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TAJIKISTAN: ECONOMIC DEVELOPMENT TRENDS SINCE INDEPENDENCE

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urrent economic development in the Republic of Tajikistan (RT) is mostly driven by migrant remittances, which make up from 20% to 50% of GDP, and by large government investments in the power and aluminum industries. Let us examine these key sectors of the economy first separately and then in combination so as to determine the trends and prospects of the whole economy.

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In analyzing remittances, experts usually pay attention to their share in GDP. But the larger this share, the greater is the dependence of the home country's economy on these remittances and, consequently, on the socioeconomic and legal situation in the host country. On the other hand, it is important to know how these remittances are used. In this context, we will focus on only two aspects: consumption and investment.

As a rule, an increase in consumption should intensify investment processes, but since the Tajik economy is an open one and its investment potential is very small, rising consumption leads to an increase in imports, putting more pressure on the country's balance of payments.

With an economy that hinges on remittances from abroad, the authorities find it very hard to hold inflation in check and to pursue a balanced monetary policy for a number of reasons.

- First, the amount of these remittances is never known exactly, since apart from formal channels there are various informal ones as well.
- Second, remittances increase household income, which leads to a rise in consumer prices.
- Third, migration and the competitiveness of domestic production are inversely proportional, and this makes the Tajik economy heavily dependent on importers. The latter usually respond to growing demand by raising prices, at least in the short term. This is caused by two factors. One of these is the time factor, i.e., the limited volume of imported goods due to import quotas or to the importer's limited opportunities in the short term. And the second one is the transportation factor, which includes transport and non-transport costs incurred in the delivery of goods. Most of Tajikistan's imports come from Uzbekistan or pass through it, which is very costly for the Tajik economy in view of high customs fees and corruption in Uzbekistan's customs system. According to World Bank estimates, non-transport costs in the transit of Tajik freight traffic through Uzbekistan average \$200 per ton of goods, while official customs fees amount to \$500 per truck, a figure which does not meet international standards.¹

In 2000-2004, the average annual rate of economic growth in the republic was 10%, but in 2005 GDP grew by only 6.7%. At the same time, in the opinion of academicians N.K. Kaiumov, R.K. Rakhimov and T.N. Nazarov from the Tajik Academy of Sciences, the Tajik economy needs an annual GDP growth rate of at least 14%. According to their estimates, only such a growth rate can create conditions for developing the country's productive forces on a qualitatively new basis and for raising living standards.

In January-September 2006, GDP grew by 7.6% compared to the same period of 2005, reaching 6.52 billion somoni (SM), or over \$1.92 billion. This was due to an increase in industrial production (by 6.2%) and agricultural production (by 8.5%). In that period, 58.1% of the republic's 702 enterprises exceeded the production level of January-September 2005, and 205 (29.2%) were at a stand-still. According to the State Statistical Committee, the production of goods accounted for 40.8% of GDP, the service sector for 47.7%, and taxes for 11.5%. In that period, the enterprises of the Ministry of Industry produced SM 284.5 million worth of products (4% more than a year ago), while those of the Ministry of Agriculture reduced production by 0.8% (to SM 317.6 million).²

As regards immediate prospects, experts project further growth in 2007: GDP is expected to approach \$3 billion, increasing by \$360 million from 2006, and inflation, according to Finance Ministry forecasts, will be around 6%.³

¹ See: Central Eurasia 2005. Analytical Annual, CA&CC Press®, Sweden, 2006, pp. 239-240.

² See: *Sotsial'no-ekonomicheskoie polozhenie respubliki Tadzhikistan za ianvar-sentiabr 2006 goda*, RT State Statistics Committee, Dushanbe, 2006, p. 146.

³ [www.regnum.ru].

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Table 1

Main Macroeconomic Indicators

C	Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
	GDP per capita, US\$	183.9	158.7	221.8	178.2	158.0	171.2	190.0	236.7	309.6	337.5
	GDP growth, % of the previous year	83.3	101.7	105.3	103.7	108.3	109.6	110.8	111.0	110.3	106.7
	GDP growth, % of 1991	32.6	33.2	34.9	36.2	39.2	42.9	47.5	52.7	58.3	62.1
	Production of goods, % of GDP	65.2	57.9	50.0	52.8	60.4	60.0	57.4	57.3	50.7	48.9
	Production of services, % of GDP	27.2	32.5	42.4	39.9	31.0	31.0	32.7	32.0	38.3	39.6
	Net taxes on products, % of GDP	7.6	9.6	7.6	7.3	8.6	9.0	9.9	10.7	11.0	11.5
S o u r c e: Tadzhikistan: 15 let gosudarstvennoi nezavisimosti, Statistical Handbook, RT State Statistical Committee, Dushanbe, 2006, pp. 205-209.											

Table 2

Main Macroeconomic Indicators for January-September 2006 (somoni)

Indicator	Jan-Sep 2006	% of Jan-Sep 2005					
GDP	6,519.8	107.6					
Industrial production	3,214.6	106.2					
Gross agricultural production	2,410.1	108.5					
S o u r c e: Sotsial'no-ekonomicheskoie polozhenie respubliki Tadzhikistan za ianvar-sentiabr 2006 goda, p. 141.							

In the agricultural sector, the main contribution to GDP is made by cotton growing, and in industry, by aluminum production. Cotton and aluminum make up most of the country's exports (adding up to 83%). In view of a shortage of machinery and equipment, the production of raw cotton involves considerable difficulties. Almost half of Tajikistan's agricultural workers (557 thou-

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sand) are employed in cotton growing, and they produce \$162 million of exports. The aluminum industry employs 15 thousand workers, whose contribution to exports is \$573 million. Other exports include vegetables, fruits and electricity. Profits in export-oriented sectors in large part depend on external factors. The slowdown in GDP growth in 2005 compared to previous years was due to slower growth in industry and agriculture. In agriculture, this was caused by a decline in the production of the main agricultural product, raw cotton (by 20%), and in the export of cotton fiber (by 42%). From 1991 to 2005, employment in agriculture increased from 881 thousand to 1,425 thousand. In principle, an increase in employment should lead to production growth, but in Tajik agriculture this was not the case: in 2005, production reached only 85% of the 1991 level. In that period, the share of agricultural employment rose from 45% to 68%. Labor productivity in this sector fell with a decline in the capital-labor ratio. In the developed countries, for example, the agricultural sector employs 4-5% of the working age population, but the capital-labor ratio and power per worker in this sector are very high. If most of the population is employed in agriculture, this is a sign of a less developed country and a major factor holding back overall economic growth and a rise in production standards.

Nevertheless, in describing the situation with cotton production in an interview with the newspaper *Asia Plus*, Agriculture Minister Boris Madaminov focused, first, on the labor surplus in this sector, saying that most of the republic's population (about 70%) lives in rural areas. Second, he spoke of 10% revenues from the sale of cotton going into the state budget. According to his estimates, with annual exports of 150 thousand tons of cotton fiber, budget revenues could amount to \$15-18 million. Third, the minister noted a shift from the export of raw cotton to the production of higher value-added cotton products in the republic. Fourth, the minister emphasized the need to sow a part of the cotton crop areas to other crops. In 2005, these areas were reduced by 38 thousand hectares, and there are plans to reduce them annually by 2.5-3 thousand hectares. At the same time, the production of raw cotton should be maintained at 550-600 thousand tons by raising yields. World Bank estimates show that cotton yields can rise by 40% from 1.8 tons per hectare (tons/ha) in 2001 to 2.5 tons/ha once the country's irrigation and drainage systems are rehabilitated.

The decline in cotton yields in recent years is estimated as follows: from 2.8 tons/ha in 1990 (according to the Asian Development Bank, from 2.0 tons/ha) to 1.5 tons/ha in 1997-2000. With the end of the drought, and also due to an expansion of crop area and more timely supply of seed material and fertilizers, cotton yields increased in 2001 to 1.8 tons/ha.⁴

Since Tajikistan became independent, the cotton sector has declined considerably (from 34% of exports in 1993 to 11% in 2001).⁵ According to the National Bank of Tajikistan, export earnings from cotton in January-September 2005 amounted to \$86 million. Cotton currently sells at \$1,000 per ton (for wheat, the figure is \$160 per ton).

In my opinion, apart from the factors mentioned above, the slowdown in GDP growth in 2005 was caused by the following factors characteristic of today's Tajik economy.

First, the past years have been marked by a recovery in sectors whose infrastructure was created back in Soviet times. Such processes are usually more intensive than the development of new lines of production. But even such growth (at an annual rate of 10% in 2001-2004) is nevertheless inadequate, since GDP has now reached only 68% of the 1990 level. According to the experts of the World Bank and the International Monetary Fund, recent economic growth in Tajikistan is still of a recovery nature.

⁴ See: Tapping the Potential: Improving Water Management in Tajikistan, National Human Development Report, UNDP, 2003, p. 39. ⁵ Ibid., p. 38.

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Table 3

	2000	2001	2002	2003	2004	2005
Cotton crop area,						
thousand hectares	238.6	257.4	269.2	284.4	293.6	288.7
Cotton production, thousand tons	335.4	452.7	515.5	537.4	556.8	447.9
Cotton production, % of 1991	41.2	55.6	63.3	66	68.4	55
Cotton yield, 100 kg						
per hectare	14.1	17.6	19.3	19	19.1	15.6
Cotton yield, % of 1991	51.1	63.8	69.9	68.8	69.2	56.5
Cotton pickers, pieces	1,346	1,309	1,168	1,071	868	763
Cotton pickers,						
% of 1991	44.7	43.5	38.8	35.6	28.8	25.3
S o u r c e: Tadzhikistan: 15 let gosudar pp. 286-304.	nezavisi	mosti,				

Cotton Sector in 2000-2005

- Second, the propensity of migrants to remit money to Tajikistan is declining for the following reasons:
 - (1) rising cost of living in Russia;
 - (2) tightening control over migration in Russia;
 - (3) creation on the basis of migrant remittances of small enterprises in Tajikistan's trade and service sector; income earned by their owners reduces the need for new remittances from migrants;
 - (4) a trend toward an increase in the number of migrants seeking permanent residence in Russia.

True, formal remittances have recently increased. This is due to the fact that remittances have become more transparent, bypassing informal channels. Formal channels are now more attractive because banks have reduced transfer fees and people have more confidence in their reliability. In 2001, certain changes occurred in the Tajik banking system regarding money transfers, so that the republic's banks became the absolute leaders among all channels of migrant remittance inflows. For example, after the abolition of the 30% tax on international transfers, the amount of remittances through the banking system multiplied tenfold, and in 2004 they reached \$433 million (21% of annual GDP).⁶ Today the cost of money transfers to Tajikistan for individuals is 1.5-3%.

Most Tajik citizens working in other countries have the immigration status of seasonal workers, so that they themselves carry home a significant part of their earnings. For example, air transport brings

⁶ See: A. Kireyev, *The Macroeconomics of Remittances: The Case of Tajikistan. IMF Working Paper*, January 2006. P. 6.

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about 200 thousand people a year from Russia to Tajikistan, and if at least half of them carry an average of \$1,000, the republic's GDP should increase by 5%.⁷

The republic's banks are a sector of the economy on which remittances have a very significant direct influence, i.e., money transactions through these banks have spurred an increase in their capital. Given that in 2005 remittances through the banking system added up to \$433 million, the average income from money transfer transactions could be around \$4.33 million, while the minimum capital requirement for commercial banks is set at \$5-6 million. But on the whole this sphere of the economy is still far from perfection: four of the country's largest banks control 70% of total bank assets, 81% of household deposits and 71% of private credits, while credits (over half of them to the cotton sector) make up 16% of GDP. The lending activities of commercial banks are mostly confined to extending short-term loans to commercial entities. Another active part consists in foreign exchange transactions, which are already indirectly influenced by remittances. As regards operations with securities and other debt instruments, these are developed least of all. But the general trend and development prospects of this sector of the market infrastructure are obvious: the latest reforms ensure its rapid development. In 2002-2005, the capital of commercial banks more than tripled to 2.7% of GDP.

Another change in the banking system introduced by the government in May 2005 was a reduction by the National Bank of the required reserve ratio for commercial banks from 18% to 15%. Today these banks have wider opportunities for providing credit to the economy.

The trend toward the development of the banking system continued in 2006 as well. Thus, a spokesman for Orienbank, the largest bank in the republic, has told *Asia Plus* that in January-September 2006 the bank's net profit increased by SM 2.6 million to almost SM 8 million (over \$2.35 million), multiplying 2.15 times compared to January-September 2005. The bank's total capital rose by SM 5.38 million to SM 56.3 million, an increase of SM 14.7 million compared to the same period of the previous year. Its authorized capital increased by SM 6.4 million (from SM 34.3 million to SM 40.7 million), and the balance of deposit accounts was over SM 337.2 million, or SM 189 million more than a year ago. Money transfers to Tajikistan through Orienbank in the first nine months of 2006 exceeded \$114 million (an increase of \$53.2 million, going up by 325.4 million from January-September 2005.⁸

Whereas at the end of 2000 Tajikistan's external debt amounted to 96% of GDP, by 2005 it was down to 40% for the following reasons.⁹ First, on the IMF's recommendation the republic began to assume financial obligations only on terms favorable to itself. Second, bilateral agreements on debt restructuring and cancellation were signed with a number of countries. For example, Russia agreed to write off \$306 million and \$250 million of Tajik debt in return for the deployment in Tajik territory of a Russian military base and the Okno (Window) space tracking station. Third, under an IMF program for cancelling the entire debt of 19 poorest countries, including Tajikistan, the republic's debt burden was reduced by \$99 million. And fourth, a reduction in the share of external debt was due to relatively high GDP growth over a number of years (from 2000 to 2004, at an average annual rate of 10%).

Tajikistan has unique water resources: 93% of its territory is covered by mountains, where large reserves of water are formed. The area of glaciers (8% of the country's total area) exceeds that of agricultural croplands (6%). In terms of the volume of water resources, the republic ranks second among the CIS countries (behind Russia). And with a population of 6.5 million, water production per person

⁷ See: A. Kireyev, The Macroeconomics of Remittances: The Case of Tajikistan. IMF Working Paper, p. 9.

^{8 [}www.regnum.ru].

⁹ See: Biulleten' inostrannoi kommercheskoi informatsii, No. 76 (9022), 8 July, 2006, p. 5.

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Table 4

	Total debt	Public debt	Publicly guaranteed debt	Non- guaranteed debt	Government debt to PRC	IMF Ioans
US\$ million	830	727	32	14.41	6	50.45
% of GDP	32	28	1.23	0.55	0.23	1.94

External Debt as of 1 October, 2006

Table 5

Debt to International Financial Organizations

	Total debt	IMF	WB	ADB	IDB
US\$ million	510	50.45	307	100	41
Maturity period, years	—	—	40	32	27
Annual interest rate	—	—	2	2	2
Source: Biznesipo Najmiddino		to Finance I	Vinister Sa	farali	

per year (over 13,000 cubic meters in 2003) is among the highest in the world.¹⁰ Considering the importance of water for human development, these resources give the republic immense potential advantages. Its water resources turn the country into a competitive partner in two major areas: irrigated cotton production and hydropower. These sufficiently developed and well-managed sectors have real potential for developing the economy and reducing poverty.

Thus, the republic's exploitable hydropower potential, of which less than 10% is currently being used, is about 264 billion kWh per year, while total electricity consumption in the Central Asian countries in recent years has averaged 135 billion kWh per year. If Tajikistan's hydropower potential is fully harnessed, the country could single-handedly power the entire region twice over.¹¹ The republic's hydropower resources are mostly concentrated in large rivers: Vakhsh, Panj, Obihingou and others. They run through deep rocky canyons, which make it possible to build effective hydro plants. Tajikistan's share in Central Asia's total hydropower potential is 76.8%, while the shares of Kyrgyzstan and Kazakhstan are 12.6% and 6.5%, respectively. Despite this potential, Tajikistan now experiences a power shortage (600 million kWh per year) in the winter period, when electricity is supplied to the republic (at world market prices) from Turkmenistan, Uzbekistan and Kyrgyzstan.

¹⁰ See: *Tapping the Potential*..., p. 20.

¹¹ Ibid., p. 49.

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The total capacity of the country's operating hydroelectric power plants (HPPs) is 4,451 thousand kW, and annual electricity production comes to 16-17 billion kWh. The largest plants are the Nurek HPP (3 million kW), Baipaza HPP (600 MW) and Golovnaya HPP (210 MW).¹²

In the late 1980s, Tajikistan's hydropower system had a turnover of \$150 million, sending \$90 million of profit to the Center every year. Today, revenues only cover current costs (about \$40 million per year), leaving an average annual shortfall of \$20 million for basic capital investments in the maintenance and renewal of the system. Whereas under normal operating conditions hydrosystems typically lose about 10% of power, Tajikistan's hydropower stations are losing as much as 30-40% of their power output due to underinvestment in the power infrastructure.¹³

In 2005, exports of electricity earned the country about \$53 million (in 2004, \$58 million). But in view of power shortages in the north of the republic, Tajikistan is obliged to import electricity from Uzbekistan. Hence a deficit of \$5 million in this sector in 2005. Electricity generation in the Tajik Republic peaked in 1996 (18 billion kWh), and the target for 2006 was 17 billion kWh.

Table 6

	2000	2001	2002	2003	2004	2005		
Electricity generation	14,247	14,382	15,302	16,509	16,491	17,090		
Electricity exports	3,909	4,047	3,874	4,596	4,466	4,402		
Electricity imports	5,242	5,396	4,659	4,605	4,810	4,637		
Balance of foreign trade								
in electricity	-1,333	-1,349	-785	-9	-344	-235		
S o u r c e: Tadzhikistan: 15 let gosudarstvennoi nezavisimosti, p. 263.								

Electricity Balance in the Economy (million kWh)

In the coming years, Russia plans to invest \$2.5 billion in the Tajik economy,¹⁴ which amounts to almost 100% of the republic's 2005 GDP. These funds will mostly go into priority sectors: the electric power industry and metallurgy. One of the investment projects being considered is the construction of the Sangtuda-1 HPP with a design capacity of 600 MW. Its construction started back in 1989, but only 24% of the scheduled work has actually been performed (at a cost of \$187.5 million). The hydropower station is to be completed by RAO UES, Russia's major power company, which plans to invest in it \$600 million.

Consequently, the capacity of this HPP is sufficient not only to meet internal power shortages, but also to export electricity. In addition, the construction of the world's largest Rogun HPP (3.6 million kW) has been resumed. Incomplete construction here, according to preliminary estimates by Tajik experts, exceeds \$1.2 million. Based on the development of the power industry, Russian companies are investing in the production of aluminum, which today, according to official data, accounts for 65% of the country's exports.

The construction of the Sangtuda-2 HPP (with a design capacity of 220 MW at a cost of \$220 million) was partially undertaken by Iran (\$180 million), the remaining \$40 million to be invest-

¹² See: Sh. Sultanov, "Ekonomika Tadzhikistana: sostoianie i perspektivy razvitia," *Ekonomist*, No. 6, 2006, p. 69.

¹³ See: *Tapping the Potential...*, p. 47.

¹⁴ See: Address by Tajikistan President Emomali Rakhmonov to the Country's Parliament, Dushanbe, 20 April, 2006.

ed by Tajikistan. Tehran is to complete the project in about three years and is then to operate it for 12 years, whereupon its share is to be transferred to Dushanbe free of charge.

The completion of the Rogun and Sangtuda (1 and 2) HPPs will enable the republic to resolve a strategic problem: to achieve self-sufficiency in energy; it will help to save fuel and energy resources and provide opportunities for exporting electricity to Afghanistan, Pakistan, Iran, China, Southern Kazakhstan and Russia.

As a result, Tajikistan will eventually export very low-cost energy, so competing with other kinds of energy in the region, and this will be a key factor ensuring the viability and profitability of the country's hydropower industry. Another powerful incentive to its development is provided by the prospect of depletion of coal, oil and gas reserves.

The republic should focus on developing its economy with due regard for migration processes, which, on the one hand, have turned into a powerful instrument for improving the well-being of households and, on the other, result in a loss of human capital. Large investments in promising sectors (hydropower and aluminum) of the Tajik economy will probably do little to reduce migration for the following reasons. First, migration is underpinned by a solid infrastructure, which will continue to attract potential migrants for a long time. And second, some of the jobs created under these projects require certain skill standards.

So, Tajikistan may eventually have to face a surplus of unskilled labor and a shortage of skilled labor. Consequently, those who cannot meet the requirements of the Tajik labor market will be obliged to emigrate. The country's human capital no longer meets the needs of the modern world. The government should take measures to prevent a loss of skills by people of working age.