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The Economy of Tajikistan: Thirty Years After Dissolution of the Soviet Union

Mirzobobo Yormirzoev





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The Economy of Tajikistan: Thirty Years After Dissolution of the Soviet Union

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Abstract

This paper examines the economic trajectory of Tajikistan over the thirty years following the dissolution of the Soviet Union, highlighting the nation's unique challenges and gradual progress. Tajikistan faced severe hurdles during its transition from a centrally planned to a market-based economy, compounded by a civil war that further disrupted economic and political stability. Despite initial economic downturns marked by hyperinflation, output decline, and reliance on external aid, the country achieved gradual recovery through reforms in privatization, agriculture, and energy production.

Key findings include the pivotal role of migrant remittances in bolstering household incomes and stabilizing the national economy, alongside the persistent challenges of poverty, income inequality, and trade deficits. The paper also explores sectoral dynamics, focusing on agriculture's recovery through land reforms and crop diversification, and the energy sector's reliance on hydropower, including major projects like the Rogun Hydropower Plant. Additionally, it assesses the increasing influence of Chinese investments and regional trade integration efforts.

While Tajikistan has made strides in economic growth and stability, the study underscores the need for diversification, industrial modernization, and demographic management to ensure sustainable development. The paper concludes with an outlook on Tajikistan's economic prospects, emphasizing the strategic importance of infrastructure projects, regional cooperation, and policy reforms to unlock the nation's full potential.

Keywords: economic growth; agriculture; energy; migration; remittances; transition economy; Tajikistan; Central Asia: former Soviet Union.

JEL codes: O1; O4; Q1; Q4; F2; R1; R5.

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1. Introduction

More than three decades ago the Soviet Union, the largest nation with communist ideology and central planning, ended its historical existence and split into fifteen independent republics. Its peaceful dissolution should have provided ample opportunity to its successors to opt for an alternative pace and scale of political and economic transformation in which principles and rules of democracy, and modern capitalism could be successfully implemented. Yet such pace and scale had different historical precedent in the region. While in majority of former Soviet countries transition took place relatively less painful, the situation with transformation of an old political and economic system to a new order remained specific in the Central Asian Republic of Tajikistan.

Prior to the collapse of communism, Tajikistan was one of the poorest countries in the Soviet Union. In 1990 GNP per capita accounted for 1,130 dollars which was more than two times lower as compared to the all-Soviet indicator.¹ By the end of 1989 more than half of population lived in poverty (Pomfret, 2019). Being a supplier of primary products, mainly cotton to the Union economy, Tajikistan's economic well-being was ultimately supported by donations and other forms of assistance by Moscow. In fact, under such initial conditions, Tajikistan encountered

colossal challenges in creating a market-based economy. On the other hand, Tajikistan did not have a history of nationhood; it was part of some feudal states in Central Asia until its modern area was incorporated into the Russian Empire and afterward the Soviet Union.

The open civil war in 1992-1997 further compounded transition challenges and uncertainties. Thanks to local and international peacebuilding efforts an agreement on national reconciliation and peace was signed in 1997 which had been important for post-conflict recovery and development of Tajikistan (Heathershaw, 2009).

The political developments in Tajikistan over the past three decades have profoundly shaped its political economy of development. Emerging from a devastating civil war (1992–1997), the country transitioned into a highly centralized governance. This centralization of power has become a defining feature of Tajikistan's governance, deeply influencing the nation's economic trajectory, state-society relations, and development outcomes.

Postwar reconstruction efforts and international aid played a dual role in stabilizing Tajikistan while inadvertently reinforcing centralized gov-

ernance. As Markowitz (2012) discusses, the current regime effectively leveraged postwar dynamics to consolidate power and centralize decision-making within key state institutions.

The legacy of Soviet central planning continues to resonate in Tajikistan's economic policies. Kalinovsky (2016) notes that the Tajik School of Economics emerged during the Soviet era as an effort to adapt Moscow's directives to local realities, particularly concerning labor and population management. However, in the post-independence period, these local adaptations have given way to a more centralized and less flexible policy framework, often shaped by the demands of international financial institutions and donors.

These political changes have had significant implications for Tajikistan's development trajectory. The state's focus on large infrastructure projects, such as the Rogun Hydro Power Plant, reflects a preference for high-profile initiatives that consolidate power rather than investments in social sectors like education and healthcare. At the same time, the heavy reliance on remittances

from labor migrants underscores structural weaknesses in the domestic economy, where political considerations often outweigh long-term economic planning.

There exists an extremely high level of government involvement in the economy. Another specific characteristic of the Tajik economy is related to a relatively lower standard of living for most people, although poverty fell from over 83% in 2000 to about 31% in 2015.² The size of the informal sector of the economy is large and Tajikistan remains immensely dependent upon external loans and migrants' remittances.

This article examines economic achievements in Tajikistan since independence. The first section reviews economic performance of the Tajik republic and the second analyzes the two major sectors of the country. Special attention is focused on migration and remittances, which will be touched on in section three. Section four discusses the future of Tajikistan's economic prospects. The last section concludes.

² Pomfret, R. (2019) *The Central Asian Economies in the Twenty-First Century* (p. 183) . Princeton University Press.

¹ Pomfret, R. (2019) *The Central Asian Economies in the Twenty-First Century* (p. 11) . Princeton University Press.

2. Economic Performance in Modern Tajikistan

2.1. Economic Performance during the 1990s

As Tajikistan became independent at the end of 1991 there were several transition-related shocks. First, Tajikistan had to dismantle central planning and create a market-based economy. The second challenge referred to mitigating consequences of Soviet-built supply chain disruptions and finding alternative ways. The last issue was to overcome hyperinflation stemming from price liberalization and single currency use in the economy. However, the dire civil war of 1992 - 1997 in the country significantly slowed down the implementation of transformation policies, and transition went indeed severe in Tajikistan.

Table one presents dynamics of the two key macroeconomic variables of the country. In 1992, real GDP fell by about one-third, the largest decline in output compared to other Central Asian republics. The negative growth rate was halted only by 1997 and much of the 1990s evidenced a period of poor macroeconomic performance. By the start of 2000 Tajikistan was able to achieve only 44% of its pre-independence output growth rate accomplishment, while in other neighbouring countries of the region this indicator on average accounted for over 70% of their Soviet-era GDP performance (EBRD, 2000).

Soaring prices referred to another important macroeconomic issue in Tajikistan. The first two years of independence witnessed a sharp increase in consumer prices. Although inflation fell by a two-digit number after the second half of the 1990s, its negative impact on people's well-being still remained substantial.

With respect to public finances that are reflected in table two, one could notice that the budget deficit tended to decrease from 7% in 1995 to 3% in 1999. On average, the public spending varied from 19% to 17%, whereas its revenue reached its highest value in 1997 at 15% compared to output.

The disintegration of the Soviet economy made Tajikistan to implement its external trade relations from the outset by finding new partners both in post-Soviet space and in other geographic locations. On the other hand, being a supplier of raw materials, in particular, cotton Tajikistan had limited opportunity to benefit from international trade as it had to import practically numerous goods, including food, oil, and gas from the rest of the world. The trade balance for selected years shows a deficit. However, in certain periods the country experienced a surplus. This was mainly

due to the economic aid received by Tajikistan from international donor agencies and rich nations (table 3).

In short, despite the drastic fall of output and spiraling inflation during the period of 1992-97, Tajikistan retained relatively better fiscal consolidation and had a positive foreign trade balance in some years of transition (IMF, 2022).

2.2. Economic Performance in the Twenty-First Century

By the start of the twenty-first century, the transition from central planning to a market-based economy in Tajikistan ended. Negative trends in growth were subsequently replaced by positive output performance. Yet, such economic fortune in part was due to the global resource boom affecting primary energy exporters of the post-Soviet region: Russia and Kazakhstan which had a strong demand for foreign labour for their growing economies. Tajikistan, as a key supplier of labour to resource-rich countries in the region, in particular, Russia reaped benefits from this economic situation. On the other hand, favorable prices for commodities affected Tajikistan indirectly, as it remains an important exporter of aluminum in the world market (World Bank, 2023).

Table four reflects output performance and price dynamics since 2000. Real output growth

was impressive, especially in 2003 and 2004, as the country's GDP rose by more than 10%. For other periods, it ranges from 3.9% in 2009 to 4.5% in 2020 and 2022 accordingly. The 2009 performance could be a result of the global economic crisis, which indirectly affected the Tajik economy. As for a relatively lower output performance in 2020 and 2022, one could attribute it to the pandemic and ongoing war between Russia and Ukraine.

Changes in price level persisted differently. With annual inflation of 32.9% and 38.6% in 2000 and 2001, it was running at 7.9% and 6.5% in recent years, albeit at varying rates in different time periods.

Despite certain economic achievements, the picture with respect to income inequality remains grim. According to the World Bank data, the Gini coefficient, as a measure of income distribution across a population of a country, increased from 29.5% in 1999 to 34% in 2015 (table five). This reflects the fact that income inequality in Tajikistan has shifted to a relatively higher income gap between different social groups.

Another measure of economic well-being is related to GDP per capita. As the table five shows Tajikistan reached its 1992 level only by 2015, i.e. twenty-three years after its independence. Compared to 1992, per capita income fell by 45% in 1995 and 48% in 1999 accordingly.³ Indeed, this

3 Author's calculations based on table five.

could have a significant effect on people's quality of life in terms of having regular access to better nutrition, education, and healthcare services.

Lastly, life expectancy as an indicator of health status was at its lowest in the late 1990s and after 2003 it started to rise, albeit it decreased to 67 years in 2020 compared to 70 years in 2018. Tajikistan ranks 179th in the world and its stance is along with other low-income nations in Africa.⁴

With respect to fiscal policy, table six indicates that government revenue and expenditure are maintained at an acceptable macroeconomic level. In 2012 and 2014 the Tajik authorities managed to run a small budget surplus, while its deficit has been most apparent in the last two decades, with - 6% in 2000 to - 2% in 2022 (table six).

A market-based economy provides plenty of opportunity for Tajikistan to actively trade with the rest of the world. Export from Tajikistan increased from US\$785 million in 2000 to US\$2,150 billion in 2022, a surge of 37%. A similar tendency is seen as regards to the country's import: it increased six-fold in 2021 compared to 2000. Indeed, it shows that Tajikistan has a high degree of openness. However, the trade deficit faced by the country rises constantly from – US\$276 million in 2004 to – US\$2,060 billion in 2021 (table seven). The expansion of the deficit

is likely the result of the country's inability to produce all goods needed for domestic use, and demand satisfaction is maintained with growing import from other countries.

Thus, the twenty-first century brought certain of improved economic conditions to Tajikistan compared to the 1990s, with steady economic growth reflected in rising per capita income and low inflation. Public finance and health measures have remained adequate in the country. Despite the widening trade deficit Tajikistan has been active in international trade relations.

However, one needs to emphasize that the industrial sector in Tajikistan remains constrained by limited diversification and significant structural challenges. The country's economy is predominantly reliant on agriculture and a narrow range of industrial outputs, such as aluminum and hydroelectric energy. Despite recent growth in industrial production (up 11.5% in early 2024), the sector faces hurdles, including outdated technology, insufficient access to raw materials, and power shortages. For instance, limited domestic production of essential inputs, such as oilseeds for vegetable oil and cotton for fiber, hampers capacity growth. Additionally, frequent power outages further disrupt industrial operations, especially in energy-intensive sectors like mineral fertilizers and cement production.

⁴ World Bank Online Database, available at <https://data.worldbank.org/indicator/SP.DYN.LE00.IN>, accessed 20 January 2023.

Efforts to diversify have focused on light industries and food processing, but competition from imports often undercuts local products. The government has identified industrialization as a priority under its 2022-2026 strategy, aiming to shift from an agrarian-industrial economy to a more balanced industrial-agrarian model. However, achieving this requires significant improvements in infrastructure, investment climate improvement, and education systems to address the acute shortage of skilled labor for the industrial sector.

Challenges are compounded by limited export markets and external trade barriers. For example, neighboring countries like Uzbekistan have developed local industries that reduce demand for Tajik exports, such as cement, while increased transit fees in Afghanistan make coal exports less profitable.⁵

Another important aspect of the modern performance of the Tajik economy is its reliance on China which has grown significantly over the past two decades, particularly through Chinese investments, trade, and infrastructure projects. China is Tajikistan's largest foreign investor, with cumu-

lative investments exceeding \$4 billion between 2007 and 2023, of which \$2.6 billion were direct investments. Key sectors include mining (gold, antimony, and silver), energy, construction, and telecommunications. Chinese-backed projects, such as the Zarafshan gold mine and numerous cement production facilities, are crucial for Tajikistan's industrial development. Over 700 Chinese-funded companies are currently operating in Tajikistan.

Trade between the two nations also plays a significant role. In 2023, bilateral trade reached \$3.93 billion, marking a 50% year-on-year increase. China is Tajikistan's second-largest trading partner and a key source of goods and technology. The Belt and Road Initiative (BRI) has further deepened economic ties, with China financing vital infrastructure projects, including roads, bridges, and energy systems.

This growing reliance has raised concerns about economic overdependence on China, particularly regarding debt. Much of Tajikistan's external debt—around \$1.2 billion—consists of Chinese loans, prompting scrutiny over the long-term sustainability of this economic relationship.⁶

⁵ Asian Development Bank, "Tajikistan Country/Economy Profile," 2024, available at <https://aric.adb.org/tajikistan>, accessed 22 November 2024.

⁶ <https://news.cgtn.com/news/2024-07-05/China-Tajikistan-Economic-Cooperation-Ushers-in-New-Chapter-1uZu8LJD5C0/p.html>, accessed 25 November 2024.

3. Agriculture and Energy: A Tale of Two Sectors

Historically, agriculture and later energy have been important sectors of the Tajik economy. Yet, during the earlier years of the transition period these sectors faced tremendous challenges. Their development is expected to promote economic growth and result in poverty reduction in the country.

3.1. Transition Decline and Land Reforms

The period of Soviet rule in Tajikistan witnessed significant agricultural development until the 1980s, followed by a period of stagnation from 1980 to 1990. However, with the collapse of the Soviet Union in 1991, the country experienced a sharp decline in agricultural production (Lerman et al. 2009). This phase was characterized by the disintegration of the traditional Soviet agricultural system and a subsequent decline in agricultural output.

Figure one presents the production fluctuations and yield of major crops in Tajikistan over the period of 1990 and 1997. It shows that the output

of all the agricultural products was relatively high in 1990, but after 1991 it began to fall. By 1997 production of these products was comparably insufficient, except for cereals.

Like other former Soviet republics, Tajikistan initiated land reforms through numerous legislative acts, government resolutions, and presidential decrees. There were two main stages of land reform. The first phase began in 1992 and lasted until 2005 (Cassavale, 2005). At this stage, the new legislation granted citizens the right to form independent Dekhkan farms.⁷ The main goal was to transform Soviet traditional sovkhozes and kolkhozes into modern farm entities. Such reform led to notable changes, i.e. a) agricultural recovery: by redistributing land, production levels have returned to pre-transition volumes. Household plots, in particular, have seen substantial productivity gains, driving much of the sector’s recovery, b) shifts in land use: there has been a move away from cotton monoculture towards grains and horticulture, which align more closely with local food security needs, and c) improved incomes: redistribution of land to smaller farms has positively impacted rural

7 In Central Asian countries, dekhkan farms refer to individual or family farm business. The word “dekhan” is translated into English as peasant.

household incomes, although disparities persist due to uneven land quality and legal ambiguities. In this aspect, the role of official development assistance, in particular, the USAID – funded land reform and farm restructuring project (2013 – 2016) was important which focused on legislative reform, farmer education, promoting legal land-use rights. This program aimed to create transparency and efficiency in land management, benefiting smallholder farmers. The World Bank and other agencies have also contributed to technical assistance and financing projects to improve farm restructuring and the agricultural value chain the country.⁸

All collective farms had finished the transition to farm labourer’s cooperatives by 2000.⁹ In fact, by this time, only the name of the enterprises had changed, the rules remained the same, even the same persons who had held these positions during the previous era. This type of cosmetic modification can be explained by the desire of the officials to receive foreign aid from such international agencies as the US Agency for International Development and the World Bank (Rowe, 2010).

Dissatisfaction with the pace of reforms and an increasing debt in agricultural expedited the onset of the second phase of land reform in 2006.

The newly adopted laws aimed to continue the decomposition of the remaining state farms. However, they sought to solve the problem of cotton debt. This kind of debt implied the inability of cotton farms to produce a sufficient level of output to cover the cost of initial inputs delivered by investors or futurists (Nebakhtshoev et al. 2018). Notwithstanding all laws and decrees from the government, their enforcement was entirely decentralized. The move to new rules and regulations were not linearly applied across different regions of the country.

3.2. Cotton Debt Crisis

The cotton debt crisis in Tajikistan was caused by a combination of several factors, including government intervention in the planting decision, farmers’ incompetence to make good profits under newly established conditions, and the desire to retain cotton monoculture.

Firstly, government intervention was directly observed in planting decisions. Only 14 % of the dekhkan farms in cotton production sector believed that they had freedom in such decisions (Lerman et al., 2009). Even after the land reform was essentially complete, the Ministry of Agricul-

8 United States Agency for International Development, available at <https://www.usaid.gov/tajikistan/agriculture-and-food-security>, accessed 28 November 2024

9 “Ekonomika Rossyi i stran blizhnego zarubezhya: uchebnoe posobie”, p. 410

ture continued to prepare plans for crop areas, especially for cotton. Local administrations required farmers to plant about 60% and 80% of irrigated arable land for cotton (Atta, 2014).

Another reason pertaining to the accumulation of cotton farm debt was the system of funding cotton crops followed by the presidential decree in 1998. The main purpose of the system was to solve the main issues with the source of financing for farmers. As a result, futurist finance systems were established. Private investors or so-called “futurists” delivered inputs in exchange for the return of a certain amount of output. The main problem was that futurists overcharged the inputs they supplied and paid below the market price for cotton. Although for futurists this deal was highly gainful, they constantly claimed that farms owed them money, while cotton farms themselves did not make profits. Consequently, farmers were not particularly motivated and concerned about the quality and quantity of the final result. Little was known about the “futurists” businesses, as they were private. In 2007 the Tajik President announced that the futurist system would no longer be used and that it would be phased out (Atta, 2014). Instead, the financing system appeared to be paid off under land mortgage and the usage of land-use certificates. Despite all authorities’ claims, the country’s financial system for cotton production was heavily reliant on futurists.

For a relatively long period, Tajikistan was trapped in a system of cotton monoculture which remained unprofitable for newly restructured farms and the rural population. The cotton monoculture was thereby monopolized by certain individuals and state elites, who remained the only stakeholders to keep their monopoly in this sector (Boboyorov, 2012). Cotton was the only crop that these elites could sell in the international market and earn good profits from it. Nevertheless, retaining the monoculture of cotton is likely to be beneficial once generated flow of income from this crop is equally distributed and re-invested, and farmers are adequately compensated. On the other hand, widespread unemployment in rural areas poses a great problem and labour compensation in this sector is not adequate per se. There is little incentive to prioritize product quality. Consequently, the government intervention with administrative price controls and insufficient farm production led towards a marked increase in cotton debt.

3.3. Agricultural development

Regardless of the collapse of an old-style economic model and transition-related challenges, Tajikistan has made some achievements in agriculture. This was attained thanks to various agreements, projects, and ambitious development plans, which have helped to create a suitable

environment for growth and development. As a result, Tajikistan is prepared to seek essential outputs in this sector, for it keeps leveraging its resources and pursuing its long-term goals. As table eight presents production and yields of major crops, including grain, rice, potatoes and fruits increased significantly showing that Tajikistan was determined to achieve a higher degree of food security in the country.

The area under cotton cultivation continuously fell and it led to a substantial increase in other varieties of crop planting. The agricultural output grew gradually, and it boosted rural families’ income. About a quarter of country’s GDP is rep-

resented by agricultural sector which appears to be a principal employer for about 46% of the economically active part of the population.¹⁰

Currently, several international organizations are implementing projects in Tajikistan which are designed to strengthen the agricultural sector, in particular, they are mainly connected to the post-pandemic recovery. In addition to this, Tajikistan is considering a joint realization of agriculture-related projects with Belarus, Saudi Arabia, and Uzbekistan in the near future (Maherramova, 2023). As agriculture remains a key sector in the Tajik economy, its further development is likely to be critical to the country’s sustainable growth.

¹⁰ United States Agency for International Development, available at <https://www.usaid.gov/tajikistan/agriculture-and-food-security>, accessed 7 February 2023.

4. Energy

The energy sector is comprised of two main categories, non-renewable energy resources which include oil, natural gas, gasoline, and nuclear energy, and renewable energy resources consisting of hydropower, wind power, and solar power. Tajikistan, a country with substantial hydropower resources, is heavily dependent on them for its electricity requirements. In contrast, the fuel and energy sector of Tajikistan encompasses several non-renewable energy resources, including coal, crude oil, oil products, and natural gas.

4.1. Historical track of energy sector

In 1970 under the central auspices of Moscow the five republics of the former Soviet Union, notably Southern Kazakhstan, the Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan formed the Central Asian Power System (CAPS). The operation of the system was planned in a way to meet the needs of the entire region and reduce the supply cost of electricity. After the disintegration of the USSR, the operation and maintenance of the system began to fall apart. Unbalanced control over resources by each country resulted in key disagreements in energy distribution (Laldjebaev et al. 2018). As a result,

each country sought to achieve energy independence. In 2009 Tajikistan halted energy trade with neighbouring countries through the CAPS, which yielded increased electricity shortages.

The electricity demand in Tajikistan has always been high due to extreme weather conditions in winter and spring times. In 2009, the primary consumers of electricity were TALCO smelter and the residential sector.¹¹ TALCO is one of Tajikistan's largest industrial enterprises, contributing a significant share of export revenues. Aluminum production relies heavily on imported raw materials and is energy-intensive, consuming vast amounts of electricity, often subsidized by the state. While its strategic importance suggests it should drive national economic growth, rent-seeking has redirected its profits away from development. The rent-seeking practices surrounding TALCO not only undermine economic development but also perpetuate a system where political elites prioritize their own interests over national progress. Addressing these issues requires systemic reforms, but such changes are unlikely without a broader shift in the political and economic paradigms governing Tajikistan. (Heathershaw, 2009).

11 The Tajik Aluminum Company is one of the biggest companies in the world. It was founded in 1975 and remains a key commodity exporter. It is believed that two-fifth of generated electricity in Tajikistan is used by the company.

The agricultural demand was restricted to the summer season for irrigation of water-intensive crops. After Tajikistan left CAPS, significant electricity shortages were observed during wintertime. A combination of reasons such as growing demand for heating in cold winters, loss of gas and electricity imports, and low river flows stemming from freezing temperature in winter resulted in these shortages. Many households in the country started burning solid fuels, mainly wood and coal, mainly to keep their houses warm. However, this indoor air pollution was detrimental to human health. Following a severe winter energy crisis in 2010 and 2011, Tajikistan announced the recommencement of the Rogun hydropower plant that remains to be currently active (Laldjebaev et al. 2018).

4.2. Thermal and renewable energy sources

Tajikistan's mineral resources endowment has not been extensively evaluated. As a result, oil, gas, and coal deposits are likely to be moderate and underestimated. Oil and gas production remains limited, and the country's residential and industrial need is to a large extent met by import. Nevertheless, coal mining has developed and increased in the last decade. The production

of this type of fossil fuel reached 2.1 million tones (Mt) in 2020.¹²

Figure two shows that hydropower has always been an important source of energy in Tajikistan. It also shows that the energy supply of oil and coal has been swiftly increasing for the last decade.

To accomplish energy security and diversification from hydropower plants, that accounts for 90% of electricity generation in the country, the authorities began to implement some other projects. In particular, in 2014-2016 the Dushanbe-2 co-generation plant was launched whose operations are totally dependent upon domestic coal resources.

As an alternative, renewable energy sources ought to be considered. Although water is a renewable energy source and Tajikistan's energy sector mainly relies on it, due to climate change its volume will gradually decrease followed by the rapid melting of glaciers. Thus, to prevent people from using biofuels in case of winter shortages of electricity, the authorities actively support the development of renewable energy resources. Initial calculations of the Ministry of Energy of Tajikistan have shown that the potential for the use of solar energy is 3103 billion kWh

12 *Tajikistan 2022 Energy Sector Review*, available at <https://iea.blob.core.windows.net/assets/ab8f5f01-4b54-4636-b2e8-7818e2ed55a8/Tajikistan2022.pdf>, accessed 16 February 2023.

per year. The climate of the country is likely to be favorable for the use of solar energy. According to the Agency of Hydrometeorology of Tajikistan, the number of sunny days per year ranges from 260 to 300. Although wind energy potential is not completely explored, under different estimates, it ranges from 30 to 100 billion kWh per year.¹³

4.3. Energy Projects in Tajikistan

To address energy vulnerability in Tajikistan, the government initiated and participated in a number of projects. One of the large-scale regional projects for which Tajikistan signed an agreement in 2015 refers to the Central Asia South Asia Electricity Transmission and Trade Project (CASA-1000) funded by the World Bank. The main objective of the project is to ensure sustainable electricity trade between Tajikistan and Kyrgyzstan and the South Asian countries of Afghanistan and Pakistan. The project aims to help Tajikistan and Kyrgyzstan export the excess

electricity generated during summertime to the neighbouring countries of Uzbekistan, Pakistan, Afghanistan, and Kazakhstan. As a result, Tajikistan could avoid electricity loss and instead benefit from its export.

The largest project of the government in the energy sector is related to the Rogun Hydro Power Plant/Dam whose construction was revived in 2016 with an estimated investment of around US\$4 billion.¹⁴ The HPP is expected to produce 3.6 GW and to eliminate winter shortages with the potential to increase electricity export to neighbouring countries. Once completed, the Rogun HPP is assumed to be the largest hydropower station in Central Asia with the world's tallest embankment dam. Scheduled to gain its full operational capacity by 2028, the HPP is expected to generate about 13,300 GWh of reliable electricity per year.¹⁵ Therefore, the project appears to be both politically and economically an important milestone in achieving the national energy security goal. One needs to point out that China's role

¹³ *Renewable Energy of Tajikistan. Why is it Important for the Country, but not a Priority*, available at <https://cabar.asia/en/renewable-energy-of-tajikistan-why-is-it-important-for-the-country-but-not-a-priority>, accessed 24 February 2023.

¹⁴ The Rogun hyperpower plant or dam was first proposed in 1959 as a part of all – Soviet energy megaproject. After its technical feasibility was completed in 1965, the actual dam construction on the Vakhsh River in southern Tajikistan began in 1976. However, the disintegration of the Soviet Union in 1991 led to construction suspension. The government was unable to complete it during the 1990s due to the dire civil war and transition period. Yet, after 2000 several attempts with other countries and international organisations were undertaken to resume construction. Uzbekistan was a strong opponent to the project claiming that it would bring significant environmental damage and impede water flow to a neighbouring country harming its agricultural sector. With a political change in Uzbekistan disagreements over this project dissolved. On October 29, 2016, the Tajik President Emomali Rakhmon officially started the construction of the dam.

¹⁵ *Rogun Hydropower Plant, the tallest dam in the world, that will double Tajikistan's energy production*, available at <https://www.webuildgroup.com/en/projects/dams-hydroelectric-plants/rogun-dam>, accessed 25 February 2023.

in Tajikistan's infrastructure is significant under the Belt and Road Initiative, including energy and connectivity projects. While the Rogun HPP is primarily domestic, Chinese-funded transmission networks and infrastructure could align with regional energy goals. This collaboration reflects Tajikistan's reliance on external partnerships for development ((Heathershaw, 2009). The BRI's focus on cross-border infrastructure aligns with the Rogun project's goal of exporting electricity. For example, Chinese-built transmission lines could facilitate energy exports to South Asia. China could potentially play a role in financing or completing aspects of the Rogun HPP, given its interest in stabilizing and integrating Central Asia into its economic sphere.

Tajikistan is also a partner in Central Asia-China gas pipeline Line D project. The corresponding agreement was signed in 2013. On September 13, 2014, the Trans – Asian Gas Pipeline Company, a subsidiary of China National Petroleum Corporation (CNPC), signed two agreements with the Tajik Ministry of Energy and Water Resources and Tajiktransgaz respectively.¹⁶

¹⁶ “CNPC Trans-Asia Gas Pipeline Ltd signs agreement with Tajiktransgaz on establishing a gas pipeline” 10 March 2014, available at <https://www.euro-petrole.com/cnpc-trans-asia-gas-pipeline-company-limited-signs-agreement-with-tajiktransgaz-on-establishing-a-gas-pipeline-n-i-9247>, accessed 28 February 2023.

It is expected that Tajikistan is planning to rejoin CAPS in 2023, albeit ties with the neighbouring country Kyrgyzstan remain strained. Its involvement in Soviet-based energy infrastructure could have a positive impact on balanced production and supply of electricity and energy security of the country.

Hence, in spite of various challenges faced in its post-Soviet era, Tajikistan is moving gradually to achieve its energy independence in a few years. Once the Rogun Hydropower Plant is completed, Tajikistan will become a key electricity producer and exporter of clean and affordable electricity. This project has the potential to generate substantial economic, social and environmental benefits both for the country and its neighbors (World Bank, 2023). With an expected upturn in electricity output and export Tajikistan might gain regular foreign earnings. Under sound macroeconomic and development policies it can maintain strong economic growth and prosperity.

5. Migration and Remittances

After gaining independence in 1991, Tajikistan became actively involved in international migratory flows. An increase in migration during the 1990s was mainly associated with political, security and economic factors. An open civil war in 1992 – 1997 had a disastrous impact on the country, leading to a significant deindustrialization of the national economy. Many people lost their jobs and became refugees or internally displaced. The first wave of moving abroad pertains to the emigration of Russian - speaking people who had been the second largest group in the capital and other major cities. According to the last Soviet census in 1989, they constituted a third of the population of Tajikistan.¹⁷

By early 2000 Tajikistan had become one of the nations in the world most dependent on migrants and remittances. At present, both the geographic mobility of people and migrant cash transfers continue to be essential for the economic well-being of the population and social stability of the Tajik society.

However, the war in Ukraine has caused labor

shortages in Russia, exacerbated by military mobilizations and economic sanctions. This initially increased the demand for migrant workers from Central Asia, including Tajikistan. Many migrants have been coerced into joining Russia’s military efforts in Ukraine, often through pressure or incentives like promises of citizenship and financial compensation. This has discouraged new arrivals and created fear among existing migrants. Economic instability in Russia, coupled with sanctions, has devalued the ruble, reducing the real value of remittances sent home to Tajikistan. Migrants now face greater uncertainty in terms of income stability and living conditions.

Following the March 2024 terrorist attack at Crocus City Hall in Moscow, where Tajik nationals were accused of involvement, xenophobic sentiment in Russia surged. Tajik migrants became targets of harassment, evictions, and heightened scrutiny by law enforcement. The attack intensified anti-migrant rhetoric, with authorities increasing raids and imposing stricter measures against foreigners, particularly those from Central Asia.¹⁸

17 The Russian - speaking population in Tajikistan included ethnic Russians, Ukrainians, Jews, Germans, Koreans, Tatars, and other ethnic minorities of the former Soviet Union. The first group of settlers, mainly from the regions of the Russian Empire, migrated to Central Asia in the 1920s and 1930s to help build industry and agriculture and develop social infrastructure in the region. After World War II primary settlers were represented by other ethnic groups, including former captive German soldiers, displaced Jews, and Koreans. Following the collapse of the Soviet Union, many ethnic Germans moved to their historical motherland, while Jews settled in Israel, North America and other European countries.

18 <https://carnegieendowment.org/russia-eurasia/politika/2024/07/russia-central-asia-migrants?lang=en>, accessed 02 December 2024.

5.1. Labor migration from Tajikistan

The labor market of Tajikistan has changed dramatically since the transition to a market-based economy. Tajikistan became a labour-exporting country in its post-Soviet era. About 300,000 people left the country between 1991 and 1995. (Olimova et al. 2003). Most of them were the core of the country’s human capital, e.g., doctors, engineers, teachers, scientists, actors, and artists. It appeared to pose a long-term challenge for Tajikistan to replace this loss.

By 2005 almost every household in the country had at least one family member living or working abroad as a migrant (Justino et al. 2012). The main destination for Tajik migrants has always been the Russian Federation, where they were mainly employed in construction, trade, and services sectors. Although Tajikistan experienced favorable economic performance in the first decade of the XXI century, it was not an employment - enhancing growth. Few opportunities were created in the formal sector. On the other hand, this Central Asian republic has had rapid population growth compared to its neighbouring countries, with the highest number of working-age group of people. Given the fact that more than 90% of the territory of Tajikistan is covered by mountains, there have been very few employment opportunities, in particular for the growing youth.

Another push factor for outmigration is associated with low income. According to a survey conducted by the International Labour Organization a third of respondents indicated that extremely low wages were a primary reason for moving abroad (International Labour Organization, 2010). Families who remained dependent upon formal income were the most vulnerable households.

Other pull factors in choosing the Russian Federation as a destination for migration are related to geographic proximity, shared history, similar cultural and mentality pattern, and knowledge of the Russian language (Yormirzoev, 2017). The visa-free regime and the existence of dual citizenship agreement between these two countries are also a contributing factor of people’s movement toward Russia.

Findings from different studies show that trends and patterns of migration from Tajikistan are seasonal and last from early spring until the end of November. Most migrants come from the country’s rural areas. More than 45% of migrants aged 15 to 29 make up the largest group of migrants. Individuals between the ages of 30 and 44 account for 40% of all short-term income - seeking travelers. Although migration is a male-dominated phenomenon, the share of females seeking to migrate temporarily reaches an average of 15% over the period of 2015-2019 (Asian Development Bank, 2020). Unlike their

male counterparts, women are mainly employed in catering and service sectors and work in relatively better conditions.

Kazakhstan is a growing destination for Tajik migrants, driven by its demand for labor in agriculture, construction, and bazaars. Tajik migrants benefit from visa agreements allowing up to 30 days of stay without registration. Seasonal migration is prominent, with remittances peaking during the harvest and construction seasons.¹⁹

Turkey has been a secondary destination for Tajik migrants, often following deportations from Russia. The country previously allowed visa-free travel for up to 90 days, though a visa regime was reinstated in 2024, complicating migration. Tajik migrants in Turkey are involved in diverse industries, including construction, textiles, and entertainment. Notably, some have succeeded in the Turkish film industry as stunt performers or extras, highlighting adaptability and unique opportunities.²⁰

Small numbers of Tajik migrants work in the Middle East, primarily in domestic labor, hospitality, and low-skilled roles. These migrants often face exploitative conditions due to weak legal protections and restrictive labor laws.²¹

Compared to Russia, Kazakhstan, or Turkey, Europe hosts fewer Tajik migrants due to stringent visa policies and higher living costs. However, a small number of skilled workers and asylum seekers have settled in countries like Germany and the Czech Republic. Migrants in Europe benefit from better labor protections and integration programs, though the migration process remains highly competitive and selective.²²

As migration has been taking place since the early 1990s well-established migrant networks are formed. Such networks facilitate more migratory flows between Tajikistan and other destinations, including the Russian Federation. Over time, migration from Tajikistan seemed to become self-perpetuating because each act of movement promotes and sustains more migration from the country.

19 <https://migrants-refugees.va/country-profile/kazakhstan/>, accessed 05 December 2024.

20 <https://www.rferl.org/a/tajikistan-migrants-turkey-actors-stuntmen-soap-operas/32909009.html>, accessed 05 December 2024.

21 <https://migrationhealthresearch.iom.int/regioncountry/tajikistan>, accessed 05 December 2024.

22 <https://migrants-refugees.va/country-profile/kazakhstan/>, accessed 10 December 2024.

5.2. Dependence on remittances

The relationship between remittances and economic well-being in migrant-sending countries has always been a topic of substantial interest and heated debate both by researchers and officials (Yormirzoev, 2016). Yet, the conventional wisdom is that remittances sent by migrants enable their direct relatives and other family members to maintain regular consumption patterns and make small investment purchases. On a macro-level such transfers help the government to solve its chronic deficit of current account balance of payment.

Tajikistan is one of the countries in the world heavily dependent on remittances. Over the past two decades remittance inflows to Tajikistan demonstrated a steady increase. For instance, in 2002 remittances constituted about 6% of the country's GDP and by 2021 they accounted for 35% of output. It reached its highest level in 2007 and 2013 accordingly (figure three). A steady increase in remittances is associated with the government's policy to encourage migrant cash transfers. As a result, national taxes were abolished, banking regulations were simplified, and attempts were undertaken to make remittances easier and more legible (Buckley et al. 2012).

Remittances are a relatively stable source of foreign financial inflows, while foreign direct investment is dependent on market size, natural

resource endowment, macroeconomic and political stability, and quality of institutions in host countries (World Investment Report, 2022). Official aid, which represents another form of foreign financial resources, is mainly provided due to political and strategic considerations (Alestina et al. 2000).

Remittances will remain the largest source of external finance for Tajikistan. However, authorities need to realise the trade-off of such transfers with a higher degree of dependence on Russia as a major host country for Tajik migrants. The financial crisis of 2008-09 negatively affected the Russian economy, which shrank by 8%. Over this period, remittance inflow to Tajikistan decreased from 45% in 2007 to approximately 30% in 2009, a third of the pre-crisis level. Another adverse situation that hit the world economy is related to the pandemic outbreak. Russia was one of the most affected nations in the world. In this regard, the Russian authorities closed their international borders and imposed different restrictions such as closing public places, and institutions, canceling events, and declaring quarantines in major cities. Thus, the employment opportunity for migrants, along with the possibility to go for seasonal migration, fell (Shimizutani et al. 2021).

Hence, except for civil war which was the primary push factor in the initial years of transition, economic deprivation, limited land area and demographic pressure have remained a key

determinant for the dynamics and flows of Tajiks' migratory processes. Geopolitical tensions in post-Soviet region could be another long-term challenge for Tajikistan, for it remains highly dependent upon Russia's economic performance.

The sustainability of Tajikistan's remittance-driven economy remains precarious. While remittances provide vital short-term economic

relief, long-term reliance on these flows poses significant risks, including economic vulnerability, deindustrialization, and a demographic imbalance. To ensure a more stable and prosperous future, Tajikistan must diversify its economy, invest in human capital, and promote sustainable investments that shift the economy away from its overreliance on external labor markets.

6. The Future of Tajikistan's Economic Prospects

Despite the ruinous civil war of the 1990s, Tajikistan managed to avoid a possible economic collapse. Negative output growth stopped by 1997, and soaring prices were effectively combated by 1999. Tajikistan enjoyed steady growth during the global oil boom of 2000-08. As a key labour exporter, Tajikistan benefited from rising remittance inflow, which increased from US\$79 million in 2002 to a peak of US\$ 4.2 billion in 2013 (World Bank). As a result, many acute social problems were successfully addressed on a household level.

However, the period of high demand for fossil fuel resources appears to end soon. More attempts are being undertaken globally to switch to alternative and environmentally friendly sources of energy. This poses certain challenges to oil and gas exporters, including Russia. Collective sanctions imposed by the West will eventually result in sizeable output contraction in Russia in near term. With such uncertainties the value of "migra-rubles" is expected to depreciate as demand for Tajik labour in Russia is likely to fall.

Will Tajikistan face an era of economic slowdown and failure? Has the Tajik economy exhausted its potential for sustained growth? The answer to both questions is probably no.

First, Tajikistan is rich in water and, along with the Kyrgyz Republic, is a main provider of this resource to downstream republics of Central Asia. Under the former leadership of Uzbekistan Tajikistan was politically limited in producing hydroelectricity given its large hydropower potential and had to face power shortage in wintertime. As a result of notable improvements in bilateral relations with this neighbouring republic Tajikistan has recently been active in promoting and implementing large-scale energy projects, including the Rogun HPP. Unlike fossil fuels, hydroelectric resources do not pollute the environment or cause carbon dioxide emissions. Consequently, a number of foreign nations, including international organizations such the World Bank, are interested in joint energy projects with Tajikistan. For instance, in summer of 2022, Tajik and Uzbek leaders launched a joint construction of 140 MWt hydropower plant on the Zarafshon River in Northern Tajikistan. This is the first major bilateral energy project between the two neighbouring countries. This project is expected to provide clean energy to a significant number of households and new businesses in both republics.²³

Secondly, Tajikistan has changed its previous status of as a single cotton producer. By imple-

23 "Tajik, Uzbek leaders virtually launch construction of 140 MW hydropower plant on the Zarafshon River", *Asia-Plus*, 3 June 2022, available at <https://asiaplus.tj.info/en/news/tajikistan/economic/20220603/tajik-uzbek-leaders-virtually-launch-construction-of-140mw-hydropower-plant-on-the-zarafshon-river>, accessed 1 March 2023.

menting the pertinent agrarian policy of crop diversification and land allocation, this Central Asian republic was able to introduce and produce other varieties of agricultural products. While cotton production has remained stable and ranged from 300 thousand to 500 thousand tones between 1998 and 2019, production of other crops such as grain, rice and potato, which are staple food for Tajik households, increased by a third over the last two decades (table eight). This might have improved problems related to nutritional status of people and have helped enhance food security.

With respect to remittance payments from migrants working mainly in the Russian Federation, one could agree that such cash transfers are an essential source of earnings for many households. However, this particular type of foreign income does not appear to be sustainable in the long run. Therefore, it is important that the Tajik authorities actively introduce and implement labour-intensive projects and employment programs in the country. A key economic driver toward this policy could pertain to the operations of micro-, small-, and medium-sized enterprises (Tilekeyev, 2014). As examples of foreign nations show, thanks to these businesses, most of the economically active part of the population is successfully employed in this sector. In addition, former migrants with relevant overseas experience could bring new skills and contributions to their communities.

However, Tajikistan faces demographic challenges, which pose long-term pressure on country's economic potential and social indicators. From 1992 and 2021 the population grew by more than 50%.²⁴ If a current population growth of 2.1% per year continues, the population of Tajikistan will double in the middle of this century. Public policy toward family planning is necessary to stabilize population growth and maintain it at an acceptable level. This can be achieved through active information campaigning, administrative enforcement, increased female labour participation, and operations of family planning clinics. Some countries in the Middle East and South Asia have been successful in mitigating consequences of rising birth rates. Rapid population growth has crowding in urban centers like Dushanbe, placing pressure on housing, healthcare, education, and transportation systems. This strain is especially felt in rural areas, where many households still rely on subsistence farming. Inadequate infrastructure and underfunded public services exacerbate social inequality. The high fertility rate, combined with migration patterns that see many men working abroad, has also led to shifts in the gender balance, with a growing number of female-headed households. These demographic changes have implications for social stability, employment, and long-term development.

Tajikistan has long experienced significant trade deficits, which means that it imports more goods and services than it exports. This imbalance is

24 Author's calculation based on World Bank Online Data. In 1992 the population of Tajikistan was 5,556,306 and it reached 9,750,064 in 2021.

compounded by the country's limited industrial base and reliance on commodity exports like cotton, which remain vulnerable to global price fluctuations trade deficit impacts Tajikistan's foreign exchange reserves, placing pressure on the country's monetary system. The reliance on imports for goods, especially consumer products and fuel, means that the country struggles to develop a diversified export base capable of balancing these outflows. The Tajik government has focused on developing domestic production, including revitalizing agriculture (especially cotton) and exploring the potential for mineral exports. However, the lack of advanced industrial and technological infrastructure continues to constrain growth. Improving energy efficiency and expanding projects, like the Rogun Dam, are seen as key measures to boost local production and reduce energy import dependency, which could help mitigate the trade imbalance.

Another notable driver toward sustainable economic growth can be related to the creation and operation of free economic zones. According to a law on free economic zone that was approved in 2004 and some of its later amendments, there are four zones in Tajikistan: Dangara and Pyanj in the Khatlon region, Sughd in the southwestern industrial part of Khujand City, and Ishkashim in the eastern part of the country next to Kyrgyz and Chinese borders. All zones operate under a preferential tax regime and with zero customs

duties on the export of products manufactured in these geographic locations. With a sound public policy in relation to all established zones, Tajikistan can achieve a number of economic, social and research and technical goals. The economic component may include further activation and expansion of the country's foreign economic activity, attraction of foreign capital, and increasing the competitiveness of production. From a social point of view, these zones can create new jobs, enhance the skills of workers based on world experience and improve people's well-being. The last item may be represented by the import of cutting-edge technologies and innovation implementation.

Despite the collapse of the common economic space under the USSR, Tajikistan and other republics of Central Asia signed a number of agreements aimed at developing regional economic cooperation in the new realities. Such cooperation is beneficial to all. With the peaceful change of leadership in Uzbekistan, cooperation in the Central Asian region has revived. In particular, the visa regime between the two countries has been abolished, regular air and land transportation has been organized, and bilateral trade has intensified in recent years. Compared to 2021, the export of goods from Tajikistan to Uzbekistan in 2022 increased by about 50%.²⁵ Such active trade cooperation has a positive effect on the Tajik economy. However, the latest

25 "Tajikistan's trade with Uzbekistan increases in 2022", *Trend News Agency*, 24 January 2023, available at: <https://en.trend.az/casia/tajikistan/3699135.html>, accessed 15 March 2023.

border conflict in 2022 between Tajikistan and Kyrgyzstan has negatively affected their regular economic cooperation. Once the border issue is resolved, both republics will be able to restore lost ties and benefit from joint activities.

Other inputs which may potentially bring economic prosperity to Tajikistan, along with the above-mentioned arguments, are large mineral deposits that have not been completely explored. The favorable weather conditions allow farmers growth fruits and vegetables up to three times in a year and thus export part of their agricultural output to large consumer markets in Russia and Kazakhstan. The climate of Tajikistan is continental, with regular sun in all regions and wind in the north. Such natural conditions provide great opportunities for the development of non-traditional electricity production at the local level. The magnificent nature with steep mountains and rivers has been popular with many tourists in the past for hiking and rock climbing, hunting

and medical recreation. However, the COVID-19 outbreak has put a stop to the influx of tourists. More tourists are expected to visit Tajikistan in the near future. To stimulate foreign travel to Tajikistan, the authorities introduced a unilateral visa-free regime for up to one month for citizens of 52 countries.²⁶ The tourism sector is emerging, and it may bring certain contributions to country's economic development.

Finally, Tajikistan has historically been a part of the "Great Silk Road". Currently, China, through its One Belt and One Road Policy, is attempting to revive this crossroad that will connect Asia with Europe. Once this mega-project is complete, there will be substantial benefits to Tajikistan in terms of increased trade operations, cargo traffic, operations of local hotels, catering services and other hospitality facilities. With strong political will on the part of the Tajik Government, all potential can become a reality.

26 "The tourism sector in Tajikistan" <https://www.mfa.tj/en/main/tajikistan/tourism>, available at <https://www.mfa.tj/en/main/tajikistan/tourism>, accessed 22 March 2023.

7. Conclusions

The economic evolution of Tajikistan since the dissolution of the Soviet Union reflects a complex blend of challenges and progress. Over the past three decades, the nation transitioned from a centrally planned economy to a market-based system while grappling with a devastating civil war, economic collapse, and political instability. Despite these obstacles, Tajikistan has made significant strides in its recovery, driven by reforms in agriculture, energy, and privatization, as well as reliance on migrant remittances.

The agricultural sector, once dominated by cotton monoculture, has seen diversification and recovery through land reforms and improved productivity. The shift toward staple crops such as grains and potatoes has strengthened food security and rural incomes. Yet, challenges such as uneven land quality, legal ambiguities, and continued reliance on cotton persist. Similarly, the energy sector has leveraged Tajikistan's abundant hydropower resources, exemplified by projects like the Rogun Hydropower Plant, which promises to address domestic energy shortages and bolster regional exports. However, overdependence on hydropower, coupled with vulnerabilities to climate change and outdated infrastructure, necessitates further diversification into renewable energy sources like solar and wind.

Migration and remittances have played a pivotal role in stabilizing household incomes and bolstering Tajikistan's economy. Yet, this dependence exposes the country to external risks, including geopolitical tensions and economic fluctuations in host countries like Russia. While remittances provide vital financial support, their long-term sustainability is uncertain, underscoring the need for domestic job creation and industrial growth.

Despite progress in economic growth, poverty reduction, and fiscal consolidation, Tajikistan continues to face significant challenges. The nation's trade deficits, limited industrial diversification, and demographic pressures remain critical concerns. Rapid population growth and insufficient urban infrastructure strain public services, while labor market imbalances hinder economic potential.

Tajikistan's future hinges on its ability to diversify its economy, modernize its industrial base, and improve its investment climate. Strategic initiatives such as the development of free economic zones, regional trade integration, and infrastructure projects under the Belt and Road Initiative hold promise. Moreover, enhancing education, addressing demographic challenges, and promoting sustainable investments will be crucial for long-term development.

Needless to say, Tajikistan's journey over the past three decades illustrates resilience and gradual progress amidst adversity. With sustained reforms, regional cooperation, and visionary leadership, Tajikistan has the potential to achieve

sustainable growth and improve the quality of life for its people. The road ahead demands strategic planning and commitment to unlocking the nation's full economic potential.



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Table 1. Output Growth and Inflation, 1992 – 1999

Period	1992	1993	1994	1995	1996	1997	1998	1999	2000 (1989=100)
Growth in Real GDP	-29	-11	-18.9	-12.5	-4.4	1.7	5.3	3.7	44
Inflation	1157	2195	350	609	418	87.8	43.6	27.5	

Notes: 2000 = EBRD calculations. Growth in real GDP in percentage. Inflation refers to change in annual average retail/ consumer price level, in percent.

Source: European Bank for Reconstruction and Development, Transition Report, 2000, pp. 221

Table 2. Government Revenue and Expenditure, as Percentage of GDP, 1995 – 1999

Period	1995	1996	1997	1998	1999
Revenue	10	12	15	11	12
Expenditure	17	18	19	14	15
Balance	-7	-6	-4	-3	-3

Note: Government revenue consists of taxes, social contributions, grants receivables, and other revenue. Government expenditure reflects total expenses and the net acquisition of nonfinancial assets.

Source: IMF World Economic Outlook, October 2022, database

Table 3. International Trade, 1993 – 1999 (Millions of US Dollars)

Period	1993	1994	1995	1996	1997	1998	1999
Exports	350	492	749	772	803	597	689
Imports	532	545	810	668	750	711	663
Trade Balance	-182	-53	-61	104	53	-114	26

Source: IMF World Economic Outlook, October 2022, pp.

Table 4. Output Growth and Inflation, 2000 – 2022

Period	2000	2001	2002	2003	2004	2005	2006	2007	2008
Growth in Real GDP	8.3	10.2	9.1	10.2	10.6	6.7	7.0	7.8	7.9
Period	2009	2010	2011	2012	2013	2014	2015	2016	2017
Growth in Real GDP	3.9	6.5	7.4	7.5	7.4	6.7	6.0	6.9	7.1
Period	2018	2019	2020	2021	2022 (est.)				
Growth in Real GDP	7.3	7.5	4.5	5.0	4.5				
Period	2000	2001	2002	2003	2004	2005	2006	2007	2008
Inflation	32.9	38.6	12.2	16.4	7.2	7.3	10.0	13.2	20.4
Period	2009	2010	2011	2012	2013	2014	2015	2016	2017
Inflation	6.4	6.5	12.4	5.8	5.0	6.1	5.8	5.9	7.3
Period	2018	2019	2020	2021	2022 (est.)				
Inflation	3.8	7.8	8.6	7.9	6.5				

Source: IMF World Economic Outlook, October 2022, database

Table 5. Economic and Social Indicators, selected years.

Period	1999	2003	2004	2007	2009	2015				
Gini Index	29.5	32.7	33.6	32.2	30.8	34				
Period	1992	1995	1999	2000	2005	2010	2015	2018	2020	
GDP, PPP (constant 2017 international dollars) per capita	2,521	1,389	1,228	1,312	1,884	2,360	2,959	3,405	3,651	
Life Expectancy at birth (years)	55	59	62	63	66	67	69	70	67	

Source: World Bank, World Development Indicators

Table 6. Government Revenue and Expenditure, as Percentage of GDP, 2000 – 2022

Period	2000	2001	2002	2003	2004	2005	2006	2007	2008
Revenue	13	15	16	17	17	20	23	22	22
Expenditure	19	18	19	19	20	23	21	28	27
Balance	-6	-3	-3	-2	-3	-3	-2	-6	-5
Period	2009	2010	2011	2012	2013	2014	2015	2016	2017
Revenue	23	23	24	25	26	28	26	29	29
Expenditure	28	26	27	24	27	28	31	38	35
Balance	-5	-3	-3	1	-1	0	-5	-9	-6
Period	2018	2019	2020	2021	2022 (est.)				
Revenue	29	27	25	26	25				
Expenditure	31	29	29	28	27				
Balance	-2	-2	-4	-2	-2				

Note: Government revenue consists of taxes, social contributions, grants receivables, and other revenue. Government expenditure reflects total expenses and the net acquisition of nonfinancial assets.

Source: IMF World Economic Outlook, October 2022, database

Table 7. International Trade, 2000 – 2021, selected years. (Millions of US Dollars)

Period	2000	2004	2008	2010	2012	2015	2018	2020	2021
Export	785	915	1,409	1,195	1,360	891	1,073	1,407	2,150
Import	675	1,191	3,273	2,657	3,778	3,436	3,151	3,151	4,210
Balance	110	-276	-1,864	-1,462	-2,418	-2,545	-2,078	-1,744	-2,060

Source: World Bank, World Development Indicators

Figure 1: Production and yields of major agricultural crops 1991-1997

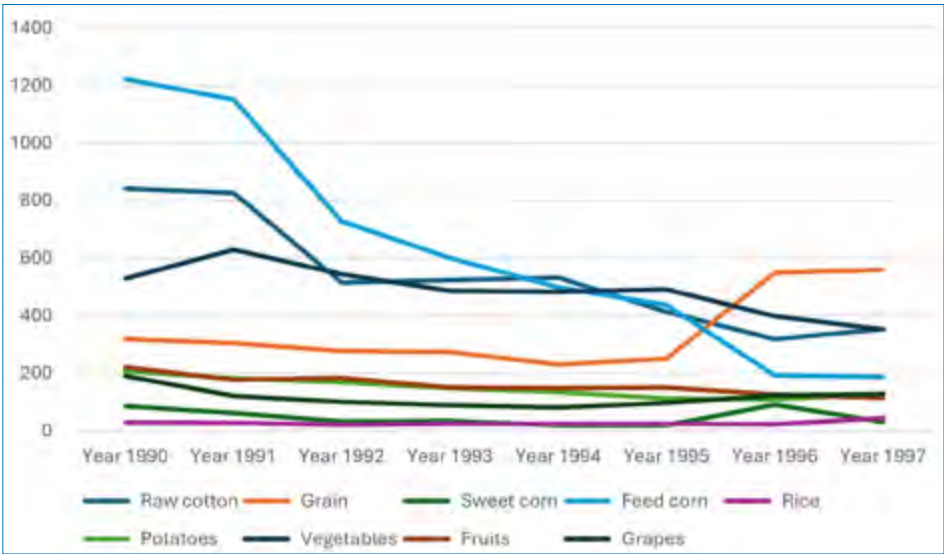
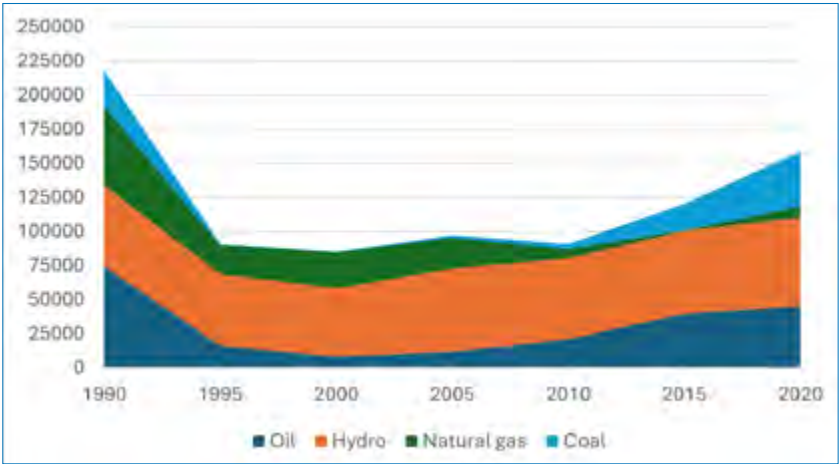


Table 8. Production and yields of major agricultural crops 1998-2019

Period	1998	2002	2006	2010	2014	2018	2019
in thousands of tonnes							
Production							
Raw cotton	383	515	438	310	373	300.3	403
Grain	500	596	773	1261	1318	1296.2	1414.6
Sweet com	36	55	139	151	186	237.4	232.9
Feed com	170	299	407	915	1086	908	908
Rice	40	50	49	77	80	90.5	106.4
Potatoes	175	357	574	760	854	964.6	994.4
Vegetables	322	473	760	1143	1550	2119.4	2182.6
Fruits	97	147	209	225	342	447.9	473.8
Grapes	46	81	107	124	189	241.9	247.2
Hay	359	376	231	409	640	1036.8	989.7

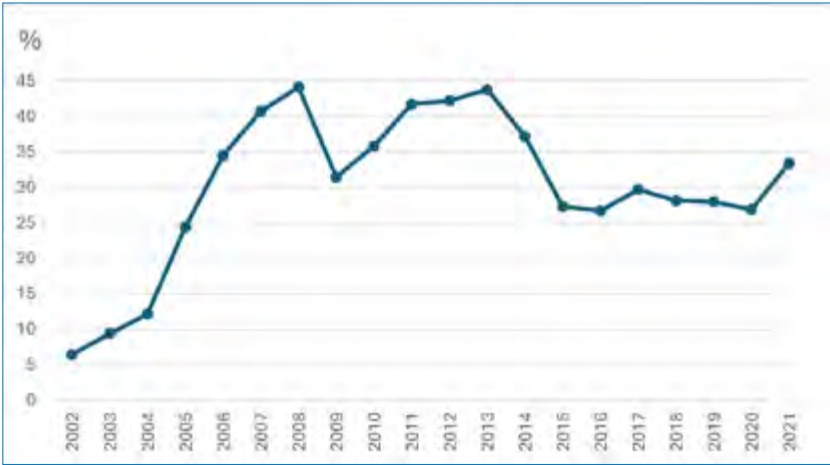
Source: Agency of Statistics under the President of the Republic of Tajikistan

Figure 2: Total Energy Supply by Source, Tajikistan 1990 -2020 in Tajikistan



Source: IEA (2022), World Energy Statistics and Balances (database)

Figure 3: Remittances Received, 2002 – 2021 (as a percentage to GDP)



Source: World Bank staff estimates based on IMF balance of payments data, and World Bank and OECD GDP estimates.



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