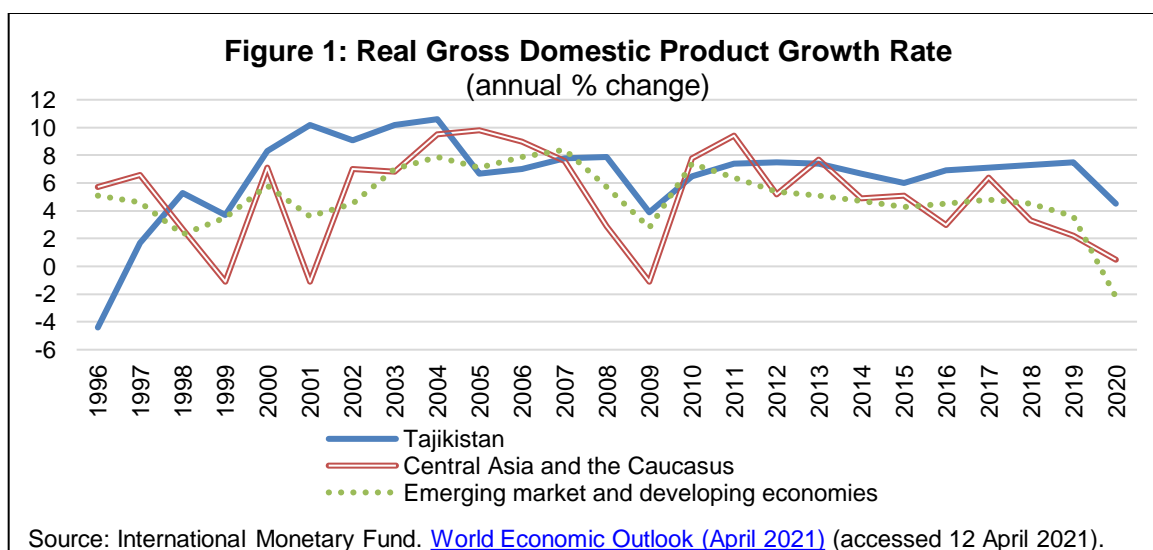


INCLUSIVE AND SUSTAINABLE GROWTH ASSESSMENT

A. Overview of Growth Performance

1. Tajikistan's economy has grown rapidly since 1998, albeit from a low base, with per capita gross national income among the lowest in Central Asia and household incomes heavily dependent on remittances, which averaged nearly 30% of gross domestic product (GDP) during 2015–2019 and more than 35% during 2006–2014. While economic activities collapsed during the 5-year civil war following independence from the former Soviet Union in 1991, growth rebounded after the war ended in 1997 and has been 6.0% or more every year since 2000 except 2009 and 2020. From 2000 to 2019, growth averaged 7.6% a year, well above the 5.6% average for peer economies in the Caucasus and Central Asia and for emerging market and developing economies worldwide (Figure 1). This is partly because Tajikistan, as a landlocked country with limited integration to the world economy through exports, has experienced less of a decline in growth than many other countries from global shocks such as the dot-com burst of 2001, the global financial crisis of 2008–2009, and the collapse of commodity prices in 2014–2016, although falling oil prices reduced remittances from Tajiks working in the Russian Federation and Kazakhstan. Tajikistan's growth slowed to 3.9% in 2009, but the decline was much less than in the Caucasus and Central Asia as a whole, where GDP contracted. Tajikistan's growth rate rose from 2015 to 2019, partly because of heavy spending on public investment, which boosted industrial activity. The rest of the Caucasus and Central Asia experienced a sharp slowdown from the plunge in hydrocarbon prices and the recession in the Russian Federation. In 2020, however, the coronavirus disease (COVID-19) pandemic slashed the GDP growth rate to 4.5%.

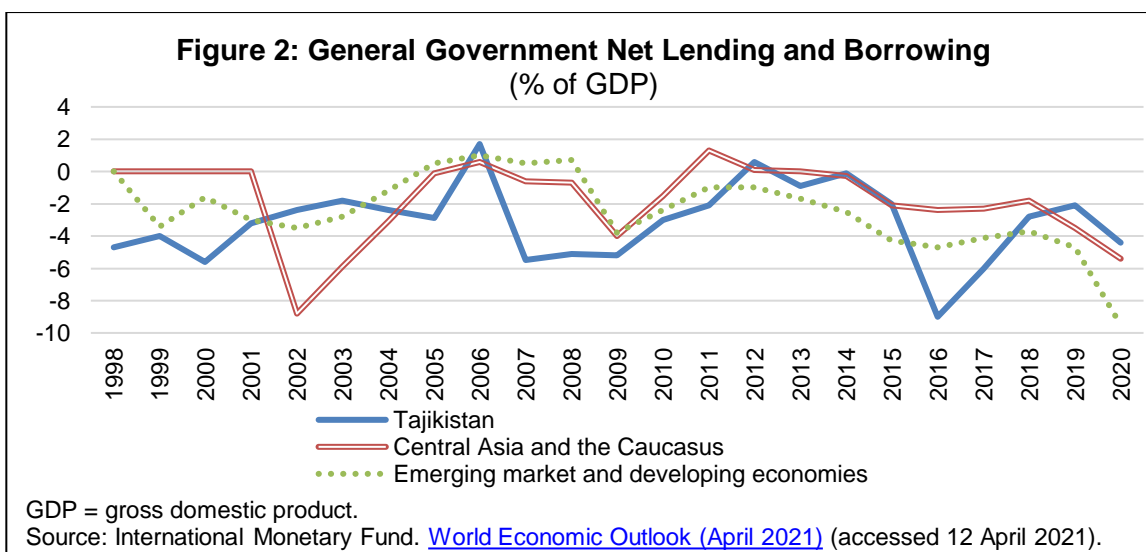


2. While Tajikistan has enjoyed steady GDP growth, the economy has done less well at providing employment for its expanding population. According to a 2017 World Bank report,¹ employment growth averaged about 2.1% per year during 2003–2013, implying an elasticity of growth in employment to GDP growth of around 0.3. Employment growth was also less than the growth in the labor force, estimated at 2.5% annually in a 2015 report from the International

¹ V. Strokova and M.I. Ajwad. 2017. [Tajikistan Jobs Diagnostic: Strategic Framework for Jobs](#). *Jobs Series*. No. 1. Washington, DC: World Bank.

Labour Organization.² Moreover, the elasticity of employment growth to GDP growth was only 0.13 during 2010–2014, after the global financial crisis, down from 0.33 in 2000–2009. In 2011, 23.5% of school graduates were unemployed, including almost 64.0% of those completing secondary vocational education. Of youth under age 30 who find work, a large share is employed in the informal economy. The shortfall in jobs contributes to the high percentage of Tajiks engaged in migrant labor, particularly among younger workers from low-income households in rural areas, and deprives the country of the benefits of the demographic dividend from a relatively youthful population.

3. Countercyclical fiscal policy has supported Tajikistan’s growth. During the 2007–2009 global financial crisis, Tajikistan’s net government borrowing reached 5.3% of GDP, far above the average for the Caucasus and Central Asia (1.8%) and for emerging market and developing economies (0.9%), reversing net lending of 1.7% of GDP in 2006. Similarly, net government borrowing reached an average of 5.7% of GDP following the collapse of global commodity prices and its aftermath in 2015–2017, well above the averages of 2.3% of GDP for the Caucasus and Central Asia and 4.4% for emerging market and developing economies (Figure 2). Public expenditure rose in 2016–2017 to support bank recapitalization and fund the construction of the Rogun hydropower plant, a national flagship project featured in Tajikistan’s National Development Strategy 2030.³ Net borrowing fell to about 2.1% of GDP in 2019. However, it rose in 2020, as the government enacted a stimulus package equivalent to 4.5% of GDP to address the consequences of the COVID-19 pandemic.

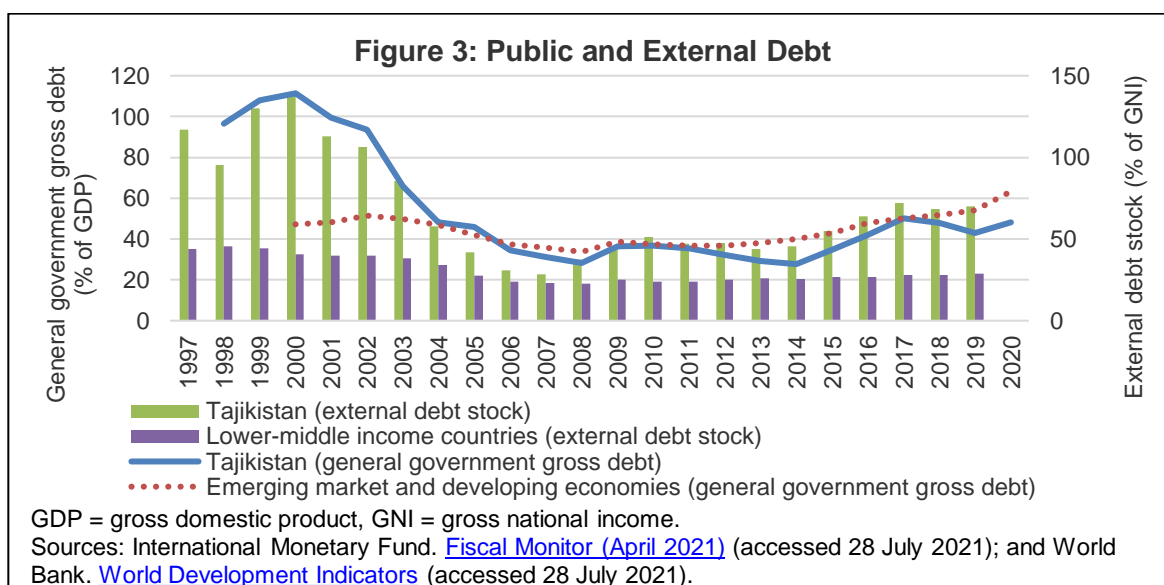


4. Extensive recourse to fiscal stimulus has undermined Tajikistan’s public and external debt sustainability. During 2014–2017, public debt nearly doubled as a share of GDP, from 27.7% to 50.3%, while total external debt (public and private) jumped from 45.4% of GDP to 72.0%—more than twice the average for lower-middle income countries (Figure 3). Bank recapitalization in 2016 and the issuance of a \$500 million sovereign Eurobond in 2017 to support the Rogun project were the main reasons for the rise in debt ratios. The latest debt sustainability analysis by the International Monetary Fund (IMF) and the World Bank in April 2020 concluded that Tajikistan’s

² M. Pouchkin and J. Sourina. 2015. [Peer Review of Youth Employment Policies in the Republic of Tajikistan: Synthesis Report](#). Moscow: International Labor Organization.

³ Government of Tajikistan. 2016. [National Development Strategy of the Republic of Tajikistan for the Period up to 2030](#). Dushanbe.

overall risk of debt distress remains high.⁴ Despite declining slightly in 2018–2019, the general government gross debt still stood at 48.1% of GDP amid the COVID-19 pandemic in 2020. The government is committed to fiscal consolidation in 2021–2022 and avoiding non-concessional borrowing until debt is considered sustainable.



5. Along with strong growth performance, the incidence of poverty in Tajikistan has declined substantially. The share of the population below the World Bank's \$1.90 per day threshold fell from 27.0% in 2003 to 4.1% by 2015—the year Sustainable Development Goal (SDG) 1 on poverty was introduced and for which the latest survey-based international data for Tajikistan are available.⁵ However, the decline in poverty in response to growth has slowed, with poverty falling by only 0.4 percentage points for each percentage point of growth during 2014–2017 versus 0.7% during 2004–2007.⁶ The slowdown reflected weaker remittances, delays in adding funding and extending the government's targeted social assistance program to more regions, and possibly a squeeze on social spending from increased outlays on the Rogun hydropower project. Tajikistan's poverty rates exceeded the averages for other countries in the Caucasus and Central Asia (Table 1). Regarding public health, Tajikistan's maternal mortality rate (18.0%) is less than the average of regional peers, whereas its under-5 mortality rate is higher.

⁴ IMF. 2020. [Republic of Tajikistan: Request for Disbursement under the Rapid Credit Facility—Press Release; Staff Report; and Statement by the Executive Director for the Republic of Tajikistan](#). *IMF Country Report*. No. 20/151. Washington, DC.

⁵ While the World Bank's latest survey-based estimate of the head count ratio using the \$1.90 a day poverty line is 4.1% in 2015, the common reference year estimate declined further to 2.2% in 2019.

⁶ World Bank. 2018. [Tajikistan Country Economic Update, Spring 2018: Changing Regional Environment—Critical to Capitalize](#). Washington, DC. p. 9.

Table 1: Poverty

Item	Tajikistan			Other CCA
	2003	2009	2015	2015
Poverty headcount ratio at \$1.90 a day (% , 2011 PPP) ^a	27.0	4.0	4.1	1.7
Poverty headcount ratio at \$3.20 a day (% , 2011 PPP) ^a	63.3	22.4	17.8	11.0
Poverty headcount ratio at \$5.50 a day (% , 2011 PPP) ^a	89.0	59.8	50.5	38.6
Maternal mortality ratio (modeled estimate, per 100,000 live births) ^b	35.0	26.0	18.0	28.3
Under-5 mortality rate (per 1,000 births) ^b	65.4	44.5	37.7	21.4

CCA = Central Asia and Caucasus, PPP = purchasing power parity.

^a Other CCA represents the 2015 averages of Armenia, Georgia, Kazakhstan, and the Kyrgyz Republic. Data for Azerbaijan, Turkmenistan, and Uzbekistan were not available.

^b Other CCA represents the 2015 averages of Armenia, Azerbaijan, Georgia, Kazakhstan, the Kyrgyz Republic, Turkmenistan, and Uzbekistan.

Source: World Bank. [World Development Indicators](#) (accessed 25 May 2021).

6. Economic inequality appears to have risen since the late 1990s. Household income per capita among the bottom 40% of the population grew by 2.3% a year in 2009–2015, less than the 3.6% for the population at large that SDG 10 (reduced inequalities) established as a target.⁷ In addition, 2015 data (most recent available data) show a rise in the Gini index to 34.0, up from 30.8 in 2009 and 29.5 a decade earlier.⁸

7. Services accounted for 50.9% of Tajikistan's GDP in 2020, with industry at 17.4% and agriculture at 22.6% (Figure 4). While services comprise the largest share of GDP, they represent a smaller share of exports, as Tajikistan's tradable services (such as tourism) are a small part of the total.⁹ In 2018, minerals represented 36.57% of exports, followed by metals and stones (29.96%) and services (17.7%). Electrical energy accounted for 2.17% of exports in 2018. Apart from aluminum, manufacturing represents only a small share of exports, and it is hard to foresee exports of manufactured goods rising much or adding significantly to growth over the medium term. Harvard University's Atlas of Economic Complexity ranked Tajikistan 116 out of 133 economies in 2018 based on the diversity¹⁰ and ubiquity of export products, above only Azerbaijan (124) in the Caucasus and Central Asia.¹¹

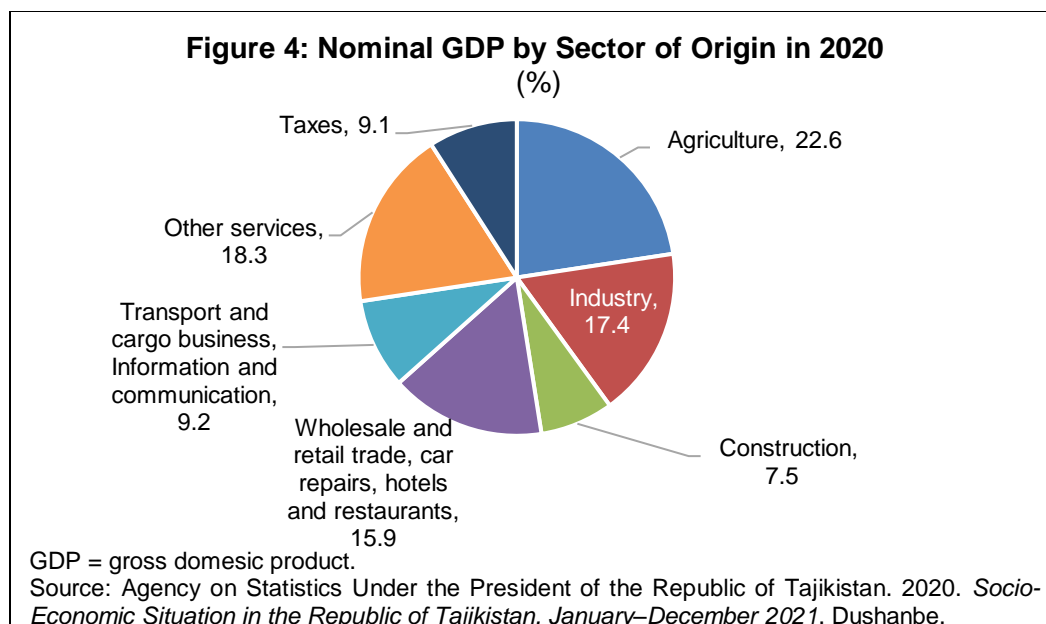
⁷ ADB. 2019. [Key Indicators for Asia and the Pacific 2019](#). Manila.

⁸ World Bank. [World Development Indicators](#) (accessed 28 June 2020). A Gini index of 0 represents perfect equality, while an index of 100 implies perfect inequality.

⁹ Trade in services through foreign service providers is not reflected in the balance of payments statistics.

¹⁰ Trade benefits a country by allowing specialization in products of comparative advantage. What matters is that specialization reflects market forces, rather than state interventions and distortions. Partly for this reason, this assessment advocates further progress toward a market economy to achieve efficient allocation of resources and welfare gains. The identification of what Tajikistan should be exporting if existing distortions to the market were to be removed is outside of the scope of this assessment. Such an assessment could be undertaken as a separate exercise using the computable general equilibrium model.

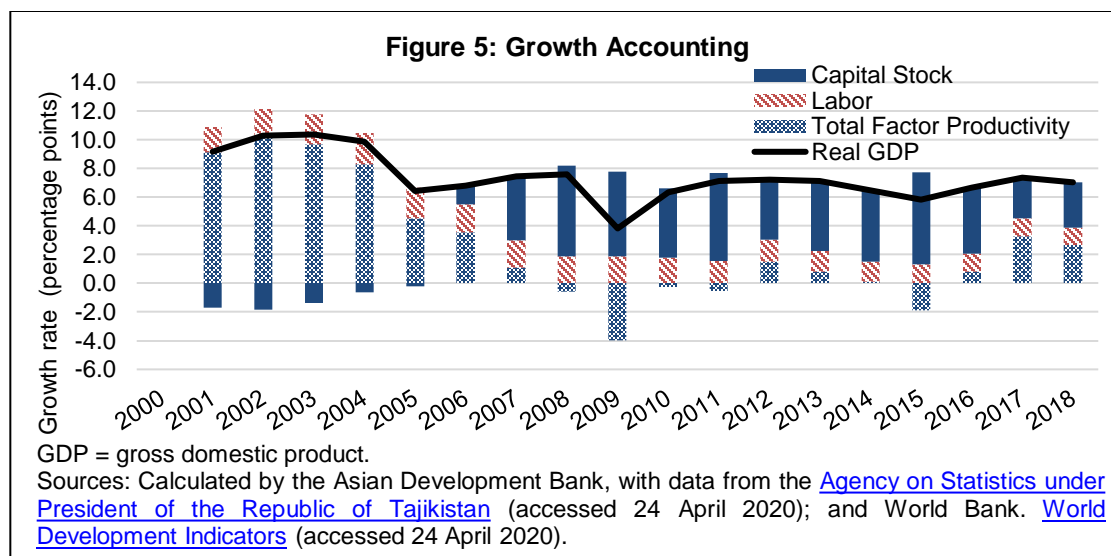
¹¹ [The Atlas of Economic Complexity](#) (accessed 10 February 2021).



B. Long-Term Growth Drivers

1. Growth Accounting

8. Growth accounting—which breaks up growth into contributions from capital, labor, and total factor productivity (TFP)—revealed that while Tajikistan’s growth up to 2005 came largely from gains in TFP, capital increases have replaced them as the main source of growth (Figure 5). During 2000–2005, when annual growth averaged 9.2%, TFP growth accounted for 91% of the expansion. This is typical of countries early in the transition to a market economy, when substantial reforms leading to more efficient resource allocation boost productivity and growth. However, the efficiency gains can diminish unless reforms are sustained over the long term. From 2005 to 2015, the contribution of TFP to growth fell to zero on average, with capital accounting for 71% of growth during 2005–2010 and 79% during 2010–2015, and average growth slowing to 6.6% during 2005–2010 and 5.3% during 2010–2015. During 2015–2018, the contribution of TFP to growth recovered to 32% and average growth rose to 6.8%, as the contribution of capital declined to 50%. Labor’s contribution to growth was relatively stable throughout 2000–2018, averaging about 20%.



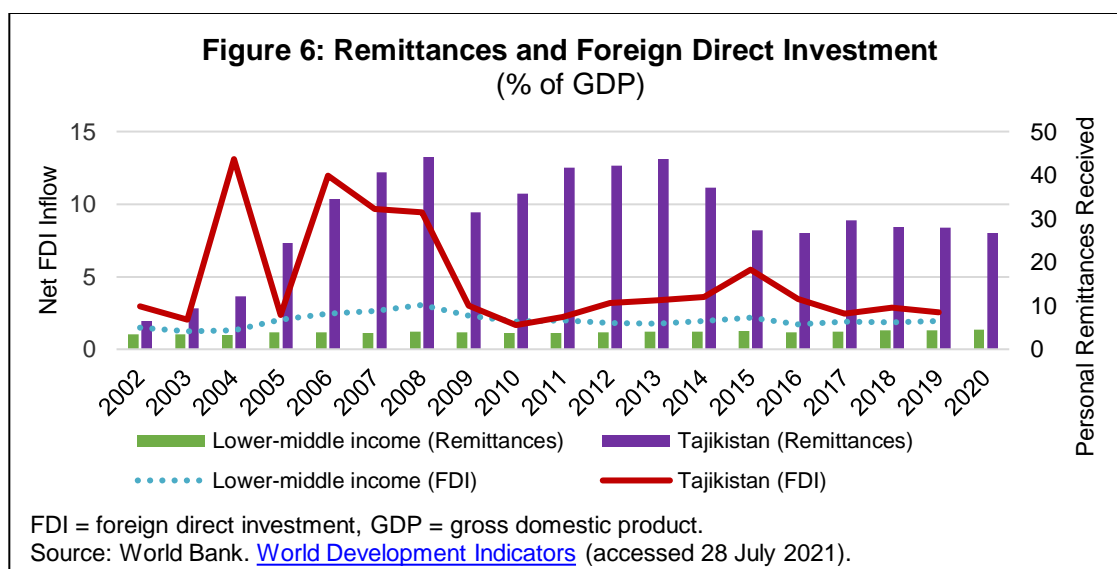
9. While capital formation has been Tajikistan's main growth driver since the mid-2000s, public investment has been the principal form of capital formation, as the share of private investment has been extremely low. Private investment is estimated to have averaged only about 4% of GDP since 2000,¹² well below the 21% of GDP average for the Commonwealth of Independent States during this period.¹³ This partly reflects the private sector's small share of economic activity as state-owned enterprises (SOEs)—accounting for about 17% of GDP and employing about 24% of the labor force as of 2018—dominate many economic sectors. With most investment by the public sector, only a small part of the economy's resource allocation has benefited from the efficiency gains of the market mechanism, which may help explain why TFP growth has stagnated.

10. The low level of private investment has not only hindered efficiency of domestic capital formulation, but has also been reflected in capital inflows. Net inflows of foreign direct investment (FDI) fell substantially during the global financial crisis and have yet to recover. During 2009–2019, FDI inflows averaged 3.1% of GDP, down from 7.4% during 2002–2008. This contrasts sharply with remittances, which averaged 33.8% of GDP, over eight times the average of 4.0% for lower-middle income countries (Figure 6). Unlike FDI, remittances are largely used to support consumption, adding little to private capital accumulation and long-term growth. Tajikistan's heavy dependence on remittance inflows makes people's livelihoods extremely vulnerable to external shocks affecting the countries in which Tajik migrants work, particularly the Russian Federation. Although Tajikistan's growth continued to rise in 2015 and 2016, persistent weakness in the Russian Federation has cut remittance inflows from their pre-2015 highs. Improving the business climate to increase domestic employment could help lessen household reliance on remittance earnings, reducing the population's vulnerability to external shocks that affect neighboring countries. In the World Bank's estimates, personal remittances received declined from 28.0% of GDP in 2019 to 26.7% of GDP amid the COVID-19 pandemic in 2020.¹⁴

¹² Based on government data, private investment accounted for 4.0% of GDP and 25.3% of fixed capital investment in 2019.

¹³ World Bank. 2018. *Tajikistan Systemic Country Diagnostic: Making the National Development Strategy 2030 a Success—Building the Foundation for Shared Prosperity*. Washington, DC.

¹⁴ World Bank. [World Development Indicators](#) (accessed 28 July 2021).



11. The lack of an enabling business environment helps explain Tajikistan's low rate of private investment. The country's score in the World Bank's 2020 Doing Business report (61.3) is below the average of Europe and Central Asia (75.3) and far below the score for Georgia (83.7)—the best performer in the Caucasus and Central Asia (Table 2). Tajikistan underperforms the regional average on most indicators. However, its score on access to credit (90.0) rose sharply, reflecting substantial improvement from a year earlier (40.0). Finance sector reforms have intensified, including the launch of a functional secured transaction system and a broadening of assets acceptable as collateral.¹⁵ The percentage of nonperforming loans declined to 23.8% at the end of 2020.¹⁶ Yet, the finance sector has traditionally been considered a weak segment of Tajikistan's economy, and domestic credit to the private sector accounted for only 12.3% of GDP in 2017, although 47% of the population aged 15 and above had an account at a financial institution.¹⁷

Table 2: Doing Business Scores

Topic	Tajikistan		Georgia	Europe and Central Asia
	2019	2020	2020	2020
Overall ease of doing business	55.4	61.3	83.7	75.3
Starting a business	91.0	93.2	99.6	90.5
Dealing with construction permits	60.6	60.8	81.0	69.0
Getting electricity	47.2	51.1	84.4	75.6
Registering property	66.3	66.4	92.9	75.8
Getting credit	40.0	90.0	85.0	72.2
Protecting minority investors	40.0	40.0	84.0	61.0
Paying taxes	60.9	60.9	89.2	77.9
Trading across borders	59.1	60.9	90.1	87.3
Enforcing contracts	60.7	60.7	75.0	65.5
Resolving insolvency	28.1	28.4	56.2	55.7

Notes: The ease of doing business score (formerly, the distance to frontier score) presented in this table captures the gap between an economy's current performance and a measure of best regulatory practice. Higher scores show absolute better ease of doing business (the best score is set at 100), while lower scores show absolute poorer ease of doing business (the worst performance is set at 0).

Source: World Bank. [Ease of Doing Business Scores](#) (accessed 30 April 2020).

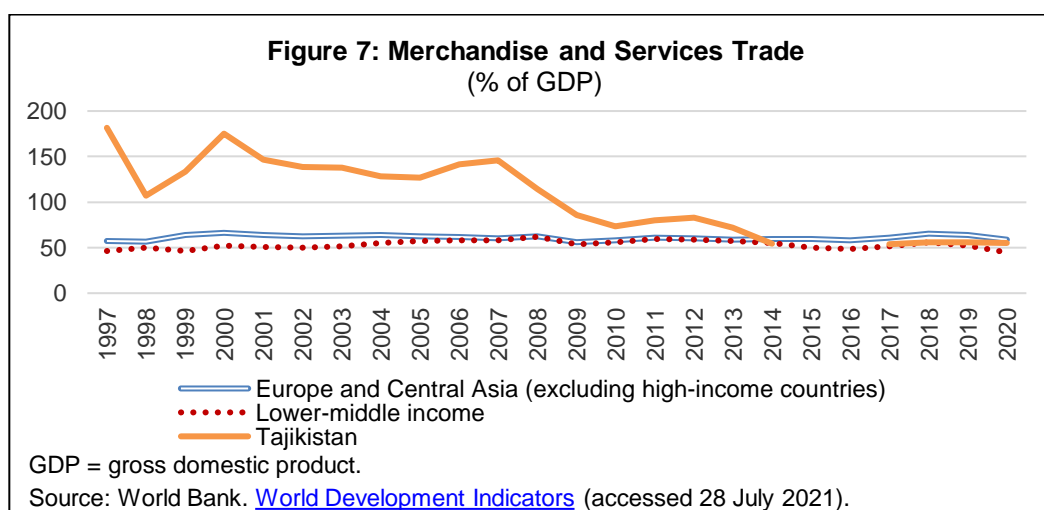
¹⁵ World Bank. 2019. [Economy Profile of Tajikistan: Doing Business 2020](#). Washington, DC.

¹⁶ ADB. 2021. [Asian Development Outlook 2021](#). Manila. p.184.

¹⁷ World Bank. [The Global Findex Database 2017](#).

12. An important factor contributing to the lack of an enabling business climate is the relatively poor quality of Tajikistan’s public institutions and governance. According to the 2020 update of the World Bank’s Worldwide Governance Indicators, Tajikistan ranked well below average on measures such as government effectiveness, the quality of regulation, the rule of law, and control of corruption. On a scale of -2.5 (weak) to 2.5 (strong), Tajikistan earned a score of -1.05 for government effectiveness (14th percentile); -1.01 for regulatory quality (12th percentile); -1.23 for rule of law (9th percentile); and -1.32 for control of corruption (9th percentile).¹⁸ In 2020, Transparency International rated Tajikistan 149 out of 180 countries on its Corruption Perceptions Index, near Uzbekistan (146), well below Kazakhstan (94) and the Kyrgyz Republic (124), and above only Turkmenistan (165) in Central Asia.¹⁹

13. Despite being landlocked, Tajikistan exhibited considerable trade openness in 2000–2007, likely as a result of the initial opening of the economy with independence. In 2007, total trade equaled nearly 150% of GDP. However, the ratio of total trade to GDP fell sharply during the global financial crisis and in its aftermath. It averaged 55% during 2017–2020—similar to the averages for lower-middle income countries and non-advanced economies in Europe and Central Asia (Figure 7)—mainly because of slowing import growth. The ratio of imports to GDP declined steadily in 2008–2010 amid the global financial crisis and from 2013 as slowing remittance growth constrained household income, whereas the ratio of exports to GDP stabilized somewhat after the crisis. As of 2020, Tajikistan’s total trade, including both goods and services, amounted to 55% to GDP, of which 38% represented imports. Greater exposure to international competition could help spur productivity growth in Tajikistan, both from one-time improvements in the allocation of resources and from increases in potential output.



14. Tajikistan has considerable scope to enhance its connectivity to the rest of the world. According to the World Bank’s Logistics Performance Index (LPI) for 2018, Tajikistan ranked 134 out of 160 economies, substantially below Kazakhstan (ranked 71), Central Asia’s best performer. Tajikistan’s overall LPI score is also below the averages for Europe and Central Asia and lower-middle income countries (Table 3). The country’s scores are modest on both customs and trade-related infrastructure. The World Economic Forum’s Global Competitiveness Report ranked Tajikistan 91 out of 141 economies in infrastructure provision (and 111 for transport

¹⁸ World Bank. [Worldwide Governance Indicators](#).

¹⁹ Transparency International. [Corruption Perceptions Index, 2020](#).

infrastructure) in 2019.²⁰ While significant progress has been made in developing international corridors, the domestic road network is still unable to connect local economies to them. Infrastructure development and trade facilitation could help overcome Tajikistan's limited integration with the global economy. Improving connectivity will require better infrastructure, along with measures to facilitate cross-border trading.

Table 3: Logistics Performance Index

Country Group	LPI Rank	LPI Score	Customs Score	Infrastructure Score
Europe and Central Asia	...	2.71	2.48	2.50
Lower-middle income countries	...	2.57	2.38	2.36
Kazakhstan	71	2.81	2.66	2.55
Tajikistan	134	2.34	1.92	2.17

... = not available, LPI = Logistics Performance Index.

Note: Performance is evaluated using a 5-point scale (1 for the lowest score, 5 for the highest), and the ranking among 160 countries (the higher, the better) is provided. Data on Europe and Central Asia exclude high-income countries.

Source: World Bank. [Logistics Performance Index](#) (accessed 28 July 2021).

15. Labor's contribution to Tajikistan's growth has been fairly stable. While available national data suggest that the unemployment rate in Tajikistan (6.9% in 2016) has been less than the average for Europe and Central Asia (7.6% in 2019), this may reflect the country's extremely low labor force participation rate. In 2016, only 42.4% of the population aged 15 and older was in the labor force—well below the 60.5% average for Europe and Central Asia (Table 4). Moreover, the participation rates for men (52.9%) and women (32.6%) were well below the comparable averages in Europe and Central Asia (70.5% for men and 50.7% for women, respectively). Labor force participation rates for youth aged 15–24 were also below those for Europe and Central Asia, particularly among men. Low participation rates may reflect labor migration and the high share of the population living in rural areas (73% in 2019), many of whom engage in subsistence agriculture or unpaid work. Amid the pandemic, more than 40% of households reported disruptions to work and 33% of those who suffered work disruptions anticipated permanent job losses (as of August 2020).²¹ In the modelled International Labour Organization estimate, the unemployment rate increased from 6.7% in 2019 to 7.5% in 2020.²²

Table 4: Labor Market
(%, national estimates)

Item	Tajikistan (2016)	Europe and Central Asia (2019)
Labor force participation rate (ages 15+)	42.4	60.5
Male	52.9	70.5
Female	32.6	50.7
Labor force participation rate (ages 15–24)	26.4	37.6
Male	30.6	44.4
Female	22.2	30.5
Unemployment rate	6.9	7.6
Male	7.9	7.6
Female	5.5	7.9

Note: Data on Europe and Central Asia exclude high-income countries.

Source: World Bank. [World Development Indicators](#) (accessed 24 May 2021).

²⁰ K. Schwab. 2019. [The Global Competitiveness Report 2019](#). Geneva: World Economic Forum.

²¹ W. Seitz and A. Rajabov. 2020. [Economic and Social Impacts of COVID-19: Updates from Listening to Tajikistan](#). World Bank Factsheet. 11 December.

²² World Bank. [World Development Indicators](#) (accessed 29 July 2021).

16. The country ranked 137 out of 153 countries in the World Economic Forum's Global Gender Gap Report 2020. In 2019, women's earnings averaged only 20% of those of men (146 out of 153 countries), and women were only 70% as likely to hold technical or professional jobs (108 out of 153 countries).²³ Women work disproportionately in health care and education, where incomes are lower than in other professional fields. Women also represent nearly half of workers in agriculture and typically hold lower-paying or unpaid positions. In addition, smaller percentages of women are enrolled in secondary and tertiary educational institutions and have higher dropout rates.²⁴ Many factors, from legal restrictions to local cultural norms (footnote 1), contribute to the disparities between male and female earnings and employment rates. The Box provides details.

Box: Gender Issues in Tajikistan

International ranking and gender indicators. Tajikistan has advanced in achieving key dimensions of human development, based on the United Nations Development Programme Human Development Reports. In 2019, it ranked 125 out of 189 countries, with a Human Development Index of 0.656, somewhat above its 2015 ranking (129 out of 188 countries). It ranked third lowest among Central and West Asian countries. The report showed that women have better life expectancy than men. More women than men also have at least some secondary education. However, men fare better than women in terms of per capita income and labor force participation rates. Men's per capita income is five times that of women, and about twice as many men as women are in the labor force. These inequities are validated in the Global Gender Gap Report 2020, where Tajikistan received a score of 0.626 and ranked 137 out of 153 countries, the lowest among Central Asian countries surveyed. Tertiary education also reveals a gender gap. In the private sector, less than 10% of firms are owned or managed by women. Women account for about a quarter of the Parliament, 6% of ministerial positions, and 22% of central and local levels of government service.

Institutional mechanisms on gender equality. Gender equality is guaranteed under the Constitution of Tajikistan and existing legislation and policies. The principles of gender equality are codified in the Law on State Guarantees of Equal Rights for Men and Women and Equal Opportunities in the Exercise of Rights, 2005; the National Strategy for Women's Empowerment for 2011–2020; and the National Development Strategy, 2016–2030. In addition, the Family Law gives equal rights to women in divorce proceedings and favors women in child custody and division of property. Women's access to land is also promoted under the Land Code, which classifies land as joint property in marriage and strengthens women's right to land after divorce. In 2013, the government adopted the Law on Protection Against Domestic Violence to address increasing violence against women. However, the Human Development Report 2019 showed that about 26% of women still experienced violence in intimate partner relations.

Women's economic empowerment and human development. Gender division and major wage gaps are widespread in the labor market, with women still mainly in lower-paid employment earning about 60% of men's wages. Male labor migration has made agricultural labor increasingly feminized, as about 69% of working women are employed in agriculture compared with 41% of men. Women perform lower-paid work such as land preparation, sowing, cultivation, and harvesting; and do not have equal access to agricultural services. Women are also largely absent in decision-making on water management, as membership in water users' associations is male dominated.

In terms of education, the literacy rate for both men and women aged 15–24 is 100%. However, gender inequality increases as students advance through the education system. About 9% of girls do not attend primary school, compared with about 2% of boys. Only 64% of girls proceed from primary to secondary school, compared with 86% of boys. In addition, only 27% of female students pursue tertiary education. The situation is more acute in rural areas, where traditional gender stereotypes and low income levels limit girls' access to higher education.

²³ World Economic Forum. 2019. [Global Gender Gap Report 2020](#). Geneva.

²⁴ ADB. 2016. [Tajikistan Country Gender Assessment](#). Manila.

Sources: United Nations Development Programme. Human Development Reports. [Tajikistan: Human Development Indicators](#) (accessed 18 February 2020); Coalition of Nongovernmental Organizations of Tajikistan. 2018. [Third Shadow Report of Nongovernmental Organizations of Tajikistan on Implementation of the Convention on the Elimination of All Forms of Discrimination Against Women](#). Dushanbe; World Economic Forum. 2019. [Global Gender Gap Report 2020](#). Geneva; Agency on Statistics under the President of Tajikistan. 2017. [Situation in the Labor Market in the Republic of Tajikistan](#). Dushanbe; Agency on Statistics under the President of Tajikistan. [Time Series of Gender Indicators to the Strategy of Enhancing the Role of Women in Tajikistan](#) (accessed 21 February 2020); Food and Agriculture Organization of the United Nations. 2018. [Small Family Farms Country Factsheet: Tajikistan](#) (accessed 21 February 2020); N. Mukhamedova, and K. Wegerich. 2018. [The Feminization of Agriculture in Post-Soviet Tajikistan](#). *Journal of Rural Studies*. 57. pp. 128–139; UNESCO Institute of Statistics. [Tajikistan](#) (accessed 20 February 2020); United Nations Children’s Fund (UNICEF). [Access to Education](#); C. Gheorghe. 2016. [Evaluation of UNICEF Tajikistan’s Work in Priority Districts during the 2010–2015 Country Programme: Final Evaluation Report](#). Tajikistan: UNICEF (accessed 20 February 2020).

17. TFP could be improved through human resources development to enhance labor productivity, and Tajikistan has had some success in this area. As of 2015, more than 5% of GDP was spent on education expenditure, somewhat above the averages for both Europe and Central Asia and for lower-middle income countries in 2017. The gross primary school enrollment rate exceeded 100% in 2017 (Table 5). However, the enrollment rate diminished for higher levels of education, falling to 31.3% for tertiary education, less than half the average in Europe and Central Asia. Based on 2017 data, the World Bank estimates that the average student will complete 10.9 years of schooling: 11.3 years for boys and 10.4 years for girls. However, the quality of education is a concern. Harmonized test scores from early grade reading assessments in Tajikistan during 2018 showed an average achievement score of 391 on a scale from 300 (representing minimum achievement) to 625 (advanced attainment). Once this average score is taken into account, average years of schooling, adjusted for learning achievement, fall to 6.8 years in Tajikistan.²⁵ Problems with educational attainment may contribute to the difficulties many secondary school graduates encounter in finding employment.

Table 5: Human Capital
(%)

Item	Tajikistan	Europe and Central Asia	Lower-middle income Countries
Gross school enrollment rate			
Primary	100.9 (2017)	99.5 (2019)	99.7 (2019)
Secondary	88.5 (2013)	99.9 (2019)	67.5 (2019)
Tertiary	31.3 (2017)	74.6 (2019)	24.2 (2019)
Education expenditure			
Share of GDP	5.2 (2015)	3.9 (2017)	3.8 (2018)
Share of total expenditures	16.4 (2015)	12.6 (2017)	16.2 (2018)

Note: This table presents education-related indicators on human capital, and health-related indicators are in Table 1. Data on Europe and Central Asia exclude high-income countries.

GDP = gross domestic product.

Source: World Bank. [World Development Indicators](#) (accessed 28 July 2021).

18. Tajikistan’s SOEs also contribute to low productivity, as they are active in many areas of the economy and are typically unprofitable. Combined losses of major SOEs are estimated at 3.7% of GDP in 2018. The dominant role of SOEs in many sectors contributes to the problems facing private sector growth.

²⁵ World Bank. [Human Capital Index 2020](#); and World Bank. 2020. [Tajikistan Brief: Human Capital Project, October 2020](#). Washington, DC.

19. TFP growth could also rise with progress in science and technology. However, Tajikistan's research and development outlays were extremely low, representing only 0.12% of GDP in 2013, and few patent applications were made in 2019 (Table 6). Thus, there is a scope for Tajikistan to enhance research and development capacity to boost growth.

Table 6: Research and Development

Item	Tajikistan	Europe and Central Asia
R&D expenditures (% of GDP)	0.12 (2013)	1.01 (2014)
Patent applications (nonresidents)	1 (2019)	14,652 (2019)
Patent applications (residents)	1 (2019)	35,799 (2019)

... = not available, GDP = gross domestic product, R&D = research and development.

Note: Data on Europe and Central Asia exclude high-income countries.

Source: World Bank. [World Development Indicators](#) (accessed 28 July 2021).

2. Fiscal and External Sustainability

20. Tajikistan's growth prospects require sound fiscal and external management. As noted in para. 4, debt sustainability has been a concern. A primary source of the problem has been high public investment—particularly outlays for the Rogun hydropower project. To address the health and economic effects of the pandemic, the government also enacted a countercyclical support program estimated at 4.5% of GDP in March 2020. While the government's net borrowing declined to 2.1% of GDP in 2019, it is estimated to have increased to 4.4% of GDP in 2020 due to revenue losses amid the COVID-19 pandemic (Table 7). Nevertheless, the government is committed to maintaining fiscal sustainability over the medium term. Once the pandemic is controlled, fiscal policy will need careful management to ensure debt sustainability over the longer term.

Table 7: Public Finance
(% of GDP)

Item	2016	2017	2018	2019	2020
General government net lending/borrowing	(9.0)	(6.0)	(2.8)	(2.1)	(4.4)
General government revenue	29.9	29.7	29.1	27.4	25.3
General government total expenditure	38.9	35.6	31.9	29.5	29.7
General government gross debt	42.1	50.3	47.8	43.1	48.1

() = negative, GDP = gross domestic product.

Sources: International Monetary Fund. [World Economic Outlook \(April 2021\)](#) (accessed 12 April 2021).

21. While Tajikistan has incurred substantial trade deficits in goods and services—nearly 30% of GDP—in recent years until 2019, the overall current account deficit has remained at or below 5% (Table 8). The trade deficits largely reflect imports financed by remittance inflows. In 2020, the current account balance moved from a deficit equal to 2.3% of GDP in 2019 to a surplus of 4.2%. This is mainly because the merchandise trade deficit narrowed significantly, as export growth doubled largely on gold sales, while muted demand and trade disruption reversed import growth amid the pandemic. Gross official reserves have risen in recent years, approaching 8 months of import cover in 2020.

Table 8: External Sector
(% of GDP, unless otherwise indicated)

Item	2016	2017	2018	2019	2020
Current account balance	(4.2)	2.2	(5.0)	(2.3)	4.2
Balance on goods and services	(29.2)	(22.9)	(28.0)	(26.7)	(21.5)
Balance on goods	(27.1)	(21.2)	(25.1)	(23.7)	(18.1)
Balance on services	(2.0)	(1.7)	(2.9)	(3.0)	(3.4)
Balance on income	16.7	17.0	16.3	16.4	17.1
Balance on transfers	8.2	8.2	6.6	8.0	8.6
Total gross external debt	61.5	73.4	71.9	68.1	75.8
Gross official reserves (months of next year's imports)	2.8	3.8	4.1	5.4	7.9

() = negative, GDP = gross domestic product

Sources: [CEIC Data Global Database](#) (accessed 6 June 2021); IMF. 2019. *Regional Economic Outlook: Middle East and Central Asia (October)*. Washington, DC; IMF. 2021. *Regional Economic Outlook: Middle East and Central Asia (April)*. Washington, DC.

3. Environmental Issues and Climate Change

22. Tajikistan's agriculture and hydropower industries require large water resources. The country's infrastructure was built mostly before 1991, during the Soviet era, and is vulnerable to the extremes of temperature and weather common in Central Asia. Many SOEs continue to have high demand for water and discharge large volumes of liquid waste. Moreover, as of 2019, nearly half of the population lacked access to safe drinking water, including more than 57% of the rural population.²⁶ Glacial melt from climate change is also a major concern, as glaciers are a key source of water. More than 1,000 of the country's estimated 14,000 glaciers have disappeared during the past 3 decades, and 35% have been degraded.²⁷

23. Waste management is also a serious concern. In 2016, waste collection services covered only about 38% of Tajikistan's population. Almost 90% of waste disposal sites do not meet sanitary epidemiological norms. In addition, only a small percentage of waste products is recycled. The storage and use of radioactive waste pose especially serious concerns. Waste is stored in 11 tailing ponds with 170 million tons, and the construction of storage facilities was undertaken without the availability of protective barriers. These storage facilities represent a serious threat to the environment and the populations of nearby areas.

24. The World Food Programme considers Tajikistan the most vulnerable country in Eastern Europe and Central Asia to climate change.²⁸ Based on the Notre Dame Global Adaptation Initiative's Country Index, Tajikistan ranked 100 (score of 46.8) out of 182 countries in 2019; its readiness ranking was 139 (score of 0.327) and its vulnerability ranking was 72 (score of 0.390).²⁹ Tajikistan is projected to experience temperature rises significantly above the global average. Under the highest emissions pathway, warming could reach 5.5°C by 2080-2099 compared with 1986-2005. Flooding and associated hazards such as landslide are expected to intensify, potentially costing lives and livelihoods. From 2010 to 2014, total greenhouse gas emissions (excluding land use change and forestry) rose by 42.6%. Agriculture accounted for 54% of the growth, while 35% came from energy, 6% from waste products, and 5% from industrial processes.

²⁶ M. Abdujaborov. 2019. [Why There Is a Problem with Access to Drinkable Water in Tajikistan?](#) Central Asian Bureau for Analytical Reporting. 21 August.

²⁷ S. Komilzoda. 2020. [Pulsating Glaciers of Tajikistan](#). Information Portal on Climate Adaptation and Mitigation in Central Asia. News article. 3 January.

²⁸ World Food Programme. 2017. [Climate Risks and Food Security in Tajikistan: A Review of Evidence and Priorities for Adaptation Strategies](#). Rome.

²⁹ Notre Dame Global Adaptation Initiative. [Country Index](#).

25. Despite these problems, in some respects Tajikistan's record on environmental protection is better than that of other Central Asian countries (Table 9). In 2017, Tajikistan had about 7,146 cubic meters of renewable freshwater resources per capita, second only to the Kyrgyz Republic, and its carbon dioxide emissions (only 0.6 metric tons per capita) were the lowest in the region.

Table 9: Natural Capital

Item	Kazakhstan	Kyrgyz Republic	Turkmenistan	Uzbekistan	Tajikistan
Forest area (2018, % of land area)	1.3	6.7	8.8	8.3	3.0
Terrestrial and marine protected areas (2018, % of total territorial area)	3.2	6.7	3.2	3.4	22.3
Carbon dioxide emissions (2016, metric tons per capita)	13.9	1.6	12.5	2.9	0.6
Renewable internal freshwater resources per capita (2017, cubic meters)	3,567.5	7,894.3	244.0	504.5	7,146.2

Source: World Bank. [World Development Indicators](#) (accessed 25 May 2021).

26. Comparative analysis of state investment programs for different years has shown a rising trend in budget allocations for addressing climate change, in line with Tajikistan's SDG commitments. The state budget's allocation for disaster risk management has also risen to address post-disaster consequences and climate adaptation. Additional investment in relevant infrastructure (e.g., rehabilitation of bridges and roads) has been made to foster tourism. Moreover, municipalities have a special budget line earmarked for disaster prevention, including climate adaptation. Under Tajikistan's first Nationally Determined Contribution (NDC) submitted to the United Nations Framework Convention on Climate Change, the country's basic priority is reducing its vulnerability to climate impacts via adaptation, given the "high dependence of the considerable part of the population and of the branches of the economy on climatic conditions, also taking into account the key role of the country's mountain ecosystems in water resources generation and biological diversity for Central Asia."³⁰

C. Implications for ADB Country Engagement

27. This analysis suggests the importance of aid for developing the private sector, to boost productivity and reduce the reliance on capital accumulation through public investment. Developing the private sector will require improving the investment climate, strengthening the quality of governance and institutions, and improving human capital by boosting education and training, while reducing gender disparities in education, earnings, and access to employment. Boosting private investment, including FDI, could reduce the pressure for public investment spending to support growth. This would allow lower fiscal deficits, while raising TFP through efficiency gains from market-based resource allocation. ADB investments in finance and other parts of the private sector, and the planned program to strengthen public sector management and reform the finance sector, could address these needs. Strengthening the private sector could expand job opportunities and attract more people into the labor force, thereby increasing labor's contribution to growth. There is a limit to the development strategy built on state-led financing of

³⁰ Republic of Tajikistan. 2014. [Intended Nationally Determined Contribution \(INDC\) Towards the Achievement of the Global Goal of the United Nations Framework Convention on Climate Change \(UNFCCC\) by the Republic of Tajikistan](#). p. 4. The NDC also pledged to cap carbon dioxide emissions at 65%–75% or, subject to international support in terms of funding and technology transfer, 80%–90% of the 1990 level by 2030.

the hydropower project; and other structural deficiencies such as high transport costs, poor human capital, regulatory and governance costs, and poor institutions should be addressed.

28. Prioritizing private sector development does not mean ignoring public investment. Public investment has a vital role to play in catalyzing private investment by financing basic infrastructure and providing the social services necessary for a market economy to function. In this respect, building infrastructure to enhance connectivity within and across borders deserves priority. To reverse the decline in Tajikistan's openness, measures to enhance the economy's international linkages are needed. ADB's projects in the transport sector should help in this regard. While ADB's previous country partnership strategy³¹ emphasized the development of international corridors, national road networks need to be linked to them.

29. Besides private sector development and public investment, ADB can also support improvements in the quality of growth through projects to foster poverty reduction, address economy-wide as well as gender inequality, and strengthen environmental protection. Social sector interventions could be broadened to boost educational opportunities for women while improving vocational education generally, to help develop a more employable workforce. They should also address emerging public health needs to address the COVID-19 pandemic. Climate and disaster resilience should be addressed. Interventions for urban development could address waste management, water supply, and sanitation; and be expanded to address the need for better access to safe water and sanitation. Agriculture projects aim at boosting prosperity in rural areas and helping develop more climate-resilient production.

³¹ ADB. 2016. [Country Partnership Strategy: Tajikistan, 2016–2020](#). Manila.