

# The Key Determinants of Industrialization in Uzbekistan

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**Abstract:** The study investigates key determinants of industrialization in Uzbekistan since 1991, considering primary political, institutional, and economic conditions in various circumstances. This study aims to find out the factors subject to advancement and hindrance. The work defines the bridge between influencing factors and the development of industrialization in Uzbekistan. Uzbekistan witnessed dramatic changes since the election of a new leader – Sh. Mirziyoyev, as the second President of the Republic of Uzbekistan (late 2016), and the reforms carried out in changing economic policy and strategy orientation and foreign economic activities, became one of the most dynamic in the post-Soviet era of the country. The key findings of this work are as follows: (i) policy change and strategy orientation, including the transition from a defensive self-reliance approach-autarky to a gradual liberal approach and comparative advantage following strategies are central to industrialization; (ii) introduction of export-oriented industrial policy is of paramount importance to the industrialization process; (iii) human capital advances the industrialization; (iv) physical capital boosts industrialization; (v) specific trade and investment-oriented policies are intrinsic to effective long-term industrial policy; (vi) elimination of the most noticeable obstacles to industrialization as insecure property rights, inefficient logistic chains, and monopolistic production is essential on the way to the industrialization.

**Keywords:** Industrialization, Uzbekistan, Reforms, Trade and Industrial Policy, Human capital

## 1. Introduction

Many development partners and economists believe that industrialization is critical to growth, economic diversification, job creation, investment, technology, and human well-being (Opoku et al., 2019). Industrialization is the transformation of the economy from an agricultural to an economy based on the production of goods, and Manufacturing Value Added (MVA) is an indicator of the level of industrialization of a country.

The coronavirus outbreak was an unexpected phenomenon for the entire world, brought considerable human suffering and significant economic disruption, penetrated almost every country, and became the biggest threat to developing countries' ambitious market transition. The unexpected recession caused by the COVID-19 pandemic turned out to have a drastic impact compared to prior global crises (Saif et al., 2021). Global production has shrunk by about three times and twice as fast as during the global financial crisis.

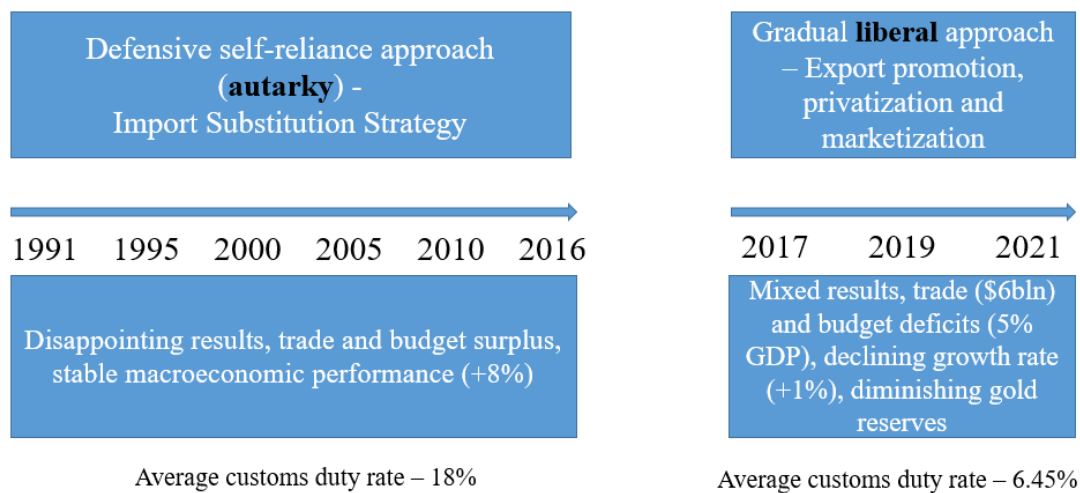
Traditionally, pro-industry policies were associated with incentives for import substitution and an export-oriented development strategy. But pandemic circumstances force especially the developing world to think about infant industries, building product manufacturing capabilities, and their inclusion in global value chains (Su et al., 2022). At the same time, integration into the world economy accelerates economic development, and an open country prospers faster than a closed one (Nikzad, 2021). The degree of economic openness usually depends on the

volume of foreign trade in which a country participates. The share of foreign trade in GDP is the primary determinant of a country's openness to trade.

On the other hand, the relationship between trade openness and industrialization has been a subject of controversy and validation for scientists, researchers, and politicians, and where Uzbekistan is no exception. Simultaneously, the choice between an import substitution model and an export promotion industrial strategy has been one of the central issues in Uzbekistan's development policy debate for three decades. This study aims to determine the critical determinants of industrialization and develop scientific and practical measures along with proposals for the industrialization of Uzbekistan's economy in the conditions of openness of foreign trade, taking into account advanced foreign experience and ensuring sustainable economic development in Uzbekistan.

Uzbekistan is located in the middle of Central Asia. In addition, Uzbekistan is the largest country in terms of population in the region. More than half of its population lives in urban areas, and the only in Central Asia, bordering all the other four countries and Afghanistan. Uzbekistan obtained its sovereignty in 1991 from the Soviets and became the Republic of Uzbekistan. Since its independence in September 1991, until the new president took office, the government has been primarily maintained in a commanded-style economy. Previously, Uzbekistan was well-known as one of the few former Soviet republics that refused to adopt the Washington Consensus policies. Hence, the mixture of rejecting the Washington Consensus and a reasonably good economic development performance has been referred to by the World Bank and the IMF as the "Uzbek growth puzzle." After the new leadership – Sh, Mirziyoyev came to power (late 2016), dramatic changes have happened in Uzbekistan. In February 2017, Uzbekistan adopted the National Development Strategy for 2017-2021, which identified five priority areas, including unprecedented comprehensive reforms to move to a new stage of economic development with the intensification of structural changes in all sectors of the economy.

**Figure 1:** Uzbekistani economic mirror (UzStat, 2021)



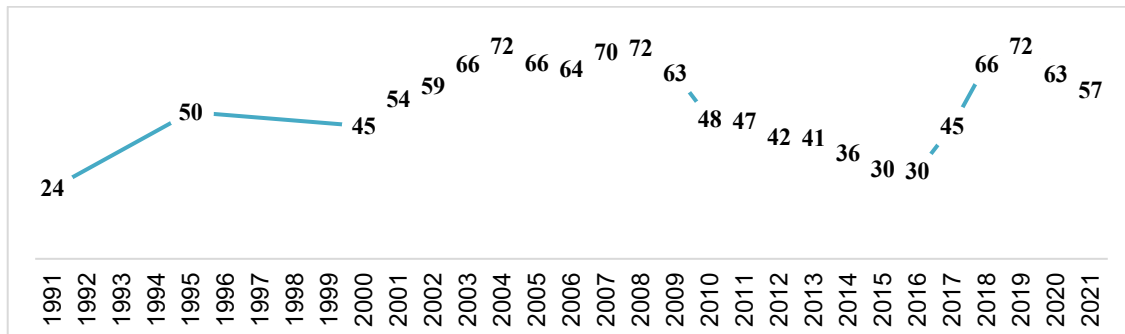
**Source:** Compiled by the author

The new government of Uzbekistan concluded that the country could not afford further to use the autarky approach based on the model of import substitution strategy. It shifted to a gradual liberal approach based on export promotion and marketization strategy.

At the same time, the country's foreign trade was not liberal enough, which led to the containment of the full use of all its possible reserves. The government began reviewing its foreign trade policy by removing restrictions on imports of products, simplifying import procedures, and reducing customs tariffs on imports (on average from 18.5% to 6.45%)

(World Bank, 2021), as well as encouraging various initiatives to boost export activities, which led to the change in trade openness index of the country, that can be seen in Figure 1.2.

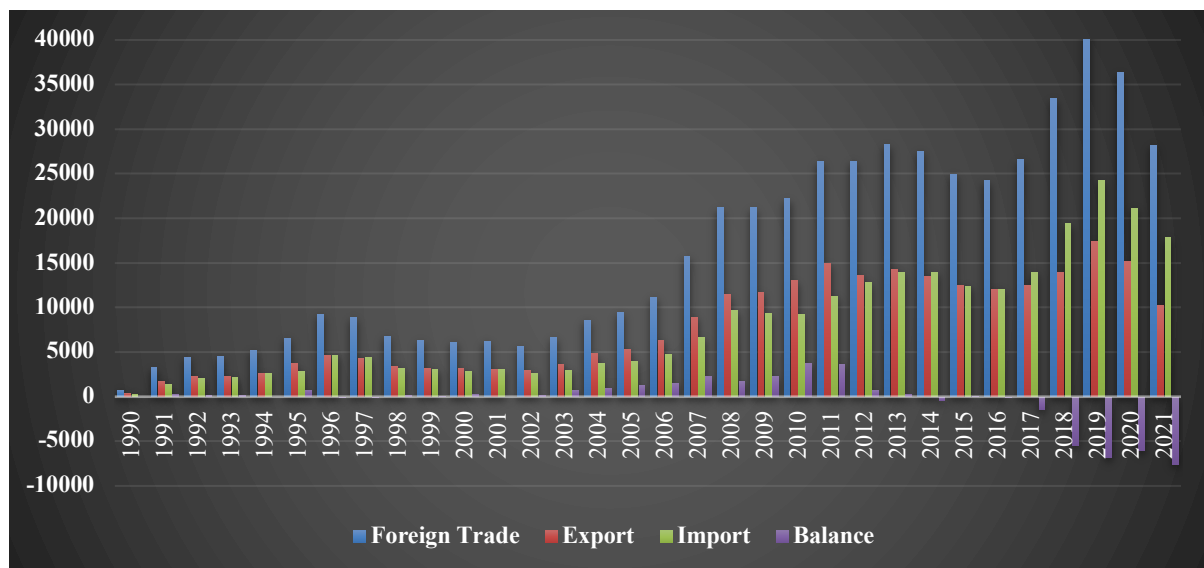
**Figure 2:** Trade openness index of Uzbekistan, % (foreign trade/GDP)



**Source:** State Committee of Uzbekistan on statistics

In the past, Uzbekistan restricted foreign trade to protect the domestic industry due to its defensive approach to self-reliance (autarky) – the import substitution strategy. Despite the short period since the start of reforms, the foreign trade of Uzbekistan faces drastic structural and volume changes.

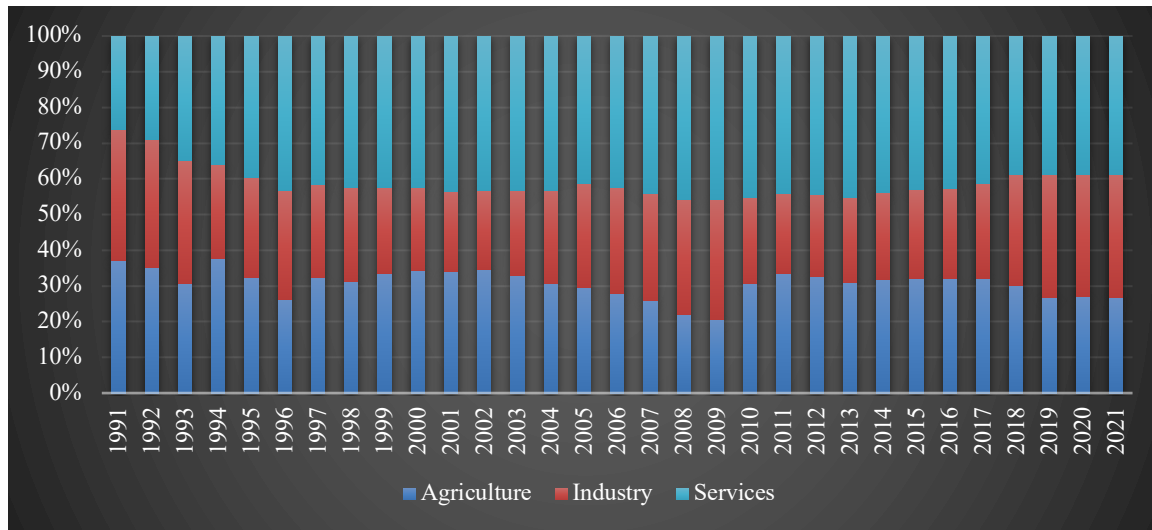
**Figure 3:** Foreign trade of Uzbekistan, 1991-2021, in thous., USD



**Source:** State Committee of Uzbekistan on statistics

For example, the total volume of foreign trade in 2020 increased by 37% and amounted to \$36.3 bln, against \$27 bln. in 2017. Exports for the noted period increased by 20%, while imports grew by 51%, which led to an unprecedented negative trade balance in history – \$6.0 bln. A similar situation was also observed in January-September 2021 when the country's foreign trade turnover increased only by 2.5% or \$0.7 bln compared with the corresponding period of 2020 and amounted to \$28.2 bln, exports decreased by 17.2% and amounted to \$10.3 bln, imports - \$17.9 bln (+18%). The foreign trade balance was negative - \$7.5 bln (-\$2.5 bln in 2020) (World Bank, 2021).

**Figure 4:** Structural change in the Economy since 1991 (Mamuka Tsereteli, 2018)



**Source:** State Committee of Uzbekistan on statistics

Together, current reforms have led to structural changes in the economy; in particular, the industry sector's share in GDP increased from 26.5% in 2017 to 34% in 2020 (World Bank, 2020), while the share of agriculture and services decreased significantly. Compared with 1990, the annual volume of industrial production increased by five times in 2020. (Figure 1.4.).

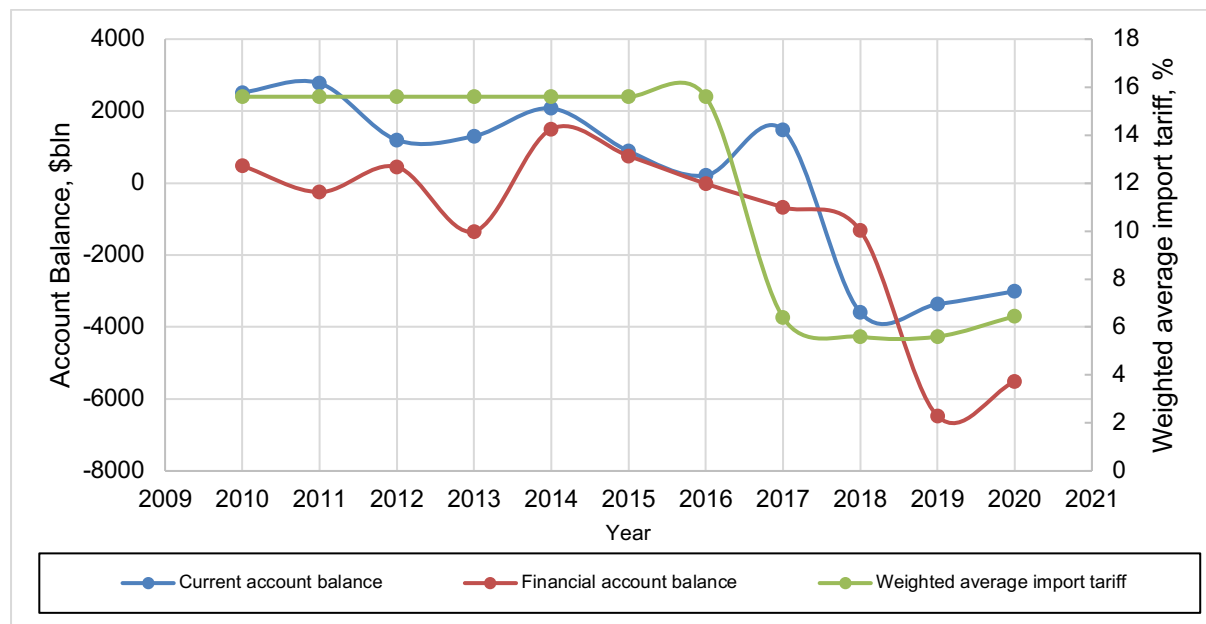
At the same time, currently, there is some concern about the continuing deficit of foreign trade due to the openness of the country's foreign trade. The central mystery is whether the ongoing reforms of openness to trade would lead to industrialization or deindustrialization and deficits in current accounts or balance of payments. This phenomenon and the continuing trend are of high interest to the author since trade openness may cause adverse effects at the macro level, such as foreign trade deficit, deindustrialization, unemployment, and at the micro-level, almost every economic entity, consumer, etc. The adopted changes in Uzbekistan's foreign economic activity to promote trade openness and improve industrial performance led to sharp structural and volume changes in the economy and foreign trade. They led to an outstanding negative balance in history – \$6.0 bln (Figure 1.5.).

Industrialization is one of the critical elements of long-term economic growth. Due to the ability of the manufacturing sector to provide employment, strengthen diversification and structural transformation, and stimulate the growth of other sectors such as services through linkages, many developing countries need to promote their industrialization. Uzbekistan is no exception. Industrialization is run by strategies (models), and two types of these strategies are distinguished as follows: import-substituting industrialization and export-oriented industrialization.

The import-substituting industrialization strategy stimulates local procedures to produce competitive import products by establishing high trade barriers on imported goods. Thus, such a strategy "creates artificial incentives (foreign trade and currency) to develop certain branches of the domestic industry to increase their competitiveness in the domestic market." It should be noted that the import substitution strategy is more associated with the selective (rigid) industrial policy because it involves direct state intervention in economic processes. Its implementation aims to develop national production, save gold and foreign exchange reserves, prevent inflation, regulate the domestic market structure, improve the country's

balance of payments, and prevent unemployment. It initially yielded promising results in several Asian and Latin American countries. Support was provided to labor-intensive industries, which corresponded to the structure of the factors of production in these countries. Impressive results were achieved, especially by governments with a capacious domestic market with relatively high per capita incomes. However, later, when these countries began to develop capital-intensive industries, some of them, which continued this strategy, faced several economic problems: economic growth slowed down, the budget deficit increased, inflation accelerated, and the standard of living of the population began to fall. Monopolization and narrowness of the domestic market, technological backwardness and high cost of export goods, and ubiquitous corruption negatively affected their economy. Many of these countries started to resort to external borrowing to modernize their economy. The winners could abandon the import substitution strategy for an export-oriented approach.

**Figure 5:** The impact of trade liberalization on accounts



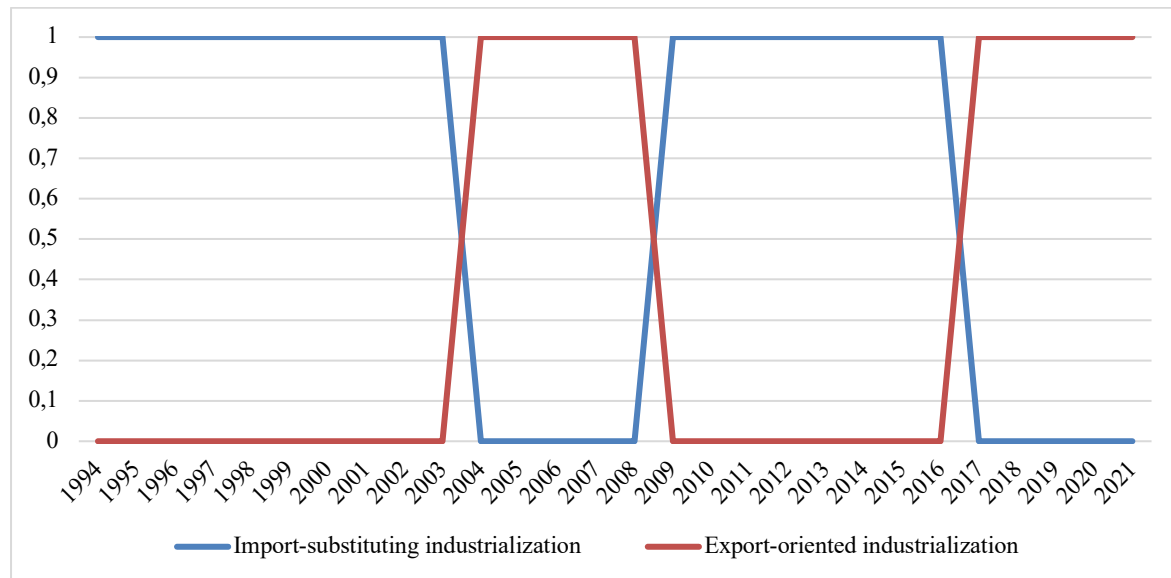
**Source:** State Committee of Uzbekistan on statistics (UzStat, 2021)

The export-oriented industrialization strategy is based mainly on the country's use of its comparative advantages by increasing the openness of the economy and realizing export potential. And yet, this does not mean a free foreign trade regime, as some industries can still be protected from imported products using the most influential industrial policy instruments. This strategy encourages competition in the domestic market and increases the demand for innovation and efficiency of resource allocation, and the quality of products. Since moderate customs tariffs have been established on imported products, it has resulted in the development of national manufacturing industries, an increase in exports, and the achievement of the goal of saving on the scale. Consequently, employment, labor productivity, and technological development are growing. The countries of East Asia, which made a timely transition from the import substitution policy to export orientation in the 1960s and 1980s of the last centuries, demonstrated fairly high rates of economic development. The reason is that they "used import substitution not as an independent mechanism of growth, but as a transitional policy of strengthening the national economy."

The Government of Uzbekistan has historically changed its approach from time to time under certain circumstances. At the beginning of its formation as an independent state, from 1994 to 2003, import-substituting industrialization had been used, while before the global financial crisis, an export-oriented industrialization strategy had been used. Due to the crisis, it

immediately switched to import-substituting industrialization, which continued until the start of full-fledged reforms in 2017. Starting in 2017, the new government of Uzbekistan decided to develop an industrialization strategy focused on the outside world (UzReforms, 2017). The author plans to assess which approach improved or hindered industrialization in this work.

**Figure 6:** Strategic directions of transformation of industrial policy in Uzbekistan (Asian Development Bank, 2019)



**Source:** Compiled by the author

This work aims to investigate the key determinants of industrialization in Uzbekistan and gauge whether the ongoing reforms, including selected approaches of development strategies and openness to trade, lead to industrialization or deindustrialization.

## 2. Literature Review

The study of the assessment of critical determinants of industrialization has been a theme of disagreement and validation by scientists, researchers, and politicians, and Uzbekistan is no exception. This section introduces the literature about (1) industrialization, (2) trade openness, (3) the association of different determinants that promotes industrialization, and (4) the most noticeable obstacles to industrialization.

### 2.1 An Overview of Economic Development of Uzbekistan

The author plans to briefly describe the types of the economy in Uzbekistan since its independence. At the time of independence, Uzbekistan's economy was characterized by a high degree of raw materials orientation, and the share of industry in GDP was only 17%. In the conditions of the command and administrative system that existed in the former Soviet Union, Uzbekistan could not determine its economic course independently. It only followed the instructions that came from "Moscow." Uzbekistan was given the role of a raw material appendage of the Soviet Union, a supplier of cotton fiber, natural gas, fruits, vegetables, etc.

The post-soviet development of Uzbekistan can be divided into two time frames: 1991-2016 and 2017 to the present day. The economy of Uzbekistan during the 25 years can be characterized as a planned, and state-managed distribution of resources and products,

followed by an economy focused on import substitution, hence with little competition in local markets. The government determined foreign exchange and interest rates. The economy developed due to heavy industry, great use of natural resources and physical capital, and subsidizing of inefficient state-owned companies (Popov, V., Chowdhury, A., 2005). Thus, Uzbekistan did not follow its comparative advantages in choosing its industries, so resources were misallocated and limited labor mobility. GDP growth started only from 1996-2%, 1997-5%, from 1998 to 2003 was about 4% (IMF, 2003).

From 2004 to 2007, partial liberalization of the economy was carried out in Uzbekistan: the official sum was devalued, the exchange rates equaled the market value, the costs of doing business were significantly reduced, and the pressure of the state and officials on the economy decreased. For the first time in the history of independent Uzbekistan, the economic growth of GDP amounted to 2004-7%, 2005-7%, 2006-8%, and 2007-10%, and exports in a short period increased four times. Some World Bank economists have emphasized the pace as a snail's or turtle's pace (Izvorski, I., 2022).

Due to the negative consequences of the global financial crises, in 2008, Uzbekistan returned to the import substitution model based on accelerated industrialization, which persisted until late 2016. Despite the stable macroeconomic performance (2008-9%, 2009-8%, 2010-9%, 2011-8%, 2012-8%, 2013-8%, 2014-8%, 2015-8%, 2016-6%) achievements are disappointing. About 20% of the labor force works as migrants in foreign countries (World Bank, 2016).

After the election, Sh. Mirziyoyev as the second president of the Republic of Uzbekistan at the end of 2016, the government of Uzbekistan launched a broad package of reforms aimed at liberalization the economy and allowing its currency to float freely, liberalizing trade, supporting entrepreneurship, improving its statistics, and issued a Eurobond debut, strengthened the independence of its central bank, introduced a new tax code, and transitioned to inflation targeting, and most importantly started investing more in labor-intensive sectors (Ruziev, K., 2021). Now Uzbekistan intends to work on reforming state-owned enterprises and capital account liberalization. In 2019, the British Economist Magazine named and declared Uzbekistan the most improved economy in the World.

## **2.2 Key Determinants of Industrialization**

In economic dictionaries and encyclopedias, industrialization always implies the transfer of the country's economy to industrial rails, a significant rise in industrial production share in the economy. The transition from a predominantly agricultural to a primarily industrial economy is associated with increased industry share in the economy's structure.

Representatives of classic economists, including Adam Smith and John Stuart Mill, ardent advocates of the doctrine of laissez-faire, which was born during the Industrial Revolution, mainly emphasized the role of free or nearly free trade regimes as the most optimal way of industrialization. While another representative of classic economists, Alexander Hamilton, persisted in the need for protectionism to industrialize the economy.

An assessment of studies conducted by different researchers related to industrialization shows that most economists have concluded that industrialization is seen as a source of employment and capital accumulation (Keynes 1936, Lewis 1954, Sen 1957, Tito 1970, Stanley 1972, Lempert 1973, Kuznets 1973), etc. Another group of scholars stated that moving from agriculture to manufacturing and further shifting to services is the process of economic development (Clark 1941, Kuznets 1957, Chenery 1979).

Kaldor (1967), Cornwall (1977), Rodrik (2008), (and Szirmai, 2015) called the manufacturing sector an "engine of growth argument.". This was confirmed by data on the current level of

production and the level of well-being of the nations, taking into account per capita income and the share of industrialization in total GDP. According to their findings, an increase in the percentage of manufacturing in GDP is the key to faster growth and economic development.

According to scholars L. Alcorta, N. McGregor, B. Verspagen, and Adam Szirma (2021), industrialization has two critical determinants: internal and external determinants. Local determinants consist of market size, consumption, investment, endowments, and human capital. In contrast, external determinants consist of openness to trade degree, capital account liberalization, depreciation of the national currency as the main currency of foreign trade, etc.

A group of scholars led by N. Haraguchi, B. Martorano, and M. Sanfilippo (2019) found that successful industrialization correlates to the country's high organizational stability, which can also be found in the characteristics of East Asian Newly industrialized countries. Market lead and state facilitated approach (Lin, 2021) would enable a certain level of industrialization, and a politically more powerful government would adopt more gradual reforms (Wang, 2014) toward better industrial upgrading.

Hausmann (2005) and Rodrik (2008) highlighted the significant role of economic policies and reforms in the industrialization of developing countries. Sachs and Warner (1998) and Ng and Yeats (1999) emphasized that the development of the state and the situation in the industry depend on the governance regulations by changing policy and strategic orientation.

Amiri (2019) also nominated a significant statement, who found that improving organizational efficiency in some economies improves the manufacturing sector's capabilities.

Professor Lin and Wang (2019) emphasized the state's role in structural changes and modernization of industry and noted the massive role of industrial policy in achieving the latter.

Another crucial key determinant was found by Greenwald and Stiglitz (2006). They stated that the depreciation of the national currency as the main currency of foreign trade might play a vital role in industrialization.

The guru scientist of industrialization D. Rodrik (2006), mentioned the central role of keeping national currency lower than the significant foreign trade currency in industrialization in the countries such as China and India.

In his production function theory, the author of one of the most famous theories, Cobb Douglas, emphasized the role of FDI as an essential key determinant of industrialization performance. Similarly, Megbowon (2019) found a significant relationship between FDI and positive manufacturing performance in his work.

In his work, Lall (1993) also stated the increasing role of capital flows in the industrial development of developing countries. This assessment is the same as the findings of Storm (2017) that investment in physical capital is central to increasing the performance of internal manufacturing capacity. Folarin's (2019) work mentioned a similar result, emphasizing the correlation between finance and industrialization.

### **2.3 Basic Trade Theories and Industrialization in the Context of Openness**

Modern trading theories triggered economic theories. Supporters of mercantilism advocated increasing exports and accumulating more savings for the future. Classical economists such as Smith, Ricardo, and Mill recommended trading what you are good at. The subject of trade openness is an old notion determined theoretically by its level of productivity given to the

absolute advantage theory of Adam Smith (1776) and comparative advantages (D. Ricardo, 1817) and by its relative endowment in factors of production according to the model of Heckscher-Ohlin.

The main message of classical economists was the importance of the government's role in determining the path of trade policy, which can be a critical factor in the well-being of its citizens. In the beginning, they advocated absolute advantage, which recommended using the decisive advantage of the country in particular skills, location, and production conditions. However, the absolute advantages theory has had tiny practical implementation in history. Adam Smith's view was corrected by his classical follower David Ricardo, who adjusted Smith's idea of free trade, moved further, and came to the concept of comparative advantages once unforeseen circumstances occurred. David Ricardo claimed that countries specialize in manufacturing lower production costs and competitive goods to expand foreign trade.

A century later, Swedish economists, Olin and Heckscher enriched the comparative advantage model with a new model, later named the Heckscher-Olin model, promoting the use of all local factors of abundance to organize export operations and import goods that are not enough in the local market. Heckscher – Ohlin model, a traditional trade theory, predicts that the trade openness approach accelerates many factors.

The trade theory of classical economists was modified by Nobel Prize winner Paul Krugman, who advised countries to mention economies of scale, which leads to the production of a particular product in large amounts at a lower average cost, which can compete with other countries in international markets.

Enriching the abovementioned theories, B.Abdukadirov (2022) stressed the need to develop an outward-oriented course utilizing local industrial endowments with a path toward intergradation into global and regional value chains, gradually improving the position in these chains in maximizing added value and accumulating knowledge.

At the same time, the works of following scientists like Balassa (1971), Michaele (1977), Krueger and Bhagwati (1978), and Edwards (1993) emphasized that countries who followed the import substitution approach could not catch up with advanced economies due to the absence of competition and incentives to increase the quality of local producers' product.

Simultaneously, works of scholars like Dollar (1992), Dollar and Kraay (2002), Dufrenot (2009), Edwards (1998), Frankel and Romer (1999), Greenaway (2002), Harrison (1995), Sach and Warner (1995) supported the hypothesis that trade openness improves economic performance.

"Openness" simply means "free trade," where all trade restrictions are eliminated. Pritchett (1996) defined "openness" as trade intensity, while Kyrre Stenses (2006) said that government intervention in removing the barriers, as well as Krueger (1978) concluded that trade liberalization could be achieved through introducing policies with less control.

The experience of some countries and the results of several other studies have shown that trade limitations by tariffs and taxes can contribute to growth Yanikkaya (2003). Similarly, Rodriguez and Rodrik (1999) found a positive effect of the average tariff on overall factor productivity growth.

Other groups of researchers support the conclusion that trade openness positively affects the expansion of the production sector. This result found only mild support in previous empirical studies (Fagerberg and Verspagen, 1999, 2007; Fagerberg and Schrolec, 2008; Rodrik et al., 2004; Szirmai and Verspagen, 2011), which states that trade stimulates the development of the production area.

David (1988) concluded that industrialization had progressed further in the outward-looking than the inward-looking economies. At the same time, a group of scholars such as Dijkstra (2000), Kim (2000), Choundhri (2000), Rae (2010), Cho and Yoon (2014), in their sector-specific studies, presented that there is a positive effect of trade openness on industrial sector development.

A similar statement was made by a group of scholars, including Muhammad Tahir, Imran Khan, Mario Arturo Ruiz Estrade, and Asim Afridi (2016), which stated that there is an excellent correlation between trade openness with industrialization and trade openness has a significant impact on manufacturing performance in the SAARC region.

From another hand, Fahad Muhammad Adamu and Ergun Dogan (2016) declared that trade openness has a significant and positive impact on industrialization in the long run and short run. The World Trade Organization (2003) emphasizes that trade openness will positively impact growth.

### **3. Research Methodology**

This section presents the data and research methods used in this work to investigate the key determinants of Industrialization in Uzbekistan. As we mentioned in the second section, based on the literature review results, the author found that policy change and strategy orientation, industrial policy, trade openness, national currency depreciation, FDI, wages, and taxes are the main key factors determining industrialization in Uzbekistan.

The author uses secondary data for the quantitative method and runs simple and multi-linear regressions. Secondary data are collected from the websites and statistical brochures of the State Statistics Committee of Uzbekistan, the World Bank, the United Nations, and CEIC. In addition to these, books, periodicals, journals, articles, magazines, newspapers, organizational reports, government policy documents, research reports, etc. The time trend from 1994-2020.

**Table 1:** Estimation technique of methodology

| <b>Methodology</b>                            | <b>Model Specification</b>                           | <b>Data Base</b>                                                          | <b>Nature of Observed Impact</b>                                                                                                                                                                       |
|-----------------------------------------------|------------------------------------------------------|---------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Inter-industry cross/panel section regression | (1) MVA growth is a function of various determinants | Various factors, including TO have significant effects on MVA performance | Various determinants, including a positive impact of trade openness to industrialization, are mainly obtained via scale benefits from comparatively advantaged sectors due to low factory price ratios |

$MVA=f(TO, Tariff, XR, INF, W, T, FDI, INO, etc).$

Industrial Policy, the trade openness index, average import tariff, exchange rates, inflation rate, average wage, tax rate, FDI, and industrial policy are independent variables. At the same time, the manufacturing value-added as a share of GDP is measured as dependable variables. The data used in the study was mainly collected from 1994 to 2020 years. Expected years of schooling, employment in industry, and gross fixed capital formations are considered as control variables.

For the qualitative method, to obtain primary data to cross-check with the results of the econometric analysis, the author organized a poll among 600 people, asking the following

question: Which of the following key determinants has the most significant impact on industrialization in Uzbekistan?

The author seeks to compare the results of the quantitative method with the qualitative approach to double-check the accuracy of determining the critical factors of industrialization in Uzbekistan.

**Table 2:** Variables

| <b>Independent (explanatory) variables</b>                               | <b>Depend variables</b>   | <b>Control variables</b>                         |
|--------------------------------------------------------------------------|---------------------------|--------------------------------------------------|
| Industrial policy: import-substitution and export-orientation strategies | Manufacturing value added | Expected years of schooling (human capital)      |
| Trade openness index                                                     |                           | Employment in industry (labor capital)           |
| Average import tariff                                                    |                           | Gross fixed capital formation (physical capital) |
| Exchange rates                                                           |                           |                                                  |
| Inflation rate                                                           |                           |                                                  |
| Average wage                                                             |                           |                                                  |
| Tax rate                                                                 |                           |                                                  |
| FDI                                                                      |                           |                                                  |

## **4. Data Analysis and Interpretation**

To achieve the specified objectives of this work, the author carried out work to identify the key determinants of industrialization in the case of Uzbekistan using quantitative and qualitative approaches of methodology.

Econometric simple and multiple linear regression is an effective tool for the scientific justification of the correlation between multiple factors and industrialization and other factors affecting industrialization.

The author, during this research, runs four various combinations of simple and multiple linear regressions to get more accurate data. The impacts of multiple factors on MVA in Uzbekistan are presented in Table 4.1.

1) Model one shows that the human capital, measured by expected years of schooling, has a significant and positive correlation with Manufacturing value-added and contributes to industrialization. One additional unit of human capital will increase 4.32 MVA at a 1% level of significance. Human capital has contributed to industrial value-added in different countries, including during the Industrial Revolution in England, German, and France, as well as today in China, Japan, S.Korea, and Uzbekistan is no exception in this list. This is also consistent with studies on the French (Squicciarini, 2015), English (Mokyr, 2020), German, and Portugal Industrialization processes. (Reis, 2005). Lucas (1988) also emphasized literacy rates complementing industrial processes to improve growth. At the same time, physical capital,

measured by gross fixed capital formation, has a significant and positive correlation with Manufacturing value-added.

2) In model two, the author once again confirmed the positive and significant correlation between human capital, measured by expected years of schooling and Manufacturing value-added, and came to the results according to which one additional unit of human capital will increase 4.94 MVA at a 10% level of significance.

3) Whereas model three verifies the positive and significant impact between industrial policy variable, human capital, and average import tariff with manufacturing value-added at a 5% significance level. At the same time, another positive and significant influence was found between physical capital, measured by the gross fixed capital formation, and manufacturing value-added at a 1% level of significance. In the case of industrial policy, it is a result of the shift from an import-substitution strategy to an export-oriented approach, which implies that when there is an increase in one unit element of industrial policy, there will be a 2.4 unit increase in MVA.

4) Lastly, model four verified the positive and significant correlation between human capital, physical capital, and average import tariff with manufacturing value-added, revealing a positive and significant correlation between trade openness and manufacturing value-added at a 10% significance.

**Table 3:** The impact of multiple factors on MVA in Uzbekistan (World Bank, 2022)

Depend variable: Manufacturing Value Added (MVA)

| Model                         | Model one          | Model two          | Model three         | Model four         |
|-------------------------------|--------------------|--------------------|---------------------|--------------------|
| Inflation                     | -                  | -0.004<br>(0.003)  | -0.000<br>(0.002)   | -0.003<br>(0.002)  |
| Expected years of schooling   | 4.32***<br>(1.23)  | 4.941**<br>(2.019) | 4.099**<br>(1.772)  | 4.574**<br>(2.075) |
| Industrial Policy             | -                  | 0.700<br>(1.211)   | 2.409**<br>(0.844)  | 1.350<br>(1.15)    |
| Average Import Tariff         | -                  | -                  | 0.328**<br>(0.133)  | 0.35*<br>(0.188)   |
| Gross fixed capital formation | 0.230**<br>(0.102) | 0.144<br>(0.101)   | 0.334***<br>(0.091) | 0.278**<br>(0.101) |
| Exchange rate                 | -0.000<br>(0.000)  | -4.77e<br>(0.003)  | -                   | 0.000<br>(0.000)   |
| Trade openness                | -                  | 0.067<br>(0.040)   | -                   | 0.066*<br>(0.038)  |
| Tax rate                      | -                  | -0.000<br>(0.001)  | 0.222<br>(0.149)    | 0.074<br>(0.180)   |
| FDI                           | -                  | -0.000<br>(0.000)  | -                   | -0.000<br>(0.000)  |
| Average Wage                  | -                  | -                  | -                   | -1.01e<br>(7.60e)  |
| Employment in industry        | -0.521<br>(0.43)   | 0.103<br>(0.467)   | 0.626<br>(0.477)    | 0.761<br>(0.503)   |
| Number of obs.                | 27                 | 27                 | 27                  | 27                 |
| R-squared                     | 0.73               | 0.85               | 0.86                | 0.90               |

Notes:

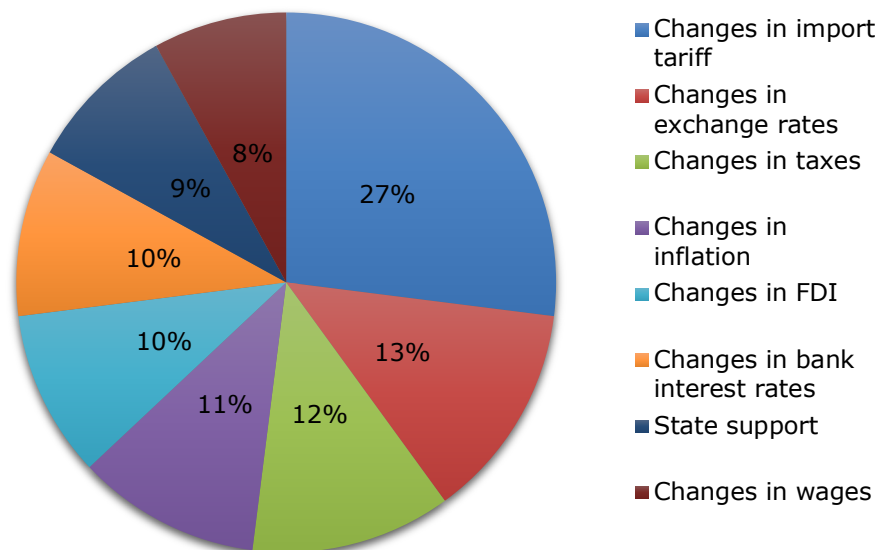
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*The key determinants of Industrialization in Uzbekistan*

1. Exchange rate: Nation currency rate of the foreign trade currency
2. Trade openness: Trade openness index
3. Inflation: Inflation rate
4. Tax: The tax rate
5. FDI: Foreign Direct Investment
6. Industrial policy: Dummy, export-oriented strategy = 1, import substitution strategy = 0
7. Average Import: Average statistic import tariff
8. Wage: Average wage
9. Expected years of schooling: Human capital, control variable
10. Gross fixed capital formation: Physical capital, control variable
11. Employment in industry: Labor capital, control variable
12. Robust standard errors are reported in parenthesis.

The four selected simple and multiple linear regressions emphasized the significance of human capital in the industrialization process of Uzbekistan. At the same time, thanks to the transition from an import substitution strategy to a strategy focused on the outward market, industrialization has taken place in Uzbekistan, and industrial policy played a valuable role. For the periods 1994-2003 and 2009-2016, the Government of Uzbekistan used the self-reliance autarky approach, while for the periods 2004-2008 and 2017-2020, an export-oriented strategy in developing the industrial sector of the economy. The physical capital and tariff instruments became practical tools in industrialization and remained a vital role. At the same time, there is a significant correlation between industrialization and trade openness in Uzbekistan, which partially corresponds to the conclusions of the second chapter – the literature review.

For qualitative methodology, the results of the conducted poll are presented as follows. According to the participants, the poll results are based on the participants' intuition and a long year of working experience.

**Figure 7:** What factors have the most significant impact on industrialization in Uzbekistan



**Source:** Primary data were collected by the author by polling officials

A poll question from people was taken by creating a group on instate messenger, telegram. The following question was asked among group members: Which factors significantly impact value-added production in Uzbekistan?

Answers were as follows:

- a) Changes in import tariff – 160 people
- b) Changes in exchange rates – 78 people
- c) Changes in taxes – 72 people
- d) Changes in inflation – 66 people
- e) Changes in FDI – 60 people
- f) Changes in bank interest rate – 60 people
- g) State support – 54 people
- h) Changes in wages – 48 people.

From Figure 7, we can see that changes in import tariffs will protect the local industries from direct competition with foreign companies and their products, according to the participants' perceptions. At the same time, changes in exchange rates and reduction of taxes are taking essential importance that might have the most significant impact on industrialization. Our findings from quantitatively and qualitatively research partly match.

## **5. Conclusion and Recommendations**

### **5.1 Conclusion**

Uzbekistan has a huge potential, and now, especially after the large-scale reforms, the country has a chance to realize this potential. The experience of many economies of the world shows that it is often necessary to carry out the most straightforward essential reforms to improve the business environment and form a challenging competitive environment to accelerate economic development.

After the election of the new leader – Sh, Mirziyoyev, as the second President of the Republic of Uzbekistan (late 2016), dramatic changes took place in Uzbekistan, and the reforms carried out in the field of changing economic policy and strategy orientation, as well as foreign economic activities, became one of the most dynamic in all the years of the post-Soviet development of the country.

The bulk of reforms resulted from the accepted strategy of actions for further development of the Republic of Uzbekistan for 2017-2021. Among the priority areas of economic growth and liberalization, special attention is paid to increasing the competitiveness of the national economy by expanding structural transformations, modernization, and modification of its important sectors.

This research examined the key determinants of industrialization in Uzbekistan between 1991 and 2020. The work used various variables such as human capital, industrial policy, trade openness, exchange rate, tax rate, FDI, average wage, labor capital, physical capital, manufacturing value-added, and others. The study found that industrialization is facilitated by human capital, physical capital, industrial policy, average import tariffs, and trade openness. The results of the research conducted within the framework of this work allow us to draw the following conclusions:

- 1) Change in Policy from a defensive self-reliance approach (autarky) to a gradual liberal approach was central. At the same time, disappointing results accompanied the first, but with a trade and budget surplus with stable macroeconomic indicators, and the latter with mixed.
- 2) The shift of strategic orientation from the import substitution strategy to the outward-oriented approach in the industrial policy was of paramount importance in the industrialization process and marketization. The author of this research B.Abdukadirov (2022), enriched the existing outward-oriented theories and stressed the need to develop an outward-oriented course utilizing local industrial endowments with a path toward intergradation into global and

regional value chains, gradually improving the position in these chains in maximizing added value and accumulating knowledge.

The study of the theoretical, conceptual, and strategic foundations of industrial policy has shown that it must be constantly improved in the current conditions of globalization to more accurately meet the requirements of sustainable development of the world's countries. Historical experience and modern processes of globalization of the world economy point to some limitations and disadvantages of existing industrialization strategies. Today, the issue of creating conditions for the effective integration of domestic companies into global value chains within an export-oriented industrialization strategy, which has its own scientific and methodological tools, is relevant.

The priorities of the gradual transition of the Republic of Uzbekistan to a new industrial policy to achieve industrial benchmarks can be divided into three stages. It is essential to create export-oriented industries and institutions for development in the first stage. There is a need to form an industrial and innovative small business sector focused on exporting finished products and intermediate products in the second stage. In the last step, the task of integrating large enterprises and companies into global technology networks and creating national brands is on the agenda.

The developed comprehensive science-based measures and recommendations on the use of effective industrial policy instruments to increase the level of export manufacturability and competitiveness of the national economy, as well as the integration of domestic enterprises into regional and global value chains, make it possible to use the existing industrial potential of the republic and meet the long-term interests of innovative and technological development of the economy.

3) The econometric analysis showed that human capital, measured by expected years of schooling, is positively allied with industrialization and can be considered an addition to innovation processes. Thus more intelligent nations export more sophisticated and varied goods in the international arena and tend to innovate. Developing countries should stimulate investments in human capital and related institutions to increase industrial and technological potential in producing and exporting complex goods. The production and export of complex goods certainly require an adequate level of human capital that stimulates innovation, which drives productivity, competitiveness, and growth.

Starting from 2017, the share of industry in GDP has increased significantly from 25% in 2016 to 34.4% in 2021 due to a reduction in agriculture. The industry's structure has partly changed. The production of relatively complex goods, such as textiles, clothing, chemical products, rubber and plastic products, and metallurgical products, has increased by the share of the processing sector. In contrast, food, beverages, and textiles have declined. The openness of trade has also led to an increase in employment in the industry sector of the economy from 13.5% in 2016 to 14% in 2021 (UzStat 2021) due to a reduction in the share of those employed in the agricultural industry. The openness to trade led to a decrease in the percentage of some regions' industrial performance, such as Kashkadarya, Surkhandarya, Syrdarya, and Fergana regions, which was expected due to the lower HDI index of the areas.

4) Ensuring that foreign trade and investment policies align with the industrial policy should be considered part of long-term industrial policy. Simplifying export and import procedures, lifting non-barrier tariffs, as well as a significant reduction of imports tariffs (on average from 18.5% to 6.45%) and eliminating restrictions for import and export products (quotas);

In general, the reforms are undertaken by Uzbekistan in foreign trade led to an increase in trade openness (TO index reached 61% in 2021 against 36% in 2016) and have no relationship with industrialization (MVA index reached 21.1% in 2021 against 16.4% in 2016), (UzStat, 2021) which is similar to the experience of Latin American states and common

intuition and the complete opposite of China's experience. Taken reforms to achieve greater openness of trade openness led to the beginning of an increase in imports compared to exports for the first time since 2000th and reached a \$6bln deficit in the 2020 year.

The reform carried out in customs and tariff regulation of Uzbekistan's foreign trade in 2017 can be considered cardinal. Along with the presence of unaccounted-for moments in it, the proposed further attempts to regulate this issue also have their drawbacks. The planned reforms in customs and tariff regulation should consider some essential principles presented in this study. The "soft" component of foreign trade liberalization is also crucial — its institutional aspect.

Starting from 2017, the share of industry in GDP has increased significantly from 25% in 2016 to 34.4% in 2021 due to a reduction in the percentage of agriculture.

The growth rate of the physical volume of industrial production has practically not changed, while the growth rate of agriculture production has decreased. In the period from 2010-to 2016, the growth of the agricultural sector was at least 6% per year, while from 2017-to 2021, this indicator averaged 2%.

The industry's structure has partly changed. The production of relatively complex goods, such as textiles, clothing, chemical products, rubber and plastic products, and metallurgical products, has increased by the share of the processing sector. In contrast, food, beverages, and textiles have declined. The openness of trade has also led to an increase in employment in the industry sector of the economy from 13.5% in 2016 to 14% in 2021 due to a reduction in the share of those employed in the agricultural industry.

Unfortunately, the reforms undertaken in the field of trade openness to industrialize the economy have been partially achieved in terms of quantity but not quality (the MVA index reached jumped from 16.4% in 2016 to 21.1% in 2021), but at the expense of the current and financial account deficits, which shortly should be covered not by gold exports but by exports of high-value-added products and services.

The choice of promising industries for the industrialization of the economy of Uzbekistan, based on the application of the methods of J.Lin and S.Mongi, R.Hausmann and B.Klinger with the author's additions, revealed that a significant reserve of industrialization lies in such industries as textile, leather and footwear, food and some branches of the chemical, construction industries, and jewelry industries. Thus, industrial policy, which encourages further diversification and deepening of processing of raw materials and components in the production and export of commodity groups with a high degree of realization of competitive advantages in Uzbekistan, will serve as a reliable source of export earnings. Customs and tariff policy should take into account the interests of these industries.

5) Elimination of the most noticeable obstacles to industrialization is possible only if the government combines single measures with other policy instruments in the market of goods and services, labor, capital, land, and technology was crucial for effective industrialization circumventing potential contractions between legislations. Insecure property rights, inefficient logistic chains, and monopolistic productions can be the main obstacles to boosting industrialization.

The effective inclusion of small industrial businesses and joint ventures of Uzbekistan in regional and global value chains requires further liberalization of foreign trade by certain principles and interests of priority sectors of the economy. Liberalization, in particular, should also concern the institutional component of foreign trade. Another potential efficiency for industrialization also gained from the increase of SOE productivity and the creation of fierce market competition among market players.

The competitive struggle of enterprises within the industry is a crucial market phenomenon that provides incentives for producers and encourages them to act in the interests of consumers. The taken reforms at the beginning of 2017 and 2018 led to the formation of conditions that ensure the development of competitive forces and counteract the processes of concentration and monopolization, ensure the effective functioning of the economic system, and are essential for the state in Uzbekistan.

The analysis of competitive methods shows that the main tools are (1) price competition, (2) loyalty to the brand, and (3) high quality of goods and services provided. The SOEs have increased their productivity by (1) reduction of production and transaction costs, (2) introducing marketing strategies, and (3) staff training.

Based on the analysis of competitive methods, it can be noted that most enterprises use the mechanism of price competition, reducing costs and setting low prices, which is characteristic of the pure competition model. There are also exceptional cases of models of imperfect competition, including monopolistic competition and oligopoly.

The author found the following mechanisms that accelerated industrialization due to fair competition development:

- improvement of legal and organizational mechanisms that created favorable conditions for the development of competition;
- reduction of the share of state participation in the economy;
- improvement of antimonopoly regulation, formation of effective mechanisms of tariff regulation and control;
- the creation of competitive mechanisms in the organization of public procurement.

According to the results of the study, the most significant achievements in the field of competence development can be identified:

- increase in the share of exports of Uzbek enterprises in the total volume of industrial output;
- the creation of conditions for the development of industrial enterprises capable of effectively competing with foreign companies in the domestic market;
- expansion of the scale of Commodity exchange trading.

We must admit that this is a brief period (2017-2021) to make a full-fledged conclusion on whether industrialization has been achieved or not. The depreciation of the national currency as the main currency of foreign trade played a vital role in industrialization. Thus, the gradual depreciation of the national currency towards the market exchange rate (from 4200 to 8100 soums) by shifting from a fixed to a floating regime and removing restrictions on the free conversion of the national currency into a foreign currency (quotas). Rejection of the system of mandatory sale of export currency earnings for exporters. At first, it decreased from 50% to 25%, and in 2017, this system was abandoned entirely.

By reducing corporate tax rates, the Government of Uzbekistan further motivated the manufacturing industry to expand, facilitating the industrialization process in the economy. The regression model found the direct correlation between tax rate and value-added manufacturing level, which shows the reverse impact for two variables. It can be explained that by lowering taxes, Uzbekistan achieved higher industrialization.

6) High industrialization tempo was possible thanks to physical capital accumulations in Uzbekistan. This is very characteristic, especially considering that Uzbekistan represents the developing world. The experience of the developing world shows that at an initial stage, most countries prefer to invest in physical capital than human capital, and Uzbekistan was not an exception. East Asian newly industrialized countries followed this miracle. But to achieve high economic growth, Uzbekistan also needs human capital and physical capital. And this will lead to an increase in total productivity factor to its industrialization.

7) The conducted analysis of the development of the non-primary direction of the republic's foreign trade, tiny businesses, foreign investments, and free economic zones revealed several remaining problems and industrial reserves for potential mobilization. At the same time, a comparative analysis of the issues of the development of domestic FEZs with the main shortcomings of state policy in this area, based on world experience, showed that most of these problems are similar.

The global best practice offers several fundamental principles and cases for the successful innovative and industrial development of the FEZs in Uzbekistan. These principles are little considered in local legislation, which requires further work facilitation in this direction.

There is a global best practice of innovative industrial development of free economic zones, the implementation of which is considered appropriate in the conditions of Uzbekistan, taking into account local specifics. This, in particular, concerns such aspects as determining their location for commercial and economic reasons, using rational land use and zoning rules, creating a reliable institutional and legal environment, identifying several priority sectors for development within the FEZ, granting institutional autonomy to zone administrations, making private and public-private FEZs, encouraging trade and industrial relations of zonal and local enterprises, setting clear goals and objectives for zones, timely monitoring of their activities, sober benchmarking and the development of competition between them.

The assessment of the degree of manufacturability of the commodity structure of Uzbekistan's foreign trade (without services) using international classifications revealed that the republic's exports are insufficiently technological and dominated by raw materials and low-tech goods that do not meet the requirements of sustainable development. At the same time, 56% of the republic's imports account for medium- and high-tech goods, which can be considered a more or less satisfactory phenomenon.

8) Current trends in trade in goods and services within the Global Value Chain indicate the need to specialize in the production of any goods or components and develop services. Countries such as India, the Philippines, Ireland, China, and others are actively integrating into these chains and becoming attractive for sourcing services. With the proper construction of industrial policy and creating the necessary favorable conditions, Uzbekistan can also take advantage of this situation by joining the chains of providing business services such as call centers, accounting, legal, medical, etc.

9) Testing several hypotheses to identify the characteristic features of enterprises in developing countries participating in the Global Value Chain confirms the existence of huge advantages from the creation of such enterprises. They have the potential to become the engine of industrial and technological development of the economy while making a considerable contribution to increasing the level of employment and labor productivity. Therefore, the activities of such enterprises should be stimulated by effective industrial policy instruments to maximize their contribution to economic growth.

The matrix developed within the framework of this study to identify the degree of participation of a country in the Global Value Chain serves as a relatively simple and convenient analytical tool in the absence of relevant statistical data. Its application in the context of Central Asian countries on the example of four groups of goods shows that the potential for the development of regional value chains for them is practically not involved. In this regard, it is advisable to include this issue in the agenda for further development of the region.

## **5.2 Policy Suggestions**

The following implications can be drawn based on the positive and significant effects of human capital, physical capital, industrial policy, average import tariffs, and trade openness.

1) The Government of Uzbekistan should pay special attention to allocating investments in the education sector and increasing the prestige of teaching and pedagogical personnel and social protection. The Ministry of Public Education, Ministry of Higher and Secondary-Specialized Education, and Ministry of Innovation Development are recommended to develop human capital as a more intelligent nation with more product knowledge and create more innovative ideas and products.

2) The Government of Uzbekistan should consider more physical investment in hard infrastructure through budget financing, sovereign lending, provision of highly concessional lending, and, most importantly, implementation of infrastructure projects with the introduction of public partnership instruments to bridge the infrastructure gap, as well as innovative financial instruments like put call options agreement, liquidity enhancement mechanisms, guarantee mechanisms, bridge to bond financing, energy repurposing and transition initiatives.

3) The Government is proposed to adopt the Law of the Republic of Uzbekistan "On Industrial Policy," which will define the procedure for supporting industries and evaluating the effectiveness of such support. The Law should reflect such aspects of industrial policy as goals, objectives, and principles, participants and their powers, support tools, financial, information and consult staffing policy, and issues of stimulating foreign economic activity of business entities (including those integrated into the Global Value Chain), support through public procurement, as well as regional and other institutional aspects (free economic and small industrial zones, industrial clusters, etc.), deadlines, responsibilities of participants and evaluation of the effectiveness of policies, etc.

The Ministry of Investments and Foreign Trade is recommended to skillfully use industrial policy tools to further increase the degree of industrialization of the economy of Uzbekistan precisely by attracting export-oriented enterprises with foreign capital, establishing high-value-added industries, and gradually including local enterprises in global value chains. It is essential to attract and encourage foreign direct investment to produce and export certain technological goods.

4) The Ministry of Economic Development and Poverty Reduction of the Republic of Uzbekistan is recommended to develop and timely use of such industrial policy instruments as the reduction of import tariffs for raw materials and intermediate goods, the introduction of schemes for the return of import duties on exports, programs that encourage industrial cooperation between local enterprises, for example, by creating industrial complexes based on the experience of China and S.Korea, and between them and foreign enterprises, the creation of investment/export promotion agencies and inclusion in their functional responsibilities to assist in the development of cooperative ties between enterprises, the creation of free economic zones and export processing zones, the implementation of programs to support the improvement of the quality of products within the framework of cooperative ties, etc. These measures are necessary for integrating local enterprises of developing countries into regional and global value chains. The Government of Uzbekistan should recognize that trade policy is part of a long-term industrial policy, and their flexibility is essential.

5) Global value chains are not only characterized by trade in goods, but also their share in trade in services is growing. With the proper construction of industrial policy and creating the necessary favorable conditions, Uzbekistan can also take advantage of this situation by joining the chains of providing business services such as call centers, accounting, legal, medical, etc. Further training of highly educated specialists with knowledge of English will contribute to inclusion in the global services industry by creating telephone call processing centers and the provision of medical, legal, accounting, personnel, administrative, and other business services. The emphasis on the graduation of highly educated specialists in computer programming, ICT, and other related areas is of no minor importance in this process. The Customs and Tax Committee should encourage processing activities in the customs territory (tolling operations)

to promote Uzbekistan's exports. In this matter, enterprises with foreign capital should play the role of a locomotive.

6) The Chamber of Commerce and Industry of Uzbekistan is recommended to prepare some recommendations on adopting relatively low tariff and non-tariff barriers to trade, preferential access to large sales markets, improved business environment indicators implying low transaction costs for business, stability of macroeconomic development, the efficiency of state institutions, speed and reliability of supply chains and overwork.

Similarly, the Antimonopoly Committee of the Republic of Uzbekistan is advised to stimulate competition between enterprises in the domestic market, which will create the necessary atmosphere for innovation, modernization of production, cost reduction, and improvement of the quality of goods and services produced and provided by them. With the effective implementation of the following and other measures, Uzbekistan can create new industries with high competitiveness in the world market, thereby ensuring the diversification of production and export of industrial goods with a high degree of manufacturability. This, in turn, will accelerate the development of both the industry itself and related sectors. This will ultimately increase the pace of sustainable economic growth and its anti-crisis potential.

The Government should also take the following steps to integrate local enterprises (mainly small businesses) into global value chains:

- organize trade fairs, conferences, forums, advisory centers, or online platforms to overcome information asymmetry between multinational enterprises and local small businesses;
- assist in strengthening the financial sustainability of local enterprises by financing supply chains and providing financial skills training to their personnel;
- encourage cooperation and clustering among small businesses to increase their production capacity and know-how;
- to help small businesses meet standards and obtain certificates, coordinate local and international standards, and create state certification systems to reduce the burden on these enterprises in obtaining certificates;
- provide training for employees of small businesses and provide them with technical assistance in the field of professional development and certification;
- to make the geographical location advantage by ensuring macroeconomic stability, market openness, and the rule of law;
- to create technology centers and business incubators in the field of ICT to increase the level of business operations in the country;
- promote cooperation and dialogue between universities, research institutions, the private sector, etc.

7) The Ministry of ICT is proposed to develop a roadmap for further penetration of the Internet into the business environment, the creation of e-government, as well as other steps for computerization and internalization of all spheres of activity, will not only help Uzbekistan to enter the global value chain adequately but also to reduce transaction costs for business, increase labor productivity, which will affect the economic growth of the country.

8) In the conditions of deterioration of the foreign economic activity, the implementation of targeted, practical measures aimed at strengthening the comprehensive support of exporting enterprises from the state, expanding the markets for the sale of goods, and increasing the competitiveness of domestic products is becoming critical. To simplify trade procedures and improve the institutional infrastructure to support exporters, the following measures should be taken:

a) creation of a specialized Export-Import Bank of Uzbekistan with the involvement of funds from the Fund for Reconstruction and Development of Uzbekistan based on the existing Fund for Export Support of Small Businesses and Private Entrepreneurship;

b) expanding the functions of individual structures of the MIFT and the Ministry of Foreign Affairs in terms of conducting research on the markets of partner countries and foreign sales needs in general, assisting in finding foreign partners and organizing meetings with prospective partners, analyzing the production sector of interest in the country where there is a diplomatic representation of Uzbekistan;

c) creation of a particular working body on trade facilitation. For the full implementation of reforms related to the development of trade institutions, national committees for simplifying trade procedures are being established in many countries, both in chambers and committees and autonomous structures under trade ministries. Such committees operate in more than 30 countries and are supported by the regional commissions of the United Nations, UNCTAD, and the World Bank. These committees act as advisory bodies that assist in simplifying trade and transport procedures, studying international legislation and best practices in trade and transport regulation, developing recommendations, and ensuring maximum transparency in trade and transport issues. The essence of the committee is to unite the interests of the state, the private sector, banks, forwarding companies, state companies, associations, customs services, various ministries, and other participants in foreign trade.

The application of this practice in Uzbekistan will make it possible to identify and eliminate institutional problems in foreign trade promptly, create the ground for regional cooperation in the trade and transport sphere, harmonize national legislation with international rules in the trade sphere, and gradually prepare the country for WTO accession (for example, through the implementation of the principles of the WTO Trade Facilitation Agreement signed in Bali in 2013 and entered into force in 2017). The Committee can be funded both by the State and with the participation of the private sector, international organizations, and donors through its projects and tools;

d) reduction of costs for transport and logistics services. Weak demand for exported industrial products of the republic is exacerbated by high transport costs, poor development of logistics services, low diversification of foreign trade routes, and low integration into international infrastructure. The transport companies of the republic are mostly uncompetitive in the global road transport market, unable to compete with the operators of Russia, Turkey, Kazakhstan, and Iran.

There is a small number of transport companies operating in the republic, there are restrictions on the work of foreign carriers, and due to limited competition, high prices for services. Taking into account these factors, it would be advisable:

- adopt a law on international road transport in the Republic of Uzbekistan and the transit of goods through the territory of the republic, which should regulate the issues of international road freight transport and transit of goods, the legal status of transit cargo carriers, to streamline the conditions of entry, stay and departure of vehicles of other countries;
- to recommend the companies "Uzbekistan Temir Yullari" and "Uzbekistan Airways" to take measures to increase the number of equipped cargo transshipment points from one mode of transport to another and their proper equipment, taking into account the needs of exporters;
- MIFT, the Ministry of Economic Development and Poverty Reduction, JSC "Uzbekistan Temir Yullari," JSC "Uzavtoyul," JSC "Uzbekistan Airways Yullari," the State Customs Committee, and other interested government bodies to take measures to amend the requirements for the types of modes of transport used (railway, auto, air transport) when exporting products, based on the location of production facilities and the development of transport infrastructure in the regions of the republic;

e) MIFT, the Ministry for the Development of Information Technologies and Communications, the State Customs Committee, the National Bank of Foreign Economic Activity, and other interested agencies to take measures to expand the range of electronic services for exporters united in a "single window" (introduction of online services for the payment of customs duties

and state duties (SCC); submission of applications for licenses and certificates of origin (SCC, MIFT); request for financial support for exports (National bank); informing about administrative obstacles to exports in Uzbekistan and abroad (MIFT, trade missions of the Republic of Uzbekistan in other countries); service of operational consultations on export issues.

To this end, it is proposed to:

- create a single Portal of foreign economic information on the Internet within the framework of the existing electronic foreign trade platform UzTrade and the websites of trade missions of the Republic of Uzbekistan (MIFT);
- development of the Internet service of information and consulting assistance to national exporters on export financing in the "single window" mode (National Bank of Foreign Economic Activity of the Republic of Uzbekistan);
- the creation of a platform for dialogue with exporters (the hub of exporters or council/association of exporters) online, in particular, to conduct a survey and receive feedback from exporters regularly, carried out within the framework of the national study of exporting organizations (both existing and potential), for subsequent updating and adjustment of the steps taken (MIFT, etc.).

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