 1 January to 1 September 2026 with the change over the same months of 2025. I call the difference between the two changes the "excess change" of a region. To compare regions with 2% and 3%, I used the Mann-Whitney test, and for the share of 2% maslikhats and for the size of the region I used the Spearman correlation. With only 20 regions these tests can find only quite strong relationships.

Activities. Table 5 does not give individual entrepreneurs by region, only by section of the classification of economic activities. In three sections the main activities of individual entrepreneurs are on the list for the self-employed: transport and storage (taxi and courier activity), real estate (renting of housing) and other personal services (hairdressers, repair of personal and household goods) [11]. I call them the "self-employed sections" and compare them with all other sections. These sections also contain activities that are not on the list, such as freight transport, so this grouping is only approximate.

4. Results

4.1. The fall was only in individual entrepreneurs

Table 1 shows the main result. Between 1 January and 1 September 2025 the number of active SMEs grew by 5.0%, but over the same months of 2026 it fell by 8.8%. The whole fall was in individual entrepreneurs, whose number decreased by 203,398, which is even a bit more than the fall in all SMEs (190,942). The number of active legal entities grew in 2026 by 3.2%, faster than in 2025.

Table 1. Active entities in Kazakhstan, January-September 2025 and 2026

Active units	1 Jan 2025	1 Sep 2025	Chan ge 2025, %	1 Jan 2026	1 Sep 2026	Chan ge 2026, %
Small and medium enterprises	2,071,657	2,174,309	+5.0	2,175,605	1,984,663	-8.8
Individual entrepreneurs	1,705,517	1,805,526	+5.9	1,799,836	1,596,438	-11.3
Legal entities	426,096	428,987	+0.7	436,864	450,688	+3.2

Source: Bureau of National Statistics, Tables 1 and 9 of the monthly releases. Legal entities include large ones, so they are not a part of SMEs only.

The monthly data show when it happened (Figure 1). Until December 2025 the number of individual entrepreneurs was growing. In 2026 it fell every month from January to May: by 29,611 in January, 37,395 in February, 43,089 in March and 92,574 in April (between the releases for 1 April and 1 May). After that it stayed almost the same, around 1.59-1.60 million. The largest monthly fall appears in the release for 1 May, two months after the deadline. I think this is the time the statistical register needed to receive the tax authorities' decisions, but I could not confirm it.

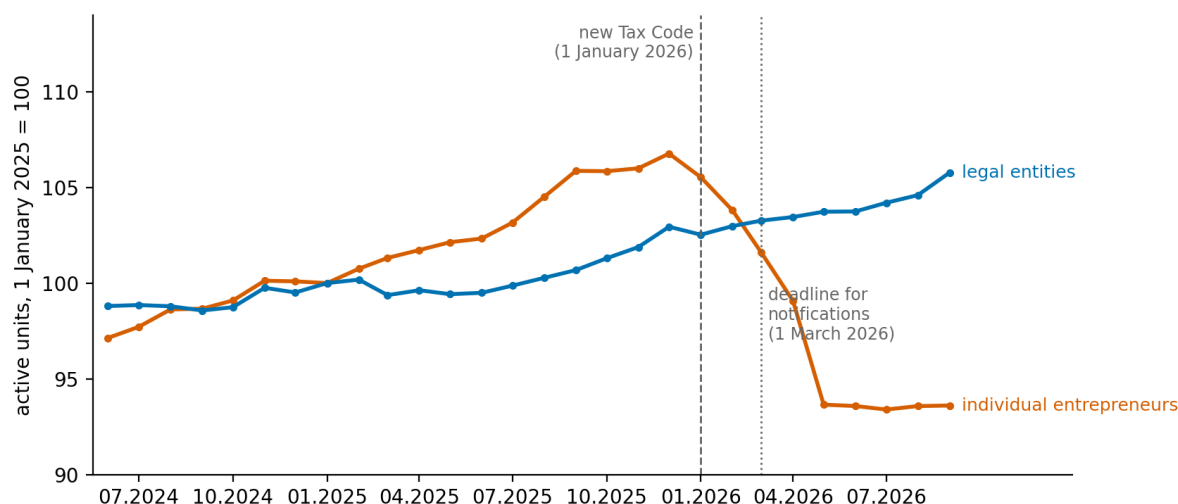


Figure 1. Active individual entrepreneurs and legal entities in Kazakhstan, June 2024 - September 2026 (1 January 2025 = 100)

4.2. The regional rates did not explain the fall

All 20 regions lost SMEs in 2026, from -5.1% in Pavlodar region to -13.1% in Kostanay region. In the same months of 2025 all of them except Karaganda region had grown. Table 2 shows that the regions with a 2% rate in their regional centre lost a median of 7.8% of their SMEs, and the regions with 3% lost 9.2%. This difference goes in the expected direction, but it is small compared with the differences inside each group, and it is not statistically significant (Mann-Whitney $p = 0.34$). The result was the same for the excess change, which takes into account how fast each region was growing in 2025 (median -11.0 and -14.4 percentage points, $p = 0.47$), and for the share of maslikhats that chose 2% (Spearman $\rho = 0.18$, $p = 0.44$). It is also important that before the reform the two groups grew at the same speed (median +3.6% and +3.7% in 2025, $p = 0.68$).

Table 2. Change in active SMEs (1 January - 1 September) by the regional rate

Group of regions	Number of regions	Change 2025, % (median)	Change 2026, % (median)	Excess change, p.p. (median)
2% in the regional centre	10	+3.6	-7.8	-11.0
3% in the regional centre	10	+3.7	-9.2	-14.4
Mann-Whitney p		0.68	0.34	0.47

Rates are for the maslikhat of the regional centre, or of the city for Astana, Almaty and Shymkent. Excess change is the change in 2026 minus the change in 2025.

The only regional feature that was related to the excess change was the size of the region (Figure 2). Larger regions lost more compared with their growth in 2025 (Spearman $\rho = -0.46$, $p = 0.04$). The excess change was -17.2 percentage points in Almaty, -17.0 in Astana and -19.4 in Almaty region, while in Pavlodar region it was -6.8 and in Karaganda region -7.3. Astana and Almaty both had a 3% rate, so part of the small difference between the 2% and 3% groups may come from the big cities being in the 3% group.

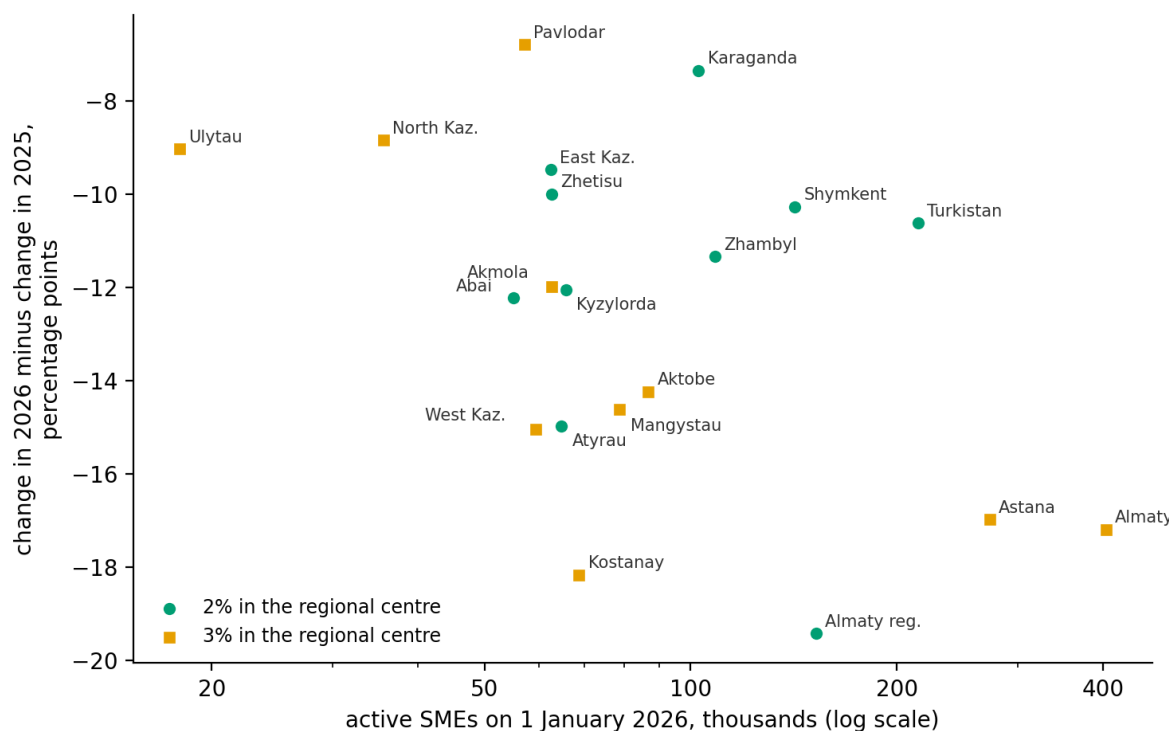


Figure 2. Excess change in active SMEs (change in 2026 minus change in 2025) against the number of active SMEs in the region

4.3. Individual entrepreneurs disappeared in the activities allowed for the self-employed

Figure 3 shows the change in active individual entrepreneurs by type of activity. The biggest fall was in transport and storage, where the number of individual entrepreneurs fell from 173,432 to 90,844, by 47.6%. This is especially interesting because in the same months of 2025 the same section had grown by 48.1%. Real estate fell by 20.1% and other personal services by 17.4%, while in 2025 they grew by 6.6% and 0.7%. Together these three self-employed sections held 30% of active individual entrepreneurs on 1 January 2026, but they gave 74% of the fall (149,590 of 203,398). In all other sections together the number of individual entrepreneurs fell by only 4.3%. Information and communication, which has no activities on the list, grew by 8.2% in 2026, almost the same as in 2025 (9.2%).

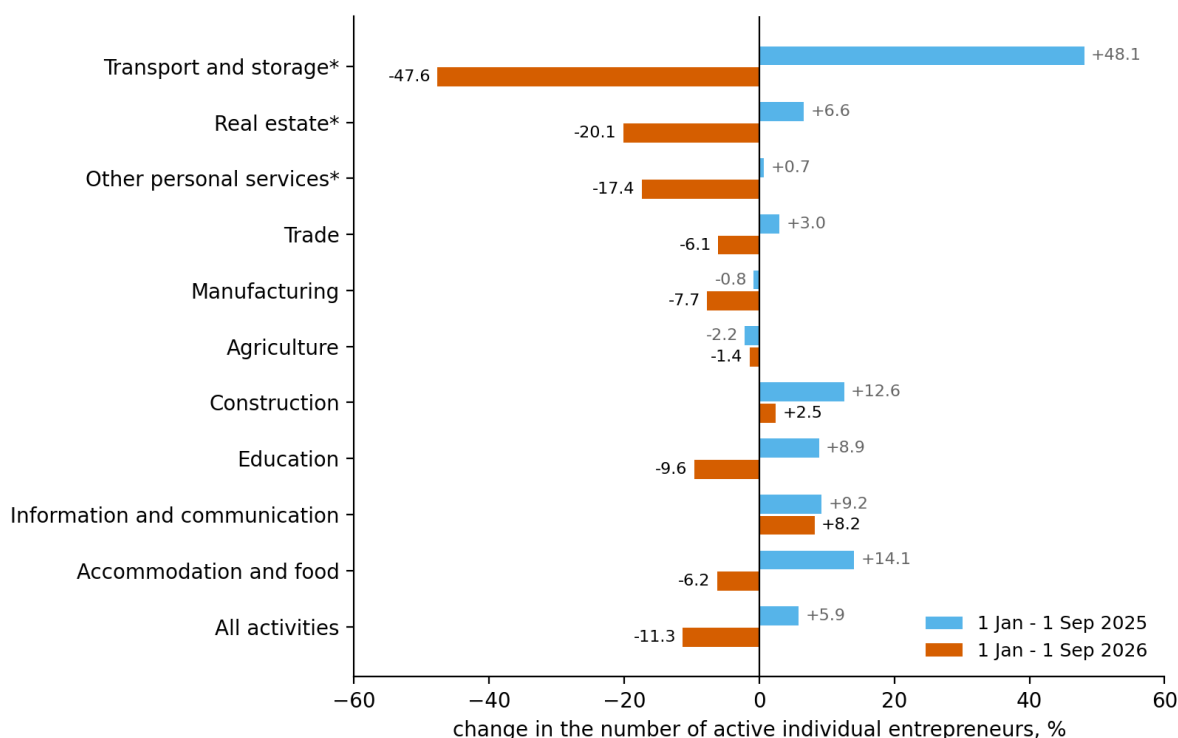


Figure 3. Change in active individual entrepreneurs from 1 January to 1 September, by type of activity, 2025 and 2026 (* sections where the main activities of entrepreneurs are on the list for the self-employed)

Trade also lost 39,507 entrepreneurs (-6.1%), which is a large number but a small share of this very big section. Retail trade through network marketing is the only trade activity on the list [11], so trade entrepreneurs may have left for other reasons, for example because the patent regime was cancelled.

4.4. How many people became self-employed

The Bureau's statistics do not include the self-employed, because they are not entrepreneurs. According to the State Revenue Committee, by the beginning of March 2026 about 346 thousand people had chosen the regime for the self-employed, and 265 thousand of them registered their activity for the first time [14]. The remaining 81 thousand had been registered before in some form, most likely as entrepreneurs. These numbers are from a news report, and I could not check them in an official statistical table. Still, they show that the number of people working in the new regime was larger than the fall in the number of individual entrepreneurs.

5. Discussion

At the beginning I expected to find that regions with lower rates kept more of their businesses. The data did not show this. The fall in SMEs in 2026 was almost entirely a fall in individual entrepreneurs, it happened in a few months around the deadline of 1 March, and it was concentrated in the activities that the new regime for the self-employed allows. The Bureau of National Statistics gives the same explanation in its footnote [3]. Together this suggests that most of the "lost" entrepreneurs did not close their business. They changed the way they are registered: a taxi driver or a person renting out a flat can now work as self-employed with 0% income tax and no registration as an entrepreneur [9, 10]. Some of them were also removed automatically because they did not submit a notification in time [12]. I cannot say how many of

the 203 thousand continued working and how many really stopped, because the data do not follow individual people.

This also explains why the regional rates did not matter. A difference of one percentage point in the simplified declaration rate is small compared with the difference between paying 2-3% as an entrepreneur and paying 0% income tax as a self-employed person. For people who could move to the new regime, the regional rate was probably not the main factor. For the businesses that stayed entrepreneurs, the effect of the rate may exist, but it is hidden by the much larger change in registration. The larger fall in big cities fits this explanation, because taxi, delivery and renting of housing are probably more common in Astana and Almaty, but I did not have regional data by activity to check it.

The fast growth of transport entrepreneurs in 2025 (+48%) and their fall in 2026 (-48%) look almost like a mirror image. I could not find an official explanation for the growth in 2025, so I only note it. If many of these entrepreneurs were taxi drivers who registered in 2025 and then moved to the self-employed regime in 2026, it would mean that the number of entrepreneurs in this section reflects the tax rules more than the real number of drivers.

From the point of view of someone who uses statistics, the main lesson is that the number of SMEs in 2026 is not comparable with earlier years. If someone reads the -8.8% as a crisis of small business, they will draw the wrong conclusion. When the definition of who is counted changes, the data need to be read together with the new category. In this case the self-employed should be counted next to the entrepreneurs.

Limitations. The data count registered units, not their income or the number of people working. Individual entrepreneurs by activity are available only for the whole country, not by region. I used the rate of the regional centre, although district maslikhats in the same region sometimes chose a different rate and the rate could also depend on the type of activity. There are only 20 regions, so a small effect of the rate could not be found even if it exists. The comparison covers only one year before the reform, and other events in 2026 could also affect the number of entrepreneurs. The number of self-employed is taken from a news report quoting the State Revenue Committee and is not an official statistical series. Finally, the timing of changes in the statistical register may lag behind the real decisions of the tax authorities.

6. Conclusion

The official statistics show an 8.8% fall in the number of active SMEs in Kazakhstan between January and September 2026, while a year earlier the number was growing. I found that the whole fall was in individual entrepreneurs, that it happened between January and May 2026, and that three quarters of it was in the activities allowed for the new regime for the self-employed. The regional simplified declaration rates chosen by maslikhats did not explain the differences between regions. My conclusion is that the fall mainly reflects a change in how people register their activity after the new Tax Code, and not a mass closure of small businesses. To find out how many of these people really continued working, the next step would be to compare the number of self-employed and entrepreneurs by region and activity when such data become available, and to use income and employment data instead of the number of registered units.

Author contribution and use of AI

The author chose the general direction of the study, how economic decisions are made in Kazakhstan, and took part in choosing the research question together with her mentor. The author's mentor collected and checked the data, carried out the analysis, made the figures and helped write and edit the English text. The author read the final text and agreed with its

conclusions. Generative AI tools were used to help with editing and translation. Every number in the paper was calculated from the official sources by the analysis code and checked by the author's mentor.

References:

1. Налоговый кодекс Республики Казахстан от 18 июля 2025 года № 214-VIII. Статья 726. Исчисление налогов по специальному налоговому режиму на основе упрощенной декларации. URL: <https://adilet.zan.kz/rus/docs/K2500000214> (accessed: 03.10.2026).
2. PRO1C. Актуальный список маслихатов, понизивших ставку по СНР на основе упрощенной декларации (updated 07.08.2026). URL: <https://pro1c.kz/articles/prochee/aktualnyy-spisok-maslikhatov-ponizivshikh-stavku-po-snr-na-osnove-uproshchennoy-deklaratsii/> (accessed: 03.10.2026).
3. Бюро национальной статистики Агентства по стратегическому планированию и реформам Республики Казахстан. Основные показатели количества субъектов в Республике Казахстан: monthly releases on 1 June 2024 - 1 September 2026, Tables 1, 5 and 9. URL: <https://stat.gov.kz/ru/industries/business-statistics/stat-org/publications/> (accessed: 03.10.2026).
4. Fajnzylber P., Maloney W.F., Montes-Rojas G.V. Does formality improve micro-firm performance? Evidence from the Brazilian SIMPLES program // *Journal of Development Economics*. 2011. Vol. 94, No. 2. P. 262-276. DOI: 10.1016/j.jdeveco.2010.01.009.
5. Monteiro J.C.M., Assunção J.J. Coming out of the shadows? Estimating the impact of bureaucracy simplification and tax cut on formality in Brazilian microenterprises // *Journal of Development Economics*. 2012. Vol. 99, No. 1. P. 105-115. DOI: 10.1016/j.jdeveco.2011.10.002.
6. Bruhn M., McKenzie D. Entry regulation and the formalization of microenterprises in developing countries // *The World Bank Research Observer*. 2014. Vol. 29, No. 2. P. 186-201. DOI: 10.1093/wbro/lku002.
7. Kanbur R., Keen M. Thresholds, informality, and partitions of compliance // *International Tax and Public Finance*. 2014. Vol. 21, No. 4. P. 536-559. DOI: 10.1007/s10797-014-9314-3.
8. Налоговый кодекс Республики Казахстан от 18 июля 2025 года № 214-VIII. Статья 723. Условия применения специального налогового режима на основе упрощенной декларации. URL: <https://adilet.zan.kz/rus/docs/K2500000214> (accessed: 03.10.2026).
9. Налоговый кодекс Республики Казахстан от 18 июля 2025 года № 214-VIII. Статья 718. Общие положения (специальный налоговый режим для самозанятых). URL: <https://adilet.zan.kz/rus/docs/K2500000214> (accessed: 03.10.2026).
10. Налоговый кодекс Республики Казахстан от 18 июля 2025 года № 214-VIII. Статья 720. Порядок исчисления и уплаты индивидуального подоходного налога и социальных платежей в специальном налоговом режиме. URL: <https://adilet.zan.kz/rus/docs/K2500000214> (accessed: 03.10.2026).
11. Постановление Правительства Республики Казахстан от 21 ноября 2025 года № 994 «Об утверждении перечня видов деятельности, по которым разрешено применение

специального налогового режима для самозанятых». URL: <https://adilet.zan.kz/rus/docs/P2500000994> (accessed: 03.10.2026).

12. Uchet.kz. Не подали уведомление о налоговом режиме до 1 марта 2026 года: что будет дальше? 11 February 2026. URL: <https://uchet.kz/news/ne-podali-uvdomlenie-o-nalogovom-rezhime-do-1-marta-2026-goda-cto-budet-dalshe/> (accessed: 03.10.2026).

13. Бюро национальной статистики. Методика по ведению и актуализации информационной системы Статистический бизнес-регистр (attached to the releases). URL: <https://stat.gov.kz/upload/iblock/0b6/94cfaiukxjvfu279wf7qw680s56oj95v.docx> (accessed: 03.10.2026).

14. NUR.KZ. Переход на новые налоговые режимы завершен: сколько самозанятых в Казахстане. 4 March 2026. URL: <https://www.nur.kz/nurfin/fines-and-taxes/2349999-perehod-na-novye-nalogovye-rezhimy-zavershen-skolko-samozanyatyh-v-kazahstane/> (accessed: 03.10.2026).

МАЗМҰНЫ – СОДЕРЖАНИЕ – CONTENT

ӘЛЕУМЕТТІК-ЭКОНОМИКАЛЫҚ ЖӘНЕ ҚҰҚЫҚ ҒЫЛЫМДАРЫ - СОЦИАЛЬНО-ЭКОНОМИЧЕСКИЕ И ЮРИДИЧЕСКИЕ НАУКИ - SOCIO-ECONOMIC AND LEGAL SCIENCES

Төлегенов Тимур Сейфуллаулы ДИНАМИКА ТУРИСТСКИХ ПОТОКОВ И ЭФФЕКТИВНОСТЬ ИНФРАСТРУКТУРЫ ТУРКЕСТАНА: ОТ ЭКСТЕНСИВНОГО РОСТА К СМАРТ-УПРАВЛЕНИЮ	10
Alexander Gorevoy WHICH INEQUALITY STATISTICS SURVIVE AN ADMINISTRATIVE BOUNDARY CHANGE? EVIDENCE FROM KAZAKHSTAN, 2010–2023	14
Rakhimov Djalil DOES THE SHIFT TO CASHLESS PAYMENTS GO TOGETHER WITH FASTER GROWTH IN HOUSEHOLD CREDIT? EVIDENCE FROM THE REGIONS OF KAZAKHSTAN, 2023-2025	26
Kazhgerey Asan HOW MANY FOOD BASKETS DOES AN AVERAGE WAGE BUY? WAGES AND FOOD PRICES IN THE 20 REGIONS OF KAZAKHSTAN, 2024-2026	37
Tagimova Alua WHO WAS LEFT BEHIND? EDUCATION AND FINANCIAL INCLUSION IN KAZAKHSTAN AND THREE CENTRAL ASIAN NEIGHBOURS, 2021-2024	44
Wei Wei, Mynzhanova Gulzhakan, Niyetalina Gaukhar DIGITAL–PHYSICAL INTEGRATION AND ECONOMIC PERFORMANCE IN INDUSTRIAL INTEGRATED ENERGY SYSTEMS: A SCENARIO-BASED ANALYSIS OF SMART GRID CONTROL, BATTERY ENERGY STORAGE, AND DIGITAL TWINS	51
Xu Fumin, Wei Wei, Ruziyeva Elvira, Moldabekova A. FROM CULTURAL RESOURCES TO GLOBAL CONSUMER VALUE: THE BRIDGE–IMC MODEL AND THE INTERNATIONALIZATION OF BLACK MYTH: WUKONG UNDER THE BELT AND ROAD INITIATIVE	64
Ibraimkhan Alikhan WHICH CRIMES CAN A 14-YEAR-OLD BE TRIED FOR? THE LIST IN ARTICLE 15 OF KAZAKHSTAN'S CRIMINAL CODE COMPARED WITH 30 OTHER JURISDICTIONS	80
Yerboluly Madi DID IMPORTED CARS REALLY GET CHEAPER? CHINESE CARS AND THE AVERAGE CUSTOMS VALUE OF PASSENGER CARS IMPORTED INTO KAZAKHSTAN, 2015-2025	91
Салимбаев Ербол Аманжолович АНАЛИЗ ИНВЕСТИЦИОННОЙ АКТИВНОСТИ КАК ИНДИКАТОР ИЗМЕНЕНИЙ ПОТЕНЦИАЛЬНОГО СПРОСА НА КОНСАЛТИНГОВЫЕ УСЛУГИ	99
Rambergenov Ramil REGIONAL NEW-FIRM FORMATION IN UZBEKISTAN AFTER THE 2017 REFORMS: PERSISTENCE IN SCALE, CONVERGENCE IN INTENSITY, AND RECOMPOSITION TOWARD TRADE	107
Abdesh Dinara FROM A WOMEN'S LEAD TO A MEN'S LEAD: THE GENDER GAP IN DIGITAL PAYMENTS IN KAZAKHSTAN AND THREE CENTRAL ASIAN NEIGHBOURS, 2021-2024	116
Amangeldi Aidana DID SMALL BUSINESS IN KAZAKHSTAN REALLY SHRINK IN 2026? THE NEW TAX CODE, REGIONAL TAX RATES AND THE FALL IN THE NUMBER OF INDIVIDUAL ENTREPRENEURS	124

Cheng Che	
BUILD, BUY, OR PARTNER? ENTRY MODE SELECTION AND RISK GOVERNANCE FOR WIND POWER INVESTMENT IN KAZAKHSTAN	133
Wang Liang	
FROM CAPACITY EXPANSION TO SYSTEM VALUE: COORDINATED DEVELOPMENT OF RENEWABLE ENERGY, GRID FLEXIBILITY AND ENERGY STORAGE IN KAZAKHSTAN	146
Chen Jun	
CONSTRUCTION-PERIOD CREDIT RISK MANAGEMENT FOR LARGE INFRASTRUCTURE PROJECT FINANCE IN KAZAKHSTAN	159
Alniyaz Danial	
HOW MUCH FUEL DOES A HYBRID REALLY SAVE? A SAME-MODEL COMPARISON OF HYBRID AND GASOLINE CARS IN US FUEL ECONOMY	173

ТЕХНИКАЛЫҚ ҒЫЛЫМДАР - ТЕХНИЧЕСКИЕ НАУКИ - TECHNICAL SCIENCE

Nurmakhan Almira	
ADVANTAGES OF FIBER OPTIC COMMUNICATION OVER TRADITIONAL COPPER CABLES	180
Kozhabai Bereke	
SECURITY CHALLENGES IN IOT-BASED TELECOMMUNICATION NETWORKS	188
Azamatuly Yerassyl	
WHY AI-GENERATED CODE FAILS A BENCHMARK: A FAILURE ANALYSIS OF THREE OPEN LANGUAGE MODELS ON 30 HUMANEVAL+ TASKS	197
Nurzhan Sanzhar	
A FEW SHELLS, A FEW OPERATORS: WHERE LOW EARTH ORBIT IS CROWDED IN AN ALTITUDE-INCLINATION MAP OF 16,620 ACTIVE SATELLITES	206
Askarbek Nurislam	
CAN THE WEATHER TELL WHICH DAYS IN ASTANA WILL BE POLLUTED? CLASSIFYING PM2.5 EXCEEDANCE DAYS WITH MACHINE LEARNING AND CHECKING THE DATA AGAINST A GROUND MONITOR	212
Iliyas Arman	
SHOOTING ON THE MOVE: HOW MUCH AIM A ROBOT LOSES BY IGNORING ITS OWN VELOCITY, AND WHETHER A VIRTUAL-TARGET CORRECTION RECOVERS IT	223
Ануар Әлімжан Бахытжанұлы, Сексенбаева Айша Курманбековна	
СРАВНИТЕЛЬНЫЙ АНАЛИЗ СТАНДАРТОВ И МЕТОДИК ОБУЧЕНИЯ КИБЕРБЕЗОПАСНОСТИ: NICE FRAMEWORK, ECSF И ПРАКТИКО-ОРИЕНТИРОВАННЫЕ ТЕХНОЛОГИИ	229
Mukhamedzhan Yerganat	
GROWTH OF GITHUB DEVELOPER COMMUNITIES IN KAZAKHSTAN, UZBEKISTAN AND KYRGYZSTAN, 2020-2026: EVIDENCE FROM THE GITHUB INNOVATION GRAPH	239

ПӘНДЕР АРАЛЫҚ ҒЫЛЫМДАР – МЕЖДИСЦИПЛИНАРНЫЕ НАУКИ – INTERDISCIPLINARY SCIENCES

Albiyev Asser	
HOW MUCH OF AN ARTICLE COUNT IS HUMAN WORK? DECOMPOSING THE CREATION OF FIVE WIKIPEDIAS, 2010–2025	251
Amangeldy Nurbolat	
HOW MUCH OF KAZAKHSTAN'S URBAN BUILT STOCK PREDATES ITS SEISMIC CODES, AND WHERE DOES THAT STOCK SIT RELATIVE TO HAZARD?	261

Torekhan Sabrina

WHERE ALMATY WALKS ITS OWN WAY: INFORMAL SHORTCUTS IN OPENSTREETMAP AND THE DETOURS THEY AVOID	267
---	------------

ӘЛЕУМЕТТІК ЖӘНЕ ГУМАНИТАРЛЫҚ ҒЫЛЫМДАР - СОЦИАЛЬНО-ГУМАНИТАРНЫЕ НАУКИ - SOCIAL SCIENCES AND HUMANITIES

Мұқатаева Айзат Амантайқызы, Стамбекова Жанат Байғазықызы, Слямханова Гүлім Болатқызы, Қызырбек Аяулым Ерболқызы

ЖАСАНДЫ ИНТЕЛЛЕКТ ДӘУІРІНДЕГІ ҒЫЛЫМИ ТАНЫМ: ПОППЕР, КУН ЖӘНЕ ЛАКАТОС ИДЕЯЛАРЫ ТҮРҒЫСЫНАН ТАЛДАУ	272
--	------------

Мұқатаева Айзат Амантайқызы, Сапарханова Мадина Төлегенқызы, Окенова Аружан Муратхановна, Тұрсынғазыева Ақерке Ерболатқызы

ШӘКӘРІМ ФИЛОСОФИЯСЫНДАҒЫ ЕРКІНДІК ЖӘНЕ МОРАЛЬДЫҚ ТАҢДАУ МӘСЕЛЕСІ	282
---	------------

Komekova Saida

DO UNHAPPY REVIEWERS MIX IN MORE RUSSIAN? STAR RATINGS AND KAZAKH-RUSSIAN CODE-SWITCHING IN 175,002 ONLINE REVIEWS	291
---	------------

Zhumagali Yerbol

DOES A BIGGER MODEL CLOSE THE GAP? KAZAKH-LANGUAGE ACCURACY ON KAZAKHSTAN-SPECIFIC VERSUS UNIVERSAL SCHOOL SUBJECTS IN SMALL OPEN-WEIGHT LANGUAGE MODELS	304
---	------------

Abdrakhmanova Madina

DOES A MEDAL BUY ATTENTION? WIKIPEDIA VIEWS OF KAZAKHSTAN'S ATHLETES BEFORE AND AFTER THE PARIS 2024 OLYMPIC	308
---	------------

ПЕДАГОГИКАЛЫҚ ЖӘНЕ ПСИХОЛОГИЯЛЫҚ ҒЫЛЫМДАР – ПЕДАГОГИЧЕСКИЕ И ПСИХОЛОГИЧЕСКИЕ НАУКИ – PEDAGOGICAL AND PSYCHOLOGICAL SCIENCES

Kaldarbek Mergen

FAMILY OR SCHOOL? SOCIOECONOMIC COMPOSITION AND MATHEMATICS ACHIEVEMENT IN KAZAKHSTAN, PISA 2022 AND 2025	316
--	------------

Zhenis Adilzhan

WHICH OLYMPIAD PROBLEMS DO STUDENTS TAKE TO THE BOARD? CHOICES AND DEFENCES IN THE 8TH-GRADE LEAGUE OF KARAGANDY MATHBATTLES 2026	323
--	------------

Базарбаева Айнура Бектуровна

ДЕТСКИЙ ФОЛЬКЛОР И ПОДВИЖНЫЕ ИГРЫ КАК ИНСТРУМЕНТЫ ФОРМИРОВАНИЯ ОСНОВ ПРАВОВОЙ КУЛЬТУРЫ У ДЕТЕЙ СТАРШЕГО ДОШКОЛЬНОГО ВОЗРАСТА	330
---	------------

БИОЛОГИЯ ҒЫЛЫМДАР - БИОЛОГИЧЕСКИЕ НАУКИ - BIOLOGICAL SCIENCES

Bazhenova Diana

GROWTH DYNAMICS OF STERLET (<i>Acipenser ruthenus</i> L.) REARED IN A RECIRCULATING AQUACULTURE SYSTEM	333
---	------------

ТУРИСТИЧЕСКИЕ И СПОРТИВНЫЕ НАУКИ - ТУРИСТІК ЖӘНЕ СПОРТ ҒЫЛЫМДАРЫ - TOURISM AND SPORTS SCIENCES

Төлеп Жазира Маратқызы

ГАСТРОНОМИЯЛЫҚ ФЕСТИВАЛЬДЕРДІҢ ТУРИСТІК ДЕСТИНАЦИЯ ТАРТЫМДЫЛЫҒЫН ҚАЛЫПТАСТЫРУДАҒЫ РӨЛІ МЕН ДАМУ ҮРДІСТЕРІ	340
--	------------

ЕСТЕСТВЕННЫЕ НАУКИ - ЖАРАТЫЛЫСТАНУ ҒЫЛЫМДАРЫ - NATURAL SCIENCES

Нургельдина Асель Ермаковна, Серикбаева Жанерке Алимжановна

ШЕКАРАСЫЗ ФИЗИКА: ӘР ЕЛДЕГІ ФИЗИКАЛЫҚ БІЛІМДІ САЛЫСТЫРУ 347