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The impact of FDI on entrepreneurship in Uzbekistan

Supervisor:
prof. Anna D'Ambrosio

Candidate:
Timur Kholmukhamedov



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Abstract

The work constitutes the analysis of the relationship between FDI and entrepreneurial performance in Uzbekistan. The business climate has been analysed with the aid of statistical data from the World Bank primarily. In the paper, I have analysed the links between the FDI and entrepreneurial activity in the economy, and acknowledged the relevant conclusions from the past researches.

I elaborated on the different influences driven by the FDI to the host economy's primary, secondary and tertiary industries. Namely, the primary industry (extracting and processing the natural resources) requiring colossal capital investments plus being tightly managed by the government can create discouraging barriers for the local entrepreneurial activities within the industry. Following, the secondary (processing the inputs from primary industry into the manufactured goods and products) and tertiary (services industry) industries, by their more dynamic environment specification, can alternatively reflect the effects brought by FDI. Also, I discussed on the FDI contribution in the value added of the firms of different industries separately. If foreign firms can affect the number of domestic entrants, it also can bring positive or negative impacts on production capacity of the local firms. Lastly, I provided some analysis in the indirect impacts on entrepreneurship environment that can be led by FDI.



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Introduction

A prosperous entrepreneurial environment is essential – it makes firms operate at high efficiency. Such an environment drives companies to innovate and enhances their productivity, which are key elements for a sustainable development of the companies. The more productive business sector raises the employment and tax payments, which are important for the governmental investments in healthcare, the educational system, and other sectors.

Past researches emphasized the significant role of FDI in driving growth, technology transfer, firms restructuring and new market establishments. Thereby, studying the entrepreneurial sector of a country, without including foreign direct investments are incomplete, especially in transition economies (e.g., Borensztein et al., 1998). The Uzbekistan's economy has not possessed a good experience in terms of the foreign direct investment inflow amount even among the central Asian countries. However, the large scale of reforms starting from 2017 are decently leading the country to a better horizon of more active cross-border relationships.

Every industry in the economy is specific, and the contribution by cross-border companies to the domestic business environment is provided differently. In particular, upstream industries include quite complex installation and costly equipment, so it requires huge effort and capital to build an industrial plant. Accordingly, investments attracted in the upstream industries are in principle, significantly large. In addition, the establishing a company in the industry basically, enables hiring the workers in large quotas. Foreign firms in upstream sectors of economy can offer higher wages and consequently, increase the inflow of the employees coming from other economic sectors. Thereby, the outflow of the competent workers from other parts of industries, in turn, can affect



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negatively by discouraging competitiveness in other sectors of the economy and secondary industries as well – negative *vertical spillover effect*. Alternatively, as foreign companies tend to pay higher wages, they can seek for highly qualified employees only, and subsequently, less qualified employees may be forced to work in local companies with lower salaries. Additionally, more competitive and effective foreign firms can increase the production volume by lowering margins, and less competitive local producers will be forced to reduce their production capacity. Aitken & Harrison (1999) recognize this as *crowding out effect*, and they identified that FDI brings larger benefits operating in more productive sectors. In the same context, Kosovà (2010) ascertains the suffer of host companies can occur only at the beginning of the FDI inflow, and foreign firms contribute positive performance to the host businesses in long term, by raising demand for products and services. Furthermore, the theoretical literature emphasizes the following channels through which foreign presence encourages local entrepreneurship environment: imitation, skills acquisition, competition, and exports (Gorg & Greenaway, 2002). The first channel has an immediate effect of FDI to local business owners. As the domestic entrepreneurs meet their international competitor that exploits more advanced products and processes, they promptly start investigating the know-how of their opponent, and finding ways to emulate those competencies. Acquisition of skills of workers is presumably the most effective and definitive spillover effect contributed by the FDI owners. The most effective and definitive owing to that once external investor settle their firm, they most likely will hire local employees and invest in their trainings. In fact, trained and educated employees can leave the company with all of their skills starting their own new business or start working at a local company. Through competition channel, foreign-owned firms drives resident firms to more efficient endeavor. In order to maximize the returns, foreign firms entered into the host economy's



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market, with more progressed technological facilities, try to protect their competitive advantage from the domestic firms. Strengthening the competitive environment can lead to the spurring of the vertical industries. Additional production capacity, gaining strong competencies in cross-border markets, international network and improving logistic facilities can ground for the enhancement of domestic producers by the exporting performance of the foreign producers.



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Chapter One. FDI inflow, number of new businesses

In a general picture, past researches have concluded controversial notions whether the FDI enhances the overall entry of domestic firms. Most certainly, the increasing multinational activity in a country does not leave the entrepreneurial activity totally unchanged. Prior analyzes have found either the positive spillover effects on overall domestic entry or negative, depending on various variables and approaches. At least, the spillover effects from the FDI contributes to the stimulation of the domestic firms, especially in the transition economies like Uzbekistan, in vertical industries, with active networking, and also creating new demand in inputs (Ayyagari & Kosovà, 2010; Kim & Li, 2012; Albulescu & Tămășilă, 2014).

The positive effect on domestic entrepreneurship lead by the entering of foreign firms can be inspected in the tendency of creating new firms in the host country (Kim & Li, 2012). On channel of the positive impact transferred to the increase of local entrants is contributed through a new market creation – domestic business owners catch the opportunity of establishing new firms, serving the market alongside their foreign competitor. Alternatively, stimulation of new host business enterprises is provided by the transfer of skills – local employees have been worked in international companies can decide to leave and start their own business entity. Besides, by establishing networks with local firms in vertical linkages, FDI owners can increase the demand for inputs that leads to the spurring of domestic production capacity (Hejazi & Safarian, 1999). The similar notion also has been analysed by Ayyagari and Kosovà (2010) – host companies benefit from the inter-industry effects provided by international companies in competitive industries.



In order to examine the relationship between the FDI and number of domestic entrants, I used statistical data from the World Bank. Figure 1 represents the foreign direct investments imposed in Uzbekistan starting from the Independence until 2019, and Figure 2 provides the data of newly created limited liability companies for 2006–2020.

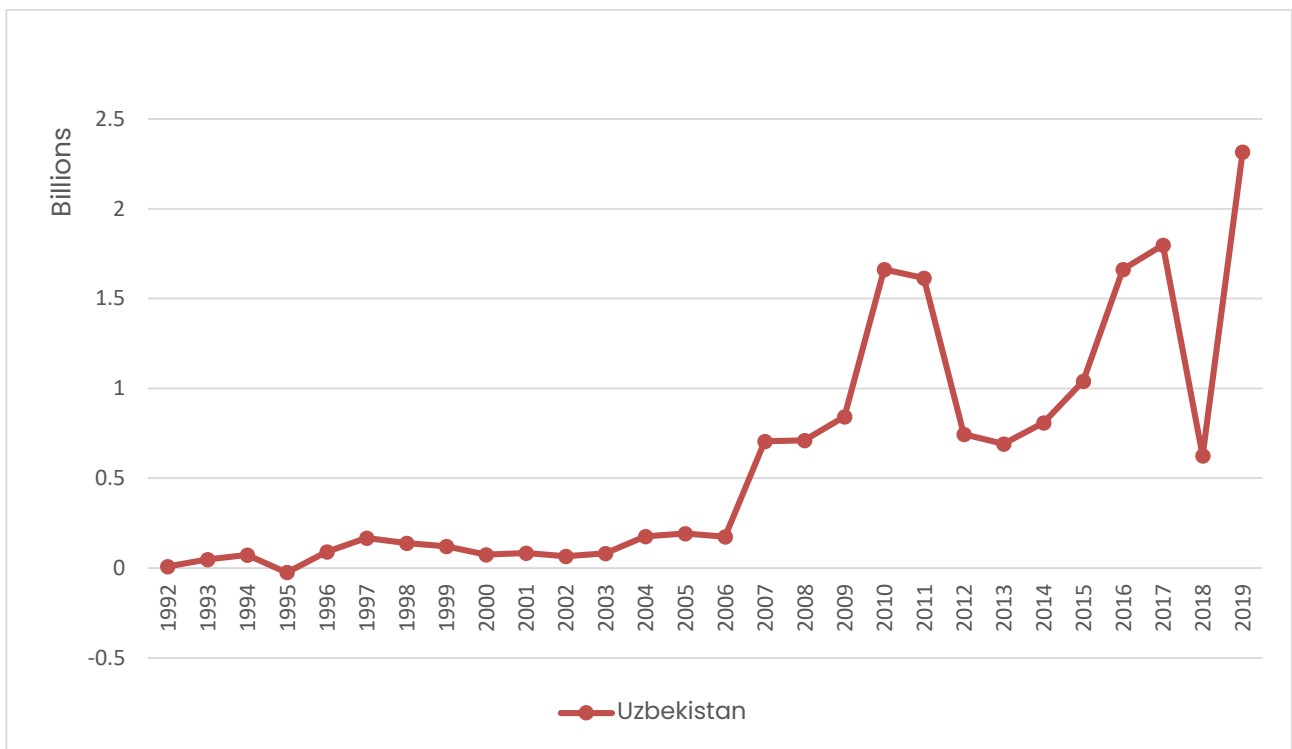


Figure 1. Foreign Direct Investments, net inflows (BoP, current US\$)*

Aitken & Harrison (1999) stated, in the 1990's many developing countries were intensively into attracting FDI, offering tax and customs incentives, and subsidies on infrastructure. In contrast, during the first half period of the Independence, Uzbekistan had not been conducting the analogous policies of lowering the

* source: <https://data.worldbank.org/indicator/BX.KLT.DINV.CD.WD?locations=UZ>



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barriers and stimulating the foreign direct investments. The assumption was the possible crowding out effect in host business entities that might be provided by multinational firms. The stability in small amounts of FDI prior to 2007 is the reason of that. Noticeable improvements of incoming foreign direct investments have occurred followed by the year 2007 – from 173.8 in 2006 to 705.2 million USD in the next year. In spite of the gradual increase in multinational activity, the number of newly created firms has not affected similarly – from 8,994 in 2006 to 9,677 in 2007.

The number of new firm establishments did not show an increasing tendency after the significant boost in FDI. In cases of unchanged progress in newly registered local businesses, first, I consider the estimations when host companies did not have sufficient capabilities, primarily technological advancement, in order to create a competing firm. By incentivizing foreign corporations to establish a plant in upstream sector, the government anticipate for a positive impact, which in turn can adversely affect the entrepreneurial activity, at least for a short period of time. Concerning the upstream industries, the appearance of firms and their shutting down does not occur frequently. Second, the absence of stimulation in domestic firm creations through vertical linkages can signify the entrepreneurs have not received a package of promoting regulations of the private business sector by the government.

After the negligible progress in 2008 for the two indexes, a bunch of positive effects have occurred both in FDI and the number of newly created enterprises during the period 2009–2011. For this period, in a broader sense, the number of total entrants begun to grow a couple years after the foreign-booked companies' activity started to increase. As the multinational enterprises starts to escalate rapidly, it is always healthy for the government to evaluate the flawed points of the improvements, since the early significant raise of FDI in 2007, e.g., number of

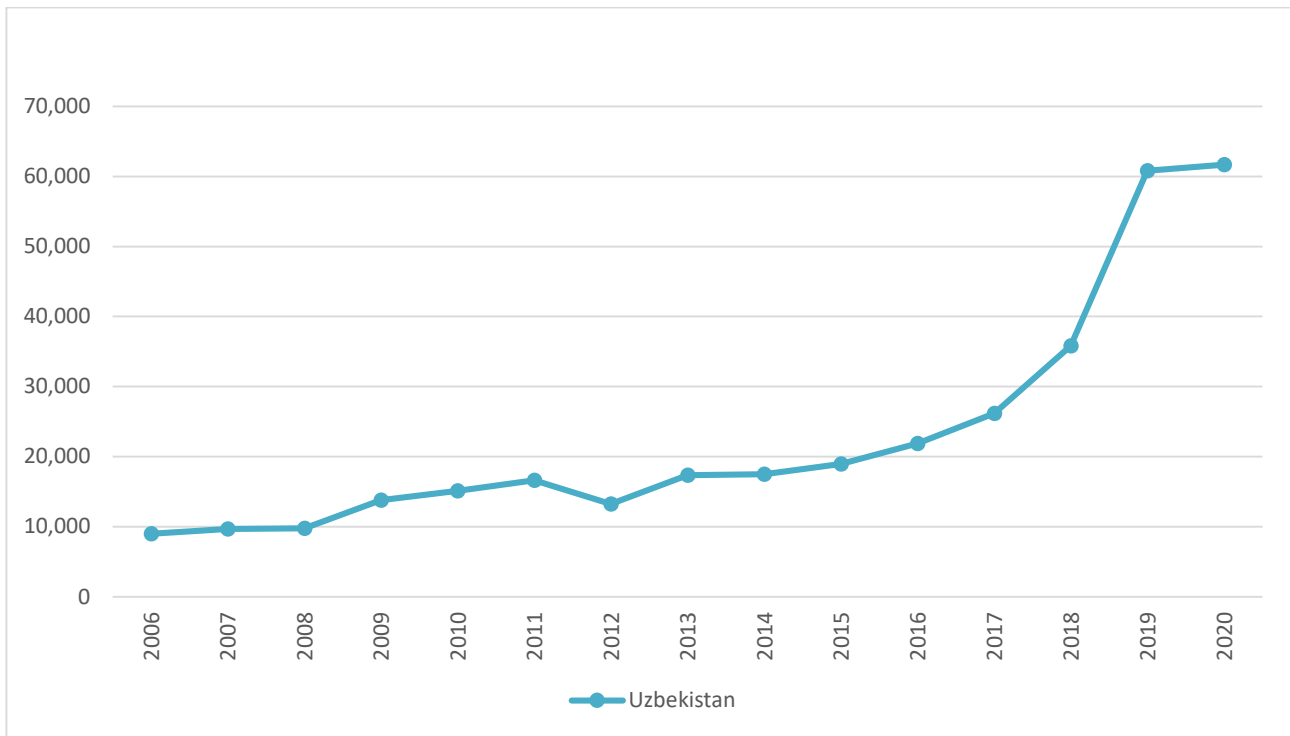


Figure 2. Number of new limited liability companies*

days required to start a business fallen from 28 to 14 days¹ in the same year. The progresses performed were significantly affected in the total number of new companies making them expand.

The year 2012 has been less appealing for both the inflow of cross-border investments, and the entrepreneurs to launch a new business entity. We observe an equal tendency for both of our economic figures and note a quite tight connection, a sharp decline of well over 54 percent in the FDI, and a 20 percent drop of domestic entry. As the 2013 ends, the tendency of foreign direct investment inflows started to grow steadily year by year until the end of 2017, 17%,

* source <https://www.worldbank.org/en/programs/entrepreneurship#new>

¹ The World Bank database: <https://data.worldbank.org/indicator/IC.REG.DURS?locations=UZ>



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29%, 60%, 8% consequently. Following the foreign investment influx, total number of firms has escalated equally, reaching 42% for the mentioned four years. Appropriate policies and regulations of the government in favour of the business climate prosperity, appeared to pay off with visible progresses.

In a country with the low institutional support² and average human capital index³ (Kim & Li, 2012), more skilful FDI owners can transfer the benefits to domestic firms via demonstration effect (Caves, 1996), in particular, multinational enterprises intentionally or unintentionally can transmit their know-how to the local enterprises. Similarly, foreign-owned companies can create new demand by developing high quality product or new markets by producing new outputs, causing *demand creation effect* (Ayyagari & Kosovà, 2010; Albulescu & Tămășilă, 2014).

Figure 2, displaying the number of new limited liability companies, provides an indication of the importance of the governmental management in continuous supporting and adopting the precise regulations for the business environment prosperity. The governmental policy positions until 2017 have been restraining the startup perspectives, and we testify how hard was the restraining when we detect the new firm creation tendency skyrocketed with 178% for the period of 2017–2019.

² According to the World Bank Database, average for 1996–2020: the Regulatory Quality: -1.53 (weak -2.5; strong 2.5); Government Effectiveness: -0.86 (weak -2.5; strong 2.5)

<https://info.worldbank.org/governance/wgi/>

Regulatory Quality - reflects perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development. *Government Effectiveness* - reflects perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.

³ World Bank Human Capital Index in Uzbekistan for 2020 – 0.62 (low 0; high 1)

<https://www.worldbank.org/en/publication/human-capital#Index>



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Chapter Two. Number of firms by industry.

In this part, we can assess the tendency of overseas and national enterprises, per broad industry classification. The point is to examine whether the number of entering foreign-owned enterprises in a specific industry has affected significantly in the number of total operating enterprises. The statistical data regarding the overall operating business entities is used here because it includes (in contrast to number of new firms) the firms that are not active or has been closed. Hence, the “scope of the operating companies” data is a good measure of finding out how successfully new firms are performing.

Figure 3 displays the total active numbers of foreign firms per industry for the period 2014–2022, and Figure 4 contains the same parameters for the total number of firms. Once again*, we detect the gradual improvements of foreign firm entrants, as well as for domestic entrepreneurship starting from 2018.

The authority showed remarkably effective performance in promoting the entrepreneurial climate in the economy, by the approach of stimulating foreign direct investments. Definitely, the industrial sector constitutes the lion share of the foreign-owned firms’ volume. Whereas the trade sector has been boosted lately. The reason is that, as the private business sectors were not in the priority position of progressive development, the attracting of FDI in this sector was not the main motivation of the authority. The manufacturing sector instead, had been and still being the key field to stimulate and enticing foreign investors. As the political reforms progressed, the entrepreneurial climate in the country started to

* The boost of economic and political reforms starting from 2017
<https://www.worldbank.org/en/news/press-release/2017/11/01/uzbekistan-is-a-global-top-improver-for-third-time-as-reform-agenda-continues-doing-business-report>



improve, so more cross-border companies found it appealing to run their businesses. As the trade industry is a downstream industry, unlike to the industry sector, less capital is required to run a new business. In fact, the trade sector has been the most prevalent sector of the economy for the nation, which is being affected positively by the increase of the foreign presence. We can detect the jump in the number of domestic firms a year later the jump in the number of

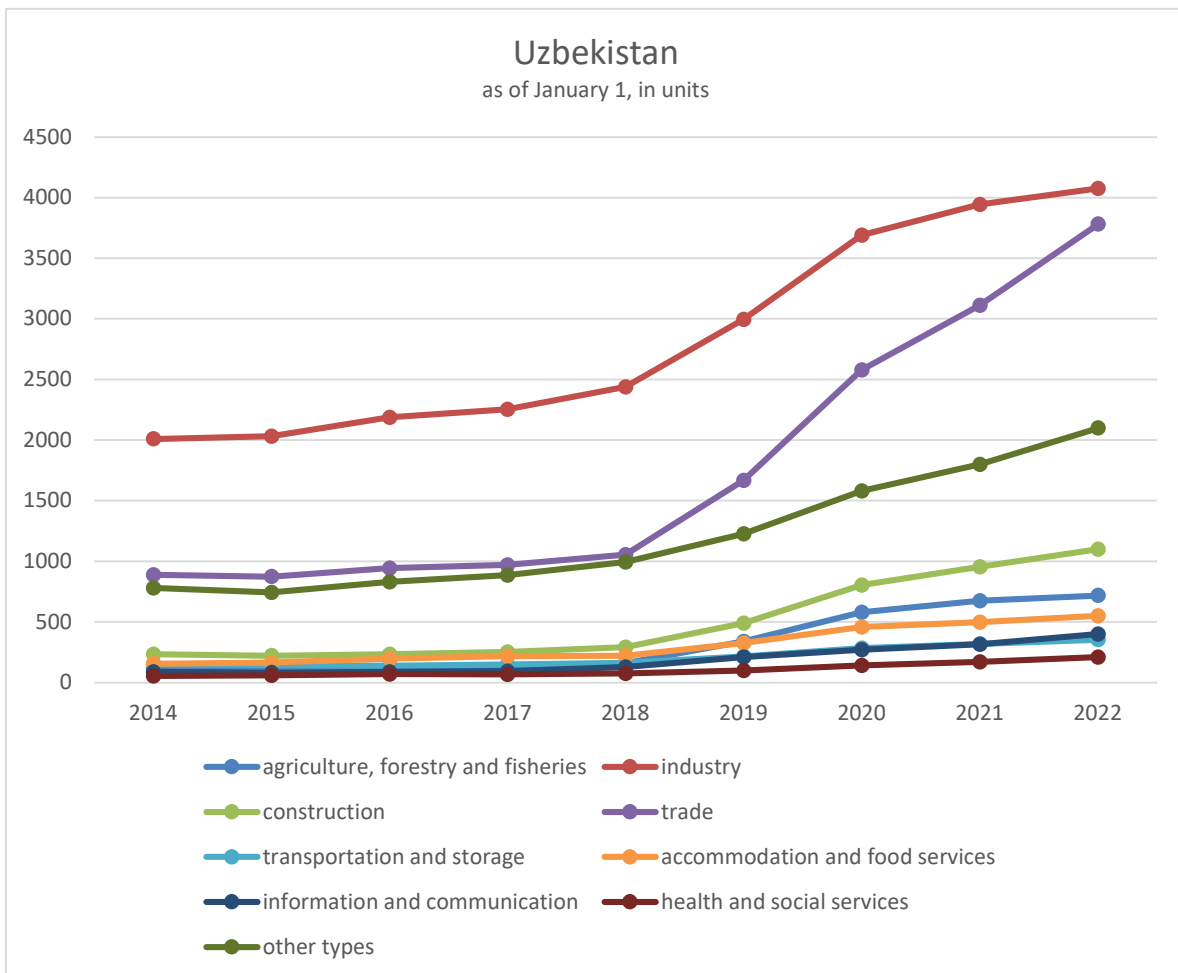


Figure 3. The total number of operating foreign firms, by industry *

* source: The State Committee of the Republic of Uzbekistan on Statistics <https://stat.uz/en/>

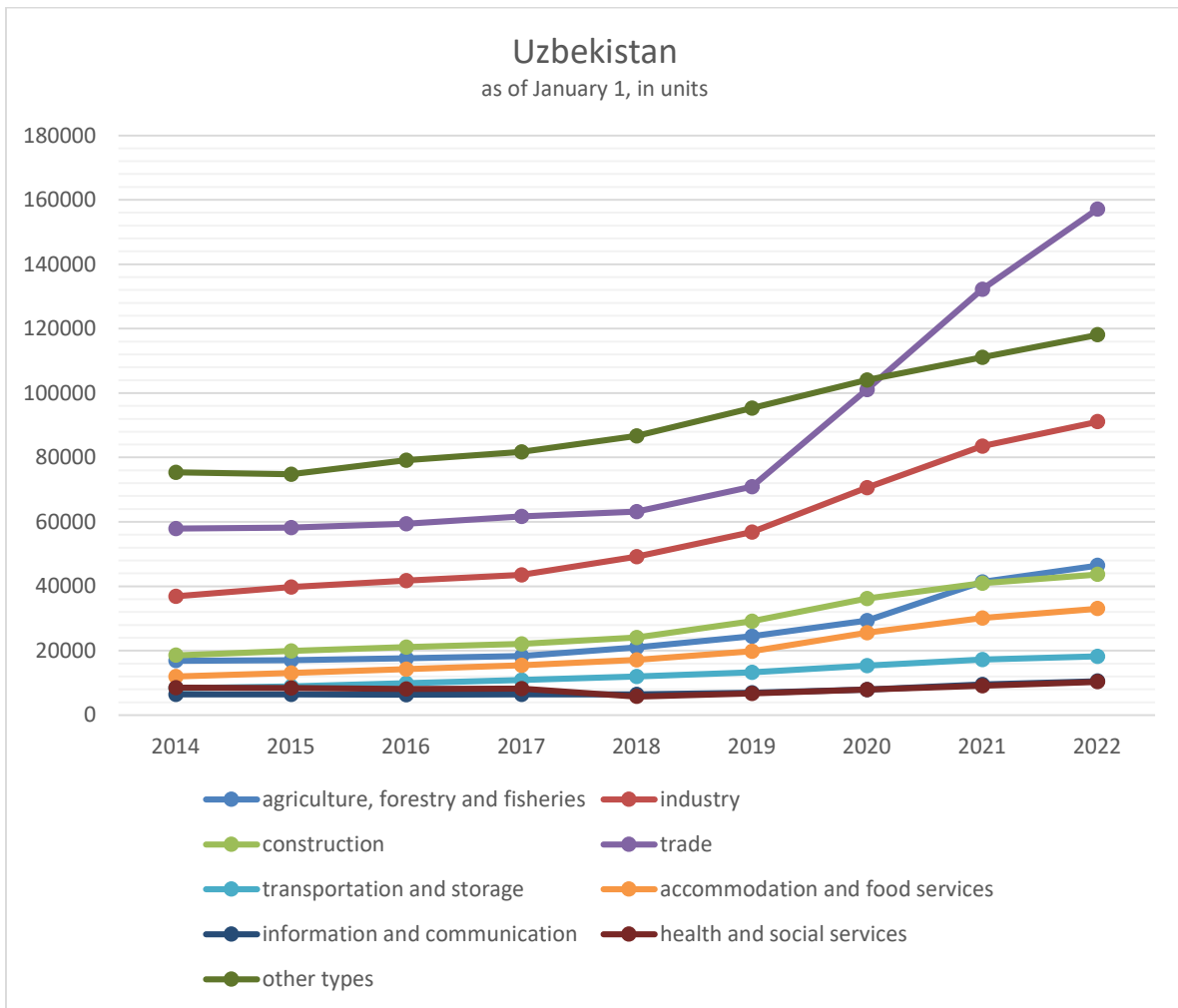


Figure 4. Total number of operating firms, by industry *

foreign firms. As the foreign firms have well established managerial, technological, and organizational capabilities, domestic business owners seek to learn and imitate these capabilities. As well as, emerging of new markets occur immensely frequently in the trading sector, so that the market meets more and more new business organizations.

* source: The State Committee of the Republic of Uzbekistan on Statistics
<https://stat.uz/en/official-statistics/usreo>



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Coming back to the industrial sector, alongside the expanding international companies, we observe more growth in total industry. On the one hand, the sector can contribute to stimulation of the intra-industry local companies by the advanced technology implementation. On the other, it can impact the inter-industry domestic firms by creating new demand in inputs and establishing contracts with suppliers, causing *vertical spillover effect*.

The construction sector for instance is the most likely to receive inter-industry spillover effects, especially from primary and secondary industries. As soon as foreign investors decide to launch a company, they start with the building of infrastructure and plant, thus creating a new demand. Greatly attracting FDI in the Construction field is linked to the authority approval of massive urban development[§] throughout the country in 2018. The companies including the foreign participants in the sector can foster the industry by transferring of skills to their employee. An employee obtaining appropriate experience in the international company can leave its job position and start own company or be hired by local business entity.

The foreign activity in the agriculture, forestry, and fisheries sectors, as a matter of fact, has brought noteworthy effective results. The tendency of total operating firms has surpassed the Construction sector in 2021, and has higher projections. The Agriculture field in Uzbekistan has been the sector of economy, which highlights the cultural characteristics of the nation. Although people historically are experienced, the entrepreneurial activity in the sector, has not been largely supported and encouraged by the authority (early improvements were started from 2007). When they are in need of running a business activity, they mostly have

[§] source: <https://www.opendemocracy.net/en/odr/dispossession-and-urban-development-in-the-new-tashkent/>



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been preferring to start working on their existing/renting/buying assets, like land, farm, livestock and etc. Additionally, launching an activity in agricultural field has been attracting also regarding the sufficiently low bureaucratic barriers to start operation and trade, which the majority people find the formalities bothering and consequently, they have no stimulus in confronting them. Taking into account above mentioned aspects, the people, bypassing the regulations, desire to start a new business as soon as possible, and as cheap as possible, due to high cost of start-up procedures**, number of procedures††, and days required to start a business‡‡ in the country.

By putting the chart into numbers, in Table 1, we can observe the number of new foreign and domestic enterprises separately. Having the number of total firms (TF) we extract from the data the foreign presence (FP) and get the scope of domestic firms (DF). With the following table, we can effectively detect the scale the FDI impact on new local firms' creation. A noticeable fluctuation in entrepreneurial activities across the industries can be detected on the data until the end of 2017, due to the lack of progressive support provided to the private business sector.

Domestic entrants in the accommodation and food services industry have been displaying slightly stronger rates comparing to the international enterprises through recent years. The sector's development is specifically essential – high number of business entities serve the greatly increasing number of foreign

** From the World Bank Database, early 2000th, average – 12.6 (%GNI per capita)

<https://data.worldbank.org/indicator/IC.REG.COST.PC.ZS?locations=UZ>

†† From the World Bank Database, early 2000th, average – 10 (procedures)

<https://data.worldbank.org/indicator/IC.REG.PROC?locations=UZ>

‡‡ From the World Bank Database, early 2000th, average – 28 (days)

<https://data.worldbank.org/indicator/IC.REG.DURS?locations=UZ>



Table 1

Number of total operating firms, foreign presence, and domestic firms, by industry

	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Agriculture, Forestry and Fisheries										
TF	16936	+90	+585	+708	+2700	+3461	+4899	+11942	+5180	46501
FP	122	-9	+8	+3	+35	+180	+241	+93	+45	718
DF	16814	+99	+577	+705	+2665	+3281	+4658	+11849	+5135	45783
Industry										
TF	36942	+2794	+2041	+1737	+5671	+7665	+13726	+12963	+7613	91152
FP	2010	+22	+155	+67	+184	+557	+695	+253	+133	4076
DF	34932	+2772	+1886	+1670	+5487	+7108	+13031	+12710	+7480	87076
Construction										
TF	18618	+1330	+1225	+916	+2029	+4994	+7087	+4751	+2745	43695
FP	233	-11	+10	+18	+41	+197	+316	+151	+145	1100
DF	18385	+1341	+1215	+898	+1988	+4797	+6771	+4600	+2600	42595
Trade										
TF	57968	+297	+1167	+2303	+1464	+7703	+30179	+31111	+24937	157129
FP	887	-13	+68	+28	+85	+613	+911	+534	+669	3782
DF	57081	+310	+1099	+2275	+1379	+7090	+29268	+30577	+24268	153347
Transportation and Storage										
TF	8404	+527	+961	+989	+1115	+1334	+2030	+1941	+950	18251
FP	147	-5	-2	+8	+13	+53	+68	+34	+38	354
DF	8257	+532	+963	+981	+1102	+1281	+1962	+1907	+912	17897
Accommodation and Food Services										
TF	12004	+1075	+1220	+1155	+1672	+2686	+5824	+4475	+2993	33104
FP	155	+9	+32	+22	+2	+105	+133	+40	+52	550
DF	11849	+1066	+1188	+1133	+1670	+2581	+5691	+4435	+2941	32554
Information and Communication										
TF	6438	+48	-116	+57	-24	+572	+926	+1616	+1070	10587
FP	87	-6	+6	+6	+33	+83	+60	+46	+85	400
DF	6351	+54	-122	+51	-57	+489	+866	+1570	+985	10187
Health and Social Services										
TF	8479	-98	-299	+159	-2401	+938	+1125	+1242	+1246	10391
FP	54	+4	+11	-3	+8	+23	+44	+28	+41	210
DF	8425	-102	-310	+162	-2409	+915	+1081	+1214	+1205	10181

visitors^{§§} in the country. As a matter of fact, the industry is culturally sensitive, local businessmen have been able to promptly react to the multinational entrants. Foreign-owned hotels, restaurants, in common, bring the organizational and

^{§§} The number of visiting tourists grew 3.5 times in 2019, compared to 2016

<https://data.worldbank.org/indicator/ST.INT.ARVL?locations=UZ>



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managerial competencies with them to the investing country. Whilst overseas entrepreneurs start to establish their branch in the country's expanding sector, the domestic ones seek to open own hotel or restaurants with more precise cultural configurations. In other words, the spillover effect from the foreign firms within the industry can occur, as the domestic firm owners attempt to extract the foreigners' proficiencies and exploiting the cultural advancement to the new firm creation.

When FDI presence increases in an industry, it is said to stimulate the *entry spillover effect* if it opens up a market niche and local companies can serve that niche, or if domestic firms can produce the product that culturally satisfies the customers better than foreign producers (Albulescu & Tămășilă, 2014).

The rest of the services subsector – Transportation and Storage, Information and Communication, Health and Social Services have been performing the slowest progress both for the number of foreign and domestic firms, and by the encouragement of entrant firms. Nonetheless, we observe quite strong variations. Broadly speaking, the Services industry, in contrast to commodity producers of upstream industry, is focused on more marginal profits, and normally less extent of customer coverage. In practice, the technological advantage in the industry does not allow the firms to outcompete for long period of time. Subsequently, the services market, in principle, contain a greater number of business entities, hence providing a stage for relatively higher competition. International firm owners are not in capable of holding their advantage, whether it is technological advancement, financial proficiency (strongly withstanding at sunk costs) or sophisticated managerial skills (delivering high quality services), for quite a long time. The tertiary industry is, as a rule, more dynamic, flexible, and fleeting industry. The high number of firm creations and closures, quick competitive



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reactions, prompt imitations make the industry different in highlighting of spillover configurations between enterprises.

Due to the pandemic situation in 2020, we can see the decline in new foreign firms' registration in all industries. Meanwhile, domestic firms have increased in industries where demand raised due to lock down situation. Namely, Health and Social Services, Information and Communication, and Agriculture, Fishery, Forestry have experienced growth of 11, 45 and 61 percentage points respectively. For what concerns the above mentioned three sectors, it remains to be studied whether the boost of the entrepreneurial activity was the result of *necessity driven entrepreneurship (nde)*, creating new firms because of losing jobs owing to the massive lock down, or *opportunity driven entrepreneurship (ode)*, entrepreneurs that found an opportunity to serve the new demand (Albulescu & Tămășilă, 2014). More generally, we have not clearly identified a case when FDI deterred the domestic entry, increasing technological entry barriers (Ayyagari & Kosovà, 2010). The assessment can be carried on in further researches by deeper analysing the relationship of FDI and entrepreneurship in 3-digit and 4-digit industries. Following, when FDI encourages the growth in the number of new domestic firms within the industry, referring the *horizontal spillover effect*. We have seen this effect solely in number of enterprises. In the next Chapter we will see its effect in the industries' financial performance.



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Chapter Three. Value added per industry

By separately observing the industries, we can draw insights on the intra-industry spillover effect stimulated by the multinational activity on the overall industry's value added in the host economy. With a linkage of spillover effect in terms of financial prosperity of the economic sectors. On the one hand, we consider an entrepreneurial activity by a high number of new entrants as an important indicator for the economy, on the other, their financial prosperity is the following crucial indicator as for the economy, so for the firms itself. The statistical data regarding the classification of FDI inflows by sectors has been requested from the State Committee of the Republic of Uzbekistan on Statistics, which is represented in Table 2.

Uzbekistan used to be an appealing country for foreign investors mostly in primary industries, specifically Mining, Quarrying, Manufacturing. Russian, Chinese, Korean companies were mostly involved in establishing their industrial plants that extract and process natural resources, like coal, gas, oil and so on. As the government is in strong favour of the extraction and production of the natural resources, it actively manages and regulates the industry, and in closer contact than other sectors. Additionally, it encourages foreign companies to establish their company in the natural resources sector, as the effective performance in the industry has a large coverage of affection in economic levers.

There are several objectives of the government anticipating the spillovers of FDI in upstream industries. First, the source countries of FDI, in principle, are more technologically advanced, thereby, they supply the finest machinery and systems, as follows the domestic country gains the improvement in technological development in the industry. Second, employees hired by foreign business owners are trained adequately in order to meet the international standards,



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leading to the increase of the human capital widely. Third, although entrepreneurs are incapable of establishing such production plants to compete with foreign firms, the authority expects the vertical spillover effect from the overseas companies, meaning they foster growth in downstream sectors, by creating new demand in the market. However, multiple researches recognized the negative impacts lead by FDI in the sector show the net of spillover effects do not bring to positive results. The notions of benefiting the spillover effect of technology, managerial expertise, and market creation are least effective in upstream industries (Alfaro, 2003). Equally, Hirschman (1958) emphasized the negative impact of the FDI in upstream industry that outputs produced in the industry leaves the economy without much of a positive contribution. In the same line, Chakraborty and Nunnenkamp (2008) have found no considerable positive spillover effects encouraged by FDI in the sector.

The Information and Communication industry has been one of the greatly captured industry by the multinational enterprises in the era of the progressive technological development of wireless communication and internet providing services. Foreign firms rapidly built their subsidiaries in the Uzbek economy's ground, and brought their contribution to the development of the technological improvement within the country. Here, we recognize the case of new market creation by the foreign business entities in the host economy, bringing significantly stronger technological facilities. Technology provided by the foreign corporations can be excessively advanced to transfer positive spillover effects to domestic firms (Kokko, 1994). At the beginning, the local firms experience deterioration from the insufficient technological enhancement. Over time, as Gorg & Greenaway (2002) defined, the absorptive capacity (the capacity of a firm for assimilating knowledge) of domestic firms have been enough to draw on



Table 2. FDI inflow, by industry, in current million US\$*

	2016	2017	2018	2019	2020
Total	1660.0	2246.4	1132.9	4316.6	2951.7
Agriculture; forestry and fishing	8.1	0.8	27.9	247.5	216.0
Mining and quarrying	1108.2	1812.9	539.8	1332.6	681.1
Manufacturing	322.6	223.1	299.1	1742.5	1409.8
Electricity; gas, steam, and air conditioning supply	-	-	10.4	19.3	27.5
Water supply; sewerage, waste management and remediation activities	-	3.2	13.0	2.6	10.1
Construction	0.6	2.0	11.3	313.5	174.1
Wholesale and retail trade; repair of motor vehicles and motorcycles	30.7	13.3	71.7	125.2	104.7
Transportation and storage	2.5	0.4	2.8	42.1	7.6
Accommodation and food service activities	0.3	1.0	1.0	160.9	18.1
Information and communication	174.0	167.1	53.3	50.1	46.6
Financial and insurance activities	0.3	0.4	0.7	0.8	2.6
Real estate activities	0.1	13.0	6.2	49.6	106.8
Professional, scientific, and technical activities	1.3	2.0	0.6	4.6	1.9
Administrative and support service activities	10.3	1.4	0.1	4.2	19.2
Public administration and defense; compulsory social security	-	-	-	-	2.4
Education	-	-	0.2	0.8	3.5
Human health and social work activities	0.3	0.2	1.1	37.9	79.4
Arts, entertainment, and recreation	0.3	0.1	93.5	181.1	5.1
Other service activities	0.3	2.0	0.4	1.2	35.1
Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use	-	3.5	-	-	-

the technological superiority. Up to current days, the number of domestic Information and Communication firms expanded largely. Eventually, local business owners' successful progresses in the industry has been resulting into the continuous decline of the overseas service providers' participation. In fact, the case is a good representation of the technology spillover effects.

The World Bank dataset provides the statistical data of the value added of the

* source: The State Committee of the Republic of Uzbekistan on Statistics <https://stat.uz/en/>



limited industries that are represented in Table 3. The subindustries in Table 2 are summed up accordingly and inserted in the line with the given industries in Table 3. Following, for the robustness of analysis, I recalculated the measurements of Table 2 from current US\$ to constant 2015 US\$, consequently computing the growth rates. Growth rates are included in order to examine the intensity of the influence.

Table 3. FDI inflow, total value add, in constant 2015 million US\$*

	2014	2015	2016	2017	2018	2019	2020
Manufacturing							
FDI inflow			302.4	200.7	249.2	1361.8	1029.2
% growth				-34%	24%	446%	-24%
Total value add	10427.5	11041.3	11778.8	12275.5	13251.0	14127.8	15125.3
% growth	8.0%	5.9%	6.7%	4.2%	7.9%	6.6%	7.1%
Industry (including construction)							
FDI inflow			1352.2	1829.6	702.0	2530.0	1671.0
% growth				35%	-62%	260%	-34%
Total value add	17925.6	19411.8	20548.4	21656.1	24156.7	26167.5	26748.5
% growth	7.4%	8.3%	5.9%	5.4%	11.5%	8.3%	2.2%
Service							
FDI inflow			43.9	30.1	151.0	486.7	307.7
% growth				-31%	401%	222%	-37%
Total value add	31362.9	33751.9	35729.3	37858.8	39828.4	42201.8	42402.6
% growth	7.4%	7.6%	5.9%	6.0%	5.2%	6.0%	0.5%
Agriculture, Forestry, Fishery							
FDI inflow			7.6	0.8	26.0	223.0	189.0
% growth				-90%	3254%	759%	-15%
Total value add	23738.6	25187.2	26740.7	27048.7	27117.3	27954.6	28782.0
% growth	6.0%	6.1%	6.2%	1.2%	0.3%	3.1%	3.0%

Having two figures, we test the effects of incoming FDI to the intra-industry's financial performance. Unluckily, the data regarding the value added of foreign

* descriptions and sources are provided in the End Notes 3.



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firms per industry has been tracked only since 2016. In addition to the short period given for foreign-owned firms, we expect higher fluctuation in percentage points, as the nominal values are quite low.

Upwards trend in financial contribution of foreign companies across all four industries have been discontinued in 2020. We see a below zero indexes of foreign-owned firms' inflow during the global pandemic situation. However, overall industries performed increasing trend despite the year with full of limited operations. In particular, the Manufacturing and Industry sectors, representing the upper middle stream industry, is expected to bring its effects in longer terms. While the Industry sector traditionally has being constantly imposed of international investments, the overall industry's production performance has been growing at stable of 6.5 percent. The Industry sector, construction included, we can detect the positive stimulus of multinational activity into the overall industry output. In spite of the negative progress of foreign companies in 2018, the previous 2 years of foreign activity has driven the total value add of the sector gradually, to 11.5% increase, with respect to prior years. Despite the continuous expansion of foreign value add, the sector generally, has the stable growth averaging around 6%. Additionally, we could have witnessed a more stable percentage growth of the industry, if the lockdown situation had not provided operational obstacles. We can recognize similar dynamics for the Manufacturing industry. The performance of value added in the industry demonstrates constant growth, and the boost in FDI inflow for the last two years has not appeared affected on the sector's value add.

On the contrary, the foreign contribution in the Services and Agricultural sectors have been demonstrating quite different results. While foreign presence in the Services showed quadruple and double progresses until the lockdown period, total production performance of the industry encountered less percentage of



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improvement points in the following years. Furthermore, the Agriculture, Fishery, Forestry sector's total value added reflected more negatively in the increase of FDI impose. According to the Institute of Forecasting and Macroeconomic Research of Uzbekistan, at the end of 2016 further development of the sector was at high risk*, since the previous sources of the growth had been exhausted, and this led to number of barriers such as monopoly in export products, regulation of export prices, the governmental boundary of acquisition of agricultural products from local producers for the unfair price and etc.

Among the subsectors of the Services industry, the Health and Social Services, and Information and Communication sectors, we inspected declining and fluctuating tendency regarding the number of both foreign and domestic new entrants (Table 1). At this point we can refer to the idea that Alfaro (2003) advanced – the impacts of FDI on the Services sector brings to controversial results. For further clarification, the Services industry can be examined by assessing different subsectors separately.

* source: <https://ifmr.uz/publications/articles-and-abstracts/agriculture>



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Chapter Four. FDI and the business environment

Foreign firms entering the market of transition economies can foster multiple parameters of the internal business environment. As a rule, they tend to be more advanced, efficient and competent comparing to the domestic firms. It is stated by multiple researches that if the gap between multinational companies and local companies is not too wide, foreign direct investment impose serves as powerful engine driving the business environment in the recipient's economy. The progressive growth of FDI, especially in secondary and service industries, mainly leads to enhancing of the local market with high quality or totally new product or service. This may lead domestic businessmen to start investigating the new situation in the market and take appropriate actions to maximize their performance. In line with the emerging excitement of host entrepreneurs, the state will likely seek to encourage local private business sector, by supporting, and lowering the operability barriers.

Depending on the characteristics and the type of firm's operating industry, foreign-owned companies can affect in economic figures differently. Still, large number of functioning international enterprises in broad sectors of economy in long-term precisely contributes to the development of the domestic entrepreneurship.

We expect more efficient, active and healthy business entities in a prosperous business climate. Accordingly, there are number of economic parameters that authorities should improve, which contribute to the ease of doing business. In Table 4, I have represented some of the economic factors that can be indirectly impacted by FDI, which ultimately can represent better operability in the private sector. Namely, by implementing regulatory policy, the state should focus on developing and enacting rational policies, high institutional competencies, and



provide more independency from the governmental pressure. Similarly, time and expenses required to start a business play another role of obstacle for the new business runners. Tax rates in turn, majorly affects to the financial performances of the companies. These are aspects that require sound regulatory approach to correctly reflect in fostering of the entrepreneurial activity overall.

Table 4*

	2014	2015	2016	2017	2018	2019
Tax rate (% profit)	42.1	41.1	38.1	38.3	32.1	31.6
Regulatory quality	-1.71	-1.64	-1.62	-1.26	-1.08	-0.99
Government effectiveness	-0.63	-0.67	-0.58	-0.55	-0.55	-0.51
GDP % growth	6.874	7.219	5.932	4.395	5.355	5.710
GDP per capita	2628	2754	2705	1917	1597	1784
Unemployment	5.1	5.2	5.2	5.8	5.71	5.65
Cost of start-up procedures	3.3	3.4	3.2	3.1	3.1	2.2
Time to start a business (days)	7.5	5.5	5.5	5	3	3
Trade (% GDP)	36.4	30.8	29.2	47.8	71.5	72.9

Furthermore, more effective and large multinational corporations, profiting in the local land at the same time contribute to the gross domestic product escalation. The tight interconnection between wealth of the country, people, and the fruitful business climate can lead to progressive results. In fact, it is likely for governments, in certain cases, to fail in building robust empirical data, in particular, the measure of the unemployment rate conceivably inaccurate. Trade, as a fraction of GDP, also reflects the openness of a country, which grows as the volume of FDI grows. Foreign firms have been experiencing in cross-border

* source: the World Bank database <https://data.worldbank.org/country/uzbekistan>
GDP per capita in current US\$



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relationships between countries in interchanging inputs and outputs, can favourably affect to the scopes of export and imports in the host economy. Subsequently, this can lead to the improvement of the local firm's production capacity by establishing export/import channels. Owners can gain the capability via cooperation with foreign-owned companies or by imitating them.

Encouraging foreign direct investments can bring to stated developments in form of a chain reaction. It is in the interest of the state to provide a flourishing business environment, thus optimistically expecting the positive spillover effects by the FDI. Table 5 is a good representation of the interrelation between the parameters discussed so far. The correlation between FDI inflows and the registration of new LLC firms and domestic entrants is positive and quite high, while it is smaller for foreign entrants. However, the accuracy of the correlations vary. The country has been relatively actively operating with overseas firms in 2014. Still, we have not detected sizable effects driven by FDI to local entrants. More effective spillover effects have been observed starting from 2017. In a general picture, domestic firms did success in gaining benefits from foreign-booked companies.

The correlation between FDI expansion and tax rate level is negative. Accordingly, it is common for authorities to provide tax incentives for multinational corporations by exception. As a matter of fact, during the initial boost of FDI in Uzbekistan, we still were not beholding of improvements in government effectiveness or promoting regulatory quality, however situation took a different direction since the middle of second decade. Government effectiveness is more strongly correlated with FDI inflows (0.56) than with regulatory quality (0.39). The contribution of the FDI into the wealth of the economy should be rechecked by setting up appropriate monetary parameters. The indicated correlations between factors suggest questionable relationships also for the unemployment rate.



Table 5. Correlation matrix*

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 FDI inflow	1															
2 New registered LLCs	0.59	1														
3 Foreign firm entrants	0.32	0.95	1													
4 Domestic firm entrants	0.55	1.00	0.94	1												
5 Total operating firms	0.56	1.00	0.96	0.99	1											
6 Total operating foreign firms	0.50	0.99	0.98	0.99	1.00	1										
7 Total operating domestic firms	0.58	1.00	0.95	0.99	1.00	1.00	1									
8 Tax rate (% profit)	-0.33	-0.87	-0.94	-0.85	-0.91	-0.91	-0.89	1								
9 Regulatory quality	0.39	0.87	0.91	0.83	0.90	0.89	0.88	-0.92	1							
10 Government effectiveness	0.56	0.78	0.73	0.73	0.81	0.77	0.79	-0.85	0.86	1						
11 GDP % growth	-0.41	-0.36	-0.33	-0.28	-0.41	-0.35	-0.38	0.53	-0.68	-0.80	1					
12 GDP per capita	-0.20	-0.72	-0.81	-0.68	-0.76	-0.76	-0.74	0.85	-0.96	-0.82	0.75	1				
13 Unemployment	0.35	0.61	0.65	0.55	0.66	0.63	0.63	-0.73	0.91	0.78	-0.87	-0.94	1			
14 Cost of start-up procedures	-0.73	-0.97	-0.84	-0.97	-0.95	-0.93	-0.96	0.76	-0.77	-0.77	0.35	0.61	-0.53	1		
15 Time to start a business	-0.32	-0.81	-0.90	-0.77	-0.86	-0.85	-0.83	0.95	-0.91	-0.73	0.52	0.82	-0.77	0.67	1	
16 Trade (% GDP)	0.19	0.86	0.94	0.85	0.88	0.90	0.87	-0.91	0.95	0.78	-0.51	-0.94	0.79	-0.74	-0.85	1

* Due to the lack of some of the variables' data before the year 2014, all the subsequent data were taken for the period 2014-2019.



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Upbeat signals have been extracted with regard to lowering barriers during the setting up of a new firm along with the raising of the FDI inflow. Bureaucratic and financial constraints play one of the main discouraging points of the business environment.

Emphasizing the role of government and its policies towards the entrepreneurial activity, the private business sector sharply tends to experience enhancement by the rational and common-sense support and patronage by the authority. Notably, the determinants of government effectiveness and regulatory quality provided higher affection points in the number of local entrants compared to foreign affiliates. In this context, we can recognize the level of deterrence of the impediments for the start-up builders. Continuous progresses on efficiency and regulation factually contributed to the expansion of national new enterprises. Similar outcomes can be achieved with the lowering the costs and days required of running a new business. It acts as incentives for potential entrants, and stronger image of the country for further attraction of foreign corporations.



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Conclusion

The large scale of reforms in 2017 played a key role in attracting FDI. It served as the opening of high-pressure valve. Alongside the progressive FDI inflows, the domestic business environment started to improve. Overall number of domestic firms has shown notable growth. The secondary and some of the service industries have experienced the most effective positive entry spillover effects led by FDI. In contrast, the HSS (Health and Social Service) and IC (Information and Communication) sectors showed ambiguous results. In fact, with the lack of appropriate empirical data, the entry spillover effect in the upstream industry has not been precisely recognized. Furthermore, by analyzing the effectivity of the FDI inflows to the value add in the industries, the greater benefit of value add has been ascertained in the manufacturing and industry sectors.

Following, the indirect impact of FDI to the local business environment has been analyzed. Upon attracting large number of foreign firms, series of economic determinants improving the entrepreneurial activity have been recognized.

During the work, I faced several nuances. Namely, the upsurge of reforms directed to the private sector, is needed to be analyzed profoundly, and further researches on deeper distinguishing of the root of spillover effects can bring to more precise results. Besides, when the topic on growth of entrepreneurial activity in a country is examined, a key fact should be taken into consideration – conclusions made, proper researches fulfilled, and robust results taken are hugely dependent on the one major circumstance. It is the independency, prosperity and lack of political boundaries of business environment of the researching country. Under the governmental restrictions, high barriers of operation in the entrepreneurial environment the conclusions and practical results will bring to the non-realistic outcomes. It has been only five full calendar years (three years of the complete



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empirical data) since the country de facto started to support unrestricted policy in the private business sector. Over time, researches made in Uzbekistan, presumably will bring to further sophisticated outcomes and conclusions.

Regarding the negative spillover effects or discouraging of the domestic firms by the FDI, more elaboration with appropriate empirical data and deeper looking in 3-digit industries can bring to more robust results and conclusions on whether local companies suffered from the foreign firms.



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End notes

1. To the ends of a convenient assessment, the analysis of FDI inflow chart – Figure 1, should be undertaken until the year 2018. The reason is, in September 2017 the government of Uzbekistan the exchange rate was adjusted to the market price. Prior to the date, there were two exchange rates – the official rates totally controlled by the authority and the market rate that was valuing twice as much on average. The World Bank Database measurements before 2018 were taken according to the earlier policy.

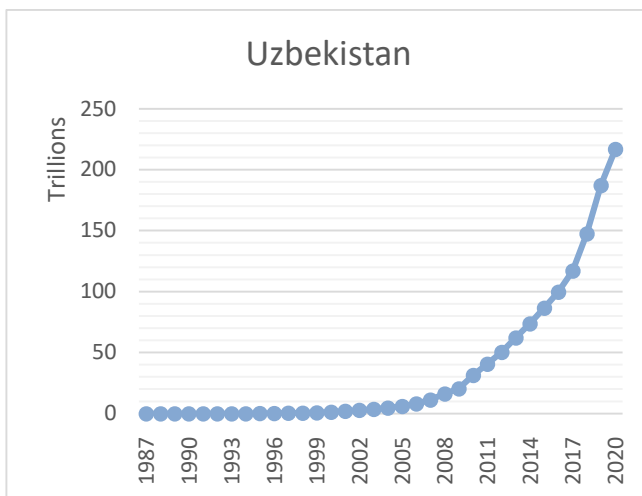


Figure n. Services, value added (current LCU)*

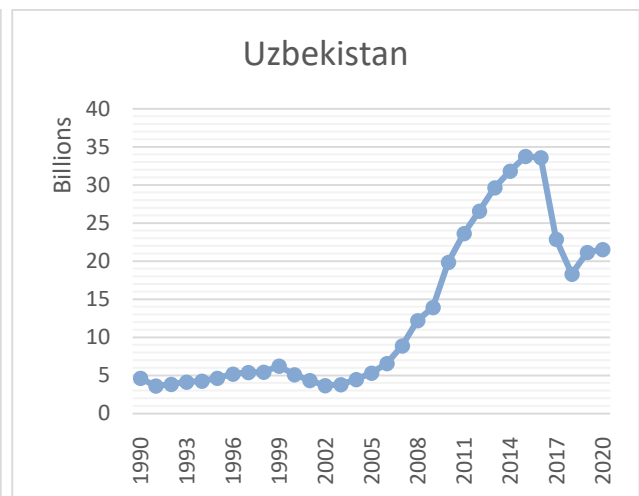


Figure m. Services, value added (current US\$)**

In the Figure n, we see the value added of Services Industry in local currency is strictly increasing, whereas the same data in USD in Figure m has the gradual drop in 2017 and 2018.

* source: <https://data.worldbank.org/indicator/NV.SRV.TOTL.CN?locations=UZ>

** source: <https://data.worldbank.org/indicator/NV.SRV.TOTL.CD?locations=UZ>



2. As the statistical data regarding the FDI inflow by industry in Table 2 are in current US\$, it has been adjusted into constant 2015 US\$ and plotted in Table 3. For the corresponding figures the adjustment has been carried out by calculating the CPIs per industry.

3. Table 3 represents:

Manufacturing - refers to industries belonging to ISIC divisions 15-37. Value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs.

<https://data.worldbank.org/indicator/NV.IND.MANF.CD?locations=UZ>

<https://data.worldbank.org/indicator/NV.IND.MANF.KD.ZG?locations=UZ>

Industry (including construction) - corresponds to ISIC divisions 05-43 and includes manufacturing (ISIC divisions 10-33). It comprises value added in mining, manufacturing (also reported as a separate subgroup), construction, electricity, water, and gas.

<https://data.worldbank.org/indicator/NV.IND.TOTL.CD?locations=UZ>

<https://data.worldbank.org/indicator/NV.IND.TOTL.KD.ZG?locations=UZ>

Services - correspond to ISIC divisions 50-99. They include value added in wholesale and retail trade (including hotels and restaurants), transport, and government, financial, professional, and personal services such as education, health care, and real estate services.

<https://data.worldbank.org/indicator/NV.SRV.TOTL.CD?locations=UZ>

<https://data.worldbank.org/indicator/NV.SRV.TOTL.KD.ZG?locations=UZ>

Agriculture, forestry, and fishing - corresponds to ISIC divisions 1-3 and includes forestry, hunting, and fishing, as well as cultivation of crops and livestock production.



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<https://data.worldbank.org/indicator/NV.AGR.TOTL.CD?end=2020&locations=UZ&start=1987>

<https://data.worldbank.org/indicator/NV.AGR.TOTL.KD.ZG?end=2020&locations=UZ&start=1987>