

Dowling, Malcolm; Wignaraja, Ganeshan

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# Central Asia after Fifteen Years of Transition: Growth, Regional Cooperation, and Policy Choices

by Malcolm Dowling  
and  
Ganeshan Wignaraja

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# Central Asia after Fifteen Years of Transition: Growth, Regional Cooperation, and Policy Choices

Malcolm Dowling  
Singapore Management University, Singapore  
e-mail: [malcolm\\_dowling@hotmail.com](mailto:malcolm_dowling@hotmail.com)

Ganeshan Wignaraja  
Office of Regional Economic Integration,  
Asian Development Bank, Manila, Philippines  
Tel: 63 2 632 6116  
e-mail: [gwnaraja@adb.org](mailto:gwnaraja@adb.org)

*Abstract:* This paper presents a coherent and systematic analysis of the collapse and subsequent revival of the Central Asian Republics (CARs) since 1990. The focus is on the pattern of growth and structural change during the cycle of decline and subsequent revival in the CARs, which have yet to be adequately analyzed in the literature on transition. The paper relates economic performance to initial conditions, country characteristics, and policies. Within this framework, it proposes a simple typology of policies (including a new “Type III” set of policies on regional cooperation and industrial competitiveness) and relates them to the cycle of decline and revival. It goes on to examine medium-term prospects and policy needs for the CARs.

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# Central Asia after Fifteen Years of Transition: Growth, Regional Cooperation, and Policy Choices

## I. Introduction

The decline of socialist countries after the former Soviet Union has been well documented.<sup>1</sup> The literature is extensive with good surveys provided by Fischer and Sahay (2000), Campos and Coricelli (2002), and Svejnar (2002). Much of the literature has focused on the transition in Central and Eastern Europe and the Baltic States, South Eastern Europe, and Russia within the Commonwealth of Independent States. However, an important group—the Central Asian Republics (CARs)—have traditionally received less interest.<sup>2</sup> Strategically located and land-locked between Europe and Asia, they have had rich and varied experiences implementing policy reforms over the past 15 years. With large endowments of minerals and other commodities, they have also become a growing focus of international attention, particularly given the increasing demand for raw materials in rapidly growing economies, particularly the People’s Republic of China (PRC) and India.

With the benefit of hindsight, the length and depth of the transition recession in former Soviet economies was unexpected by early observers.<sup>3</sup> Initial estimates were that the power of market forces and the efficiency gains of competition, along with better allocation of resources, would more than compensate for adjustments in moving from centralized planning to a market economy (see, for example, Lipton and Sachs, 1990; Balcerowitz, 1994; Sachs 1996). These observers suggested that a “big bang” (or shock therapy) approach would rapidly bring about the transition and that economic prosperity would be higher than during Soviet times.

This optimism was obviously misplaced, as most countries went into a period of sharp contraction in the early 1990s. A series of stylized facts has been proposed to explain this decline. These include (i) tight credit policies; (ii) a collapse in credit—as subsidies to firms were reduced; (iii) an increase in real interest rates; (iv) a general disorganization within the economy—as centrally planned (specified) producers and distributors had to be replaced by less specialized firms and suppliers; (v) the development of new business habits among both producers and consumers ; (vi) major adjustments in the labor market; and (vi) the dissolution of the Council of Mutual Economic Assistance—governing trade among Soviet bloc members (see Svejnar, 2002, Campos and Coricelli, 2002, Djankov and Murrell, 2002).

While these stylized facts developed, there was extensive discussion on the merits of either big bang or gradual reform policies. Within this debate, various kinds of policy reforms were bandied about, deemed necessary for a more rapid and efficient transition based on economic performance. There is some consensus that big bang reforms are too simplistic, and that a more complex approach is needed to ensure effective transition to a market economy. Observers have developed two categories of policies to reflect this complexity: Type I policies include standard big bang instruments such as macro, price, and exchange rate reforms, and Type II policies that include regulatory, legal, and other institutional reforms. Additional policy instruments may also be required to reflect the special land-locked circumstances of the CARs.

This paper aims to present a coherent and systematic analysis of the collapse and subsequent revival of the CARs during the 1990–2005 period. Six economies are examined: Azerbaijan, Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan. The focus is on the pattern of economic growth, its causes, and the

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<sup>1</sup>These countries include: Central and Eastern Europe and the Baltic States, South Eastern Europe and the Commonwealth of Independent States. See EBRD (2005) for the details of these groupings.

<sup>2</sup> Some notable exceptions include the papers in Rumer (ed. 1996, ed. 2000, and ed. 2002) and Burghart and Sabonis-Helf (ed. 2004). See also Pomfret (2000 and 2003a), Starr (2004), Hausmann and Others (2005), and UNDP (2005).

<sup>3</sup> Fisher and Sahay (2000) thus note: “A decade ago it was generally expected that output would fall at the start of the reform process, as a result of both macroeconomic stabilization and the reallocation of resources from unproductive to sectors that would be profitable at world prices. ...although the extent to which output collapsed far exceeded expectations. By the time output had bottomed out, it had fallen by more than 40 per cent on average” (Fisher and Sahey, 2000, p. 4).

associated transformations in economic structure during the cycle of decline and subsequent revival, which has been inadequately analyzed in the literature to date. This paper relates economic performance to initial conditions, country characteristics, and economic policies. And within this framework, it proposes a simple typology of policies (including a new “Type III”) and assesses them against the cycle of decline and revival. It also examines medium-term economic prospects and policy needs.

**Table 1: A Snapshot of the Central Asian Republics**

Country	GDP Per Capita, 2004 (in US dollars)	Population, 2004 (in million)	Share of World Reserves		Geography	Reform Status
			Oil	Gas		
<b>Oil Exporters</b>						
Azerbaijan	1,029.4	8.3	0.6	0.8	Landlocked	Active
Kazakhstan	2,723.9	15.0	3.3	1.7	Landlocked	Active
Turkmenistan	1,250.7	6.2	0.042	1.6	Landlocked	No reforms
<b>Non-oil Exporters</b>						
Kyrgyz Republic	432.4	5.1			Landlocked	Active
Tajikistan	323.1	6.7			Landlocked	Active
Uzbekistan <sup>1</sup>	461.2	26.0	0.05*	1.0	Double landlocked <sup>2</sup>	Partially active

<sup>1</sup>Uzbekistan has small oil reserves and significant natural gas reserves but does not export except to neighboring countries.

<sup>2</sup>Goods from Uzbekistan must pass two borders to reach seaports.

Sources: British Petroleum (2005), ADB *Key Indicators 2005*, World Bank *World Development Indicators 2006*; authors' estimates.

## II. Typology of Policies

The literature on economic adjustment in developing and transition economies suggests that the pattern of long-run growth and structural change is a function of many factors. These include initial conditions, country size, geographical location, investment, human capital, technological progress and, above all, economic policies.<sup>4</sup> Based on the complexity of the various transitions, analysts typically distinguish between Type I and Type II policies (World Bank, 2002; Svejnar, 2002). Table 2 provides a policy matrix with examples of each, including the new “Type III” typology.

<sup>4</sup> See the classic study by Chenery, Syrquin, and Robinson (1986). For a comprehensive survey of recent studies on growth see Durlauf and Quah (1999).

**Table 2: Typology of Economic Policies during Transition**

Policy Type	Focus of Policy	Results
Type I	<p><b>Macroeconomic</b>—inflation, monetary and fiscal policies, and exchange rate policy</p> <p><b>Microeconomic</b>—labor market and wages, social safety nets, price liberalization (exceptions for energy, staple food, and housing) and removal of subsidies</p> <p><b>Banking and State-owned Enterprises</b>—reduced subsidies, privatization, and bank liberalization.</p>	<p>These reforms did not achieve the anticipated increase in productivity in the CARs. One reason was that governments were unable to quickly create revenue flows to finance even recurrent expenditures, particularly those tied to state-owned enterprises (SOEs). As a result, there was a hesitation to replace inefficient SOEs with more efficient private enterprises, as removing subsidies frequently led to the failure of these SOEs. Banking reforms were successful in allowing entry although state banks, which retained their influence in many CARs. Social benefit systems were inadequate given limited resources. This overall situation did not improve until the late 1990s.</p>
Type II	<p><b>Primarily legal policies:</b></p> <ul style="list-style-type: none"> <li>• <b>Developing legal and regulatory frameworks for industry and finance</b></li> <li>• <b>Privatization of medium- and large- scale enterprises</b>—sale of assets to employees or independent parties</li> <li>• <b>Restructuring the labor market</b>—wage determination, unemployment compensation, and retirement benefits</li> </ul>	<p>Withstanding pressures from special interest groups was the main obstacle governments faced in trying to build a level playing field attractive to foreign investors. In the oil exporting CARs, for example, these policies proved successful in providing a reliable environment to attract foreign direct investment. For non-oil exporters, these reforms were less successful. Privatization did not bring expected benefits and special interest groups were able to influence policy.</p>
Type III	<p><b>Regional cooperation</b>—within the CARs using various initiatives such as trade facilitation, transport, and energy policy dialogue and cooperation.</p> <p><b>Develop industrial competitiveness policies</b>— to foster diversification away from natural resources and other raw material production into manufacturing.</p>	<p>These policies were slow to develop, particularly in the first half of the 1990s when the CARs were more concerned with developing national identities and earning revenue through customs taxation. Recent developments, however, suggest a greater willingness to lower tariffs and cooperate on both transport and energy policies. To foster economic diversification, Kazakhstan introduced an innovative industrial development strategy in 2003, which contains elements of an industrial competitiveness policy agenda such as fostering industrial clusters. Azerbaijan is also assessing its industrial competitiveness and may follow suit.</p>

Big bang policies of Type I are standard macro, price, and exchange rate reforms and are components of stabilization and structural adjustment programs of international financial institutions (Lipton and Sachs, 1990; Balcerowitz, 1994; Sachs 1996). These are macro stabilization and inflation policies focusing on monetary and fiscal issues, trade reforms, as well as policies aimed at dismantling the command and control institutional structure of the former Soviet system. These policies also include microeconomic reforms designed to address price distortions that constrain market efficiency, such as more efficient resource allocation, replacing subsidies with market-determined prices, breaking up or rationalizing SOEs, and allowing markets to use production factors efficiently. Sometimes included are reforms of state-owned banks and the establishment of social safety nets to deal with the unemployment created by reallocation of resources during the transition. Type I reforms are sometimes also referred to as “first generation” reforms.

Type II category reforms primarily deal with the development of legal and regulatory frameworks for both public and private sectors. Often focusing on productive sectors—i.e., industry, agriculture, and the services—details may vary but include revisions of laws affecting the private sector, a reduction in bureaucratic red tape for establishing small businesses, building transparency in public enterprises, and creating procedures for the privatization and development of regulations governing institutions. These reforms are sometimes referred to as “second-generation” reforms, implying that they are implemented once Type I policies are in place.

Type III policies add two sets of initiatives that have particular pertinence to the land-locked CARs: (i) regional cooperation and (ii) industrial competitiveness. With small domestic markets, the land-locked CARs are isolated from international markets and thus unable to reap economies of scale. They also face high transport and transit costs, and are therefore relatively unattractive to foreign direct investment (except in oil and gas). Using regional initiatives in key areas—notably in transport, trade, and energy—can not only link the CARs with each other, but help link them to international markets (UNDP, 2005). Examples of these initiatives in the CARs would include road, rail and air transport system integration; harmonization of border posts and customs procedures, and the development of an efficient regional energy market. Region-wide free trade agreements (to reduce trade barriers) and monetary and financial cooperation (including policy dialogue and surveillance, bond market development, and open exchange rate policies) could also be added (Lamberte, 2005).

To be effective, regional cooperation initiatives in the CARs need to be underpinned by policies to improve industrial competitiveness—to support the often difficult process each firm faces in building technological compatibility required to cost-effectively compete in export markets. The experience of more advanced developing and transition economies show that the building capabilities at the firm-level requires conscious investment in information search, engineering, training, and research and development to translate imported technologies into productive use (Lall, 1992; Nelson and Pack, 1999). Missing factor markets and weak institutional support (for technology, skills, finance, and export marketing) constrain firms from building better production capabilities. Changing market and institutional imperfections into greater competitiveness can be addressed by introducing market-friendly measures such as increasing imports of technology (e.g., foreign investments, technology licensing, and consultants); adopting international best practices and standards for quality management of small and medium enterprises; upgrading technology-based institutions; improving access to industrial finance for technological development; and strengthening production linkages between small and large firms along the supply chain and within industrial clusters (Lall and Teubal, 1998; Wignaraja, 2003).

Applying any of the Type I, II, or III policies alone would result in partial transitional economic success. However, taken together they present an interlocking set of complementary policies that are much more likely to succeed. We will return to these policies throughout the paper. The introduction and speed of implementation has a direct bearing on both the collapse of the CAR economies in the first half of the 1990s, as well as their subsequent revival later on.

### III. Collapse

All of the CARs suffered severe reductions in real output following the breakup of the Soviet Union (Figure 1). Between 1990 and 1996, real output fell by between 40% and 60% in all the CARs with the exception of Uzbekistan, where real output fell less than 20%.<sup>5</sup> Aside from reasons common to all the transition economies,<sup>6</sup> there are several features of the collapse particular to the CARs, some of which are related to their previous status as republics of the former Soviet Union, while others relate to geography and resource endowment.

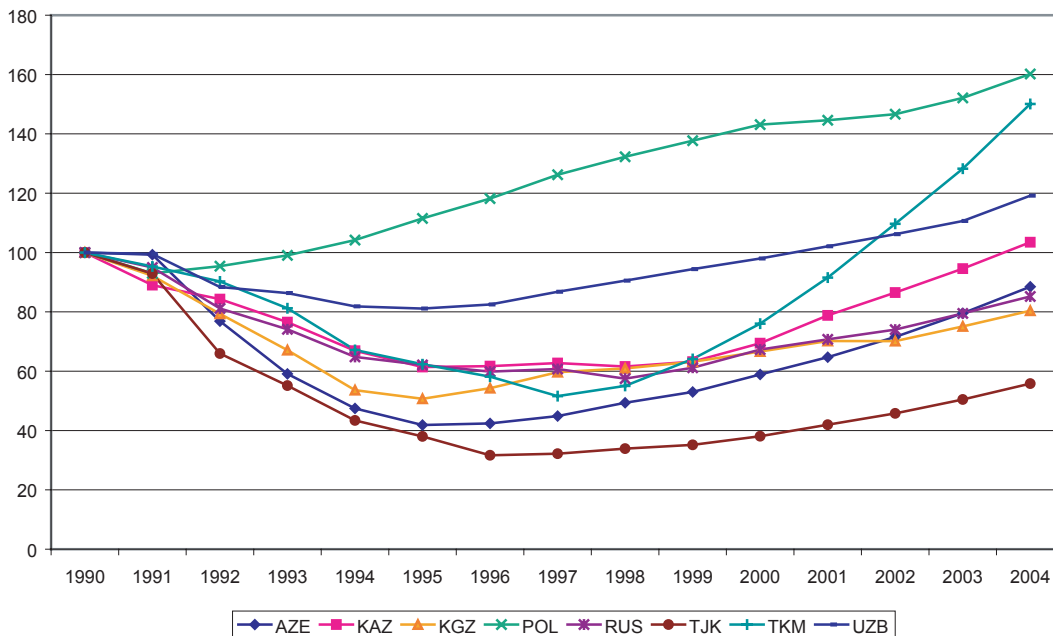
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<sup>5</sup> A similar magnitude of economic collapse is reported by other studies. Using national GDP data, Zhukov (2002) finds that real GDP in 1990–1995 fell by 58% in Tajikistan, 49% in the Kyrgyz Republic, 39% in both Kazakhstan and Turkmenistan, and 19% in Uzbekistan.

<sup>6</sup> For example, see Campos and Coricelli (2002) and World Bank (2002).



Figure 1: Changes In Real GDP Index, 1990–2004  
(1990=100)



Source: World Bank, *World Development Indicators online*.

During the Soviet period, the CARs were required to supply raw materials, energy, and intermediate inputs to Russia as part of the integrated production system. Russia supplied finished manufactured goods to the CARs and other regions (IMF and Others, 1991). This naturally constrained the flexibility of the industrial sector during the transition. To compound matters, SOEs in the CARs had been under Russian management, thus, there were few qualified local managers able to take over during the transition. Private manufacturing was prohibited during Soviet times so there was no private sector apart from informal trade. Furthermore, international trade was handled directly from Moscow or through Russian SOEs. As a result there were virtually no opportunities to develop marketing relationships with foreign buyers or investors during the early transition period.

In addition, all of the CARs were dependent on Soviet subsidies to industries, and when those were suspended, it added significant fiscal pressure. This made maintaining social safety nets more difficult as budgets were stretched and thus poverty increased rapidly. There was also a breakdown in the supply of raw materials and other inputs during the early stages of transition. This further exacerbated profitability and affected operations of a variety of SOEs, as well as newly privatized industries.

In terms of geography, all of the CARs are landlocked. Sea access for traded goods is through the Russian Federation or Iran. Uzbekistan is double landlocked—meaning goods have to pass two borders to reach the sea. There are also other geographic barriers, including harsh winters and high mountains in Tajikistan and semi-arid conditions throughout much of the region. This climate and geography mean high costs for transport, communications, energy, and transit as well as extended delivery times to international markets (see Raballand, Kunth, and Auty, 2005; UNDP, 2005).<sup>7</sup> Early on, this remoteness meant that industries had limited access to information or technology through contacts with overseas buyers and markets.

<sup>7</sup> UNDP (2005) suggest that there is an asymmetry in transport costs for shipments between Central Asia and Europe. Data provided by the study shows it costs \$8,500–\$10,000 to ship a truckload of cargo from the Benelux countries to Central Asia and only \$6,000–\$7,000 to ship in the opposite direction. In an “ideal world”, shipments would cost \$5,000–\$6,000 in either direction.

Finally, the CARs are richly endowed with commodities such as crude oil, natural gas, cotton, gold, copper, aluminum, and iron. Three CARs (Azerbaijan, Kazakhstan, and Turkmenistan) export natural gas and oil to international markets, while the Kyrgyz Republic and Uzbekistan export gold (see Table 1).<sup>8</sup> These commodity exports account for from 30% to 88% of total exports, depending on the country (see Freinkman, Polyakov, and Revenco, 2004). Commodities also contribute heavily to fiscal revenues and provide resources for investment in development. During the Soviet period, these resources were distributed and marketed through Moscow (see Sabonis-Helf, 2004). In the early years of the transition, these transit links were severely disrupted. Soviet agencies such as Gazprom—which market oil and natural gas products—took advantage of their monopolies over distribution to price commodities below market levels. The result was a drop in commodity exports with an associated drop in government revenue throughout the CARs.

The collapse affected each CAR differently:<sup>9</sup>

Kazakhstan is the largest country geographically (2.7 million square kilometers—the size of India) and has a wealth of natural resources. It now produces over a billion barrels of oil a year, almost as much as Indonesia (British Petroleum, 2005). The collapse in output was largely the result of the interruption of oil and natural gas production and exports, loss of subsidies from the Soviet Union, and the exit of skilled Russian technicians, scientists, and managers. The beginning of a manufacturing sector related to minerals production was also inhibited by lack of revenue, weak domestic investment, and failure to attract foreign direct investment. Poor fiscal performance meant that the government was unable to maintain infrastructure spending, and as a result, public investment and the provision of social services suffered.

The other two oil and natural gas producing CARs—Azerbaijan and Turkmenistan—suffered similar disruptions. However, they were smaller economies and more dependent on Soviet markets and subsidies. As a result, the disruptions in supply of oil and natural gas were somewhat more serious than in the case of Kazakhstan. Furthermore, Azerbaijan was adversely affected during its conflict with Armenia over the disputed Nagorno-Karabakh region—lasting from 1988 until the 1994 ceasefire—which claimed 30,000 lives, created about half a million Azeri refugees from Armenia into Azerbaijan, and resulted in widespread damage to physical infrastructure in both countries.

While Uzbekistan exports gold, it relied more on agricultural production than the other CARs. Population densities were higher with its 26 million people close to 40% of the total population of the CARs. With import substitution and state-ownership the rule—rather than export promotion or private sector production—Uzbekistan adopted a cautious approach to economic reform. While there were disruptions in gold marketing, Uzbekistan suffered the smallest decline in production and income among the CARs. It also benefited early on from buoyant world prices for cotton, its main export. In addition, some agricultural reforms occurred as collective farms were gradually converted to private ownership. However, the increase in productivity was small and recovery to pre-transition levels of income in agriculture has been slow.

With limited natural resources and small domestic markets, Tajikistan and the Kyrgyz Republic were even more closely tied to Moscow than the other CARs, through supply chains in manufacturing and from gold mining in the Kyrgyz Republic (see IMF and Others, 1991; Zhukov, 2000). As a result, the collapse in these two CARs followed closely the decline in Russian Federation's economy (see Figure 1). Nevertheless, Tajikistan production fell much further and recovered more slowly than the other CARs, partly due to the civil war that erupted shortly after independence in 1991 and lasted until 1997. World Bank estimates suggest that the war killed 50,000 and caused \$7 billion in physical damage (World Bank 2005). Tajikistan also had relatively higher levels of poverty, lower levels of education, and poorer quality infrastructure than other CARs.

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<sup>8</sup> Uzbekistan is recognized to have significant natural gas reserves and small oil reserves. However, it has witnessed modest gas production growth by avoiding Russia's pipeline system and by concentrating on the domestic markets and on exports to its immediate neighbors. See British Petroleum (2005).

<sup>9</sup> A useful distinction can be made between the oil and gas exporting CARs and non-oil and gas exporting CARs. For further explanations see the papers in Rumer (ed. 1996) as well as Fisher and Sahey (2000), Trushin and Trushin (2000), Zhukov (2000), Pomfret (2003a), Linn (2004), and Loukoianova and Unigovskaya (2004).

Aside from the dominant role of mineral production—with sales and marketing done outside the region during the Soviet period, there were other reasons for the poor performance of the CARs in the early 1990s. Generally, enterprise restructuring was not as successful as in other transition economies such as Eastern Europe (for example, see the literature cited in Djankov and Murrell, 2002). Privatization did not positively affect output or productivity. New owners were not as effective as they were in Eastern Europe, in part because ownership was often transferred to workers who were not efficient managers. Lack of Type II policies relating to governance issues such as the legal framework and operational transparency probably contributed to the poor performance.

The lack of non-Russian markets played an important role in the length of the collapse. It took time to build relations with foreign firms outside Russia and to attract foreign investment for increasing production capacity in natural resources. Transport bottlenecks and transfer taxes with Russia and within the CARs themselves increased costs and reduced the attractiveness for both domestic and foreign investors. Also, technical capacity was reduced as many Russian technicians returned home.

Four of the CARs (Azerbaijan, Kazakhstan, Kyrgyz Republic, and Tajikistan) attempted to implement economic reform programs in the 1990s, including both Type I and Type II policies. The timing of these programs, coverage, and implementation speed and success varied among countries. There is general agreement that the effectiveness of Type I and Type II policies during the collapse were compromised by the size of the adjustments required, the extent of disruptions in production and trade linkages, the lack of a core private sector to build on, inefficiency and technological obsolescence of SOEs, a virtual absence of markets or regulatory institutions, and widespread rent-seeking (for recent studies see Trushin and Trushin, 2000 and 2002; Zhukov, 2002; Pomfret, 2003a). In contrast with the four reform-minded CARs, Uzbekistan and Turkmenistan maintained largely unchanged Soviet-era economic policies during 1990–1996 (Wall, 2003; Sabonis-Helf, 2004).

## IV. Revival

### Economic Growth

To analysis the CAR growth revival we should revisit Figure 1 to examine some interesting comparisons. Most obvious is that CAR trends are very similar to the Russian Federation (Russia). Early on, some observers called it an L shaped pattern—a relatively steep decline evening out over the first five to nine years (Boeri and Terrell, 2002). However, if we look at the entire 15 year period covered, it is far more a U-shaped curve bottoming out between 1995 and 1997 for the CARs and Russia (although Russia's financial crisis led to another decline in 1998). Turkmenistan and Uzbekistan are exceptions, as Uzbekistan had a much milder decline to begin with, and Turkmenistan's growth accelerated quite dramatically from 1997. Uzbekistan's production returned to 1990 levels of real gross domestic product (GDP) in 2001, Turkmenistan in 2002, and Kazakhstan in 2004. By 2004, Azerbaijan's real GDP was 88.5% of its 1990 level, Kyrgyz Republic's was 80.4%, and Tajikistan's was 55.8%.

In contrast, the best performers in Central and Eastern Europe and the Baltic States had a very mild downturn. By 1993 or 1994, they had recovered to precrisis GDP levels as a result of (i) a higher initial level of development, (ii) inflows of FDI, (iii) proximity to Western European markets, (iv) implementation of appropriate stabilization and other early policy reforms (see World Bank, 2002; EBRD, 2005; Simoneti *et al*, 2005). The revival in the CARs can be similarly viewed from several perspectives.

There are five basic reasons for the CARs revival—(i) higher international commodity prices and their impact on investment, fiscal performance, income, and consumption; (ii) an acceleration in foreign direct investment (FDI) inflows, particularly in oil and gas, and in manufacturing to a lesser extent; (iii) better macroeconomic management; (iv) an upturn in agriculture due to good weather, high world commodity prices, and several agricultural reforms; and (v) improved political stability.<sup>10</sup>

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<sup>10</sup> On the economic revival in Central Asia see also Rumer (2002), Starr (2004), Dowling and Wignaraja (2005), and International Monetary Fund (2005).

## Commodity Prices

After remaining relatively stable through the late 1990s (British Petroleum (2005)), world commodity prices have accelerated upwards since 2000, particularly from 2002–2005, largely in response to rising demand and supply bottlenecks (Table 3). Oil and natural gas prices shot up, with oil prices per barrel rising from \$25.0 to \$53.0 between 2002 and 2005. Prices for cotton, gold, and other minerals were also strong. Export earnings from these commodities, and the associated revenues flowing into the government coffers gave CARS the ability to begin addressing social issues, develop and improve infrastructure, and increase economic efficiency (see Makhmutova, 2005).

Table 3: International Prices for Oil, Cotton, and Gold (\$ per unit)

Commodity	2000	2001	2002	2003	2004	2005
Oil <sup>1</sup>	28.5	24.5	25.0	28.8	38.3	53.0
Cotton <sup>2</sup>	59.2	48	46.2	63.3	63.6	63.3
Gold <sup>3</sup>	279	271	310	363	421	375

<sup>1</sup> \$ per barrel; Brent crude

<sup>2</sup> US cents per pound

<sup>3</sup> \$ per troy ounce

Sources: Oxford Economic Forecasting, Economic Intelligence Unit, *World Economic Outlook* (International Monetary Fund), and authors' estimates.

## FDI Inflows

Average annual FDI inflows in the oil and gas exporting CARs doubled to \$2.3 billion in Kazakhstan during 1997–2004, \$917.5 in Azerbaijan and \$156.8 million in Turkmenistan (Table 4). FDI in Kazakhstan and Azerbaijan rapidly approached those in Central and Eastern Europe and the Baltic States (see Simoneti *et al*, 2005). Oil, gas, and mining benefited most from the FDI inflows, but the nascent manufacturing sector was also targeted. Substantial raw material deposits along with high international prices; favorable corporation tax rates for foreign investors; a strengthening of supply lines to export; improvements in the energy infrastructure; and low cost technical manpower attracted much of the investment (Moldasheva, 2002, World Bank, 2003; Sabonis-Helf, 2004). Also, macroeconomic stabilization and implementation of economic reforms also played a role in attracting FDI (see section below). FDI brought not only capital but access to ownership advantages of multinationals (e.g., market access, new technology, and management skills), vital for efficient exploitation and export. Other CARs also saw an increase in FDI in the late-1990s but overall levels were lower than the oil and gas exporters. Aside from the lack of oil and gas deposits, there was policy uncertainty, lack of transparent investment procedures, inadequate transport linkages with major investor markets, and under-developed market institutions (Wall, 2003; Mogilevsky, 2004; World Bank 2004).

Table 4: Trends in Exports, FDI, and Remittances, 1990–2004 (in \$ millions)

	Average Annual Exports			Average Annual FDI			Average Annual Remittances		
	1990-96	1997-2004	%	1990-96	1997-2004	%	1990-96	1997-2004	%
			change			change			change
<b>Oil Exporters:</b>									
Azerbaijan	801.3	2,200.6	174.6	478.7	917.5	91.7		118.5	
Kazakhstan	6,521.2	11,579.6	77.6	1,050.5	2,263.4	115.5	74.7	68.9	..
Turkmenistan	2,085.5	2,386.6	14.4	89.1	156.8	76.1		105.7	41.4
<b>Non-oil Exporters:</b>									
Kyrgyz Republic	434.9	665.4	53.0		27.9	..	1.6	31.8	1,863.1
Tajikistan	551.7	804.8	45.9	..	13.5	23.1	71.3	0	43.1
Uzbekistan	3,848.0	3,585.0	(6.8)	39.2	105.1	168.2	0		
								0	

Source: *World Development Indicators Online*, World Bank

## Better Macroeconomic Management

Macroeconomic stability—helped by declining inflation—has improved. Inflation rates have fallen significantly throughout the region over the past few years indicating improved macroeconomic management. Average inflation for the CARs as a group declined from 20.4% to 6.9% between 1997 and 2001 and between 2002 and 2004 (Table 5). In 2005, it fell somewhat to 6.3%. Greater price stability was partly the result of greater fiscal and monetary discipline as well as greater stability in exchange rates (IMF, 2005; Hausmann and Others, 2005).

Table 5: Inflation, Transition Indicator Scores, and Private Sector Share of GDP

Country	Annual average Inflation (%)			EBRD Average Transition Indicator Score, 2005 <sup>1</sup>	Private Sector Share of GDP (%) 2005 <sup>2</sup>
	1997–2001	2002–2004	2005		
<b>Oil Exporters</b>					
Azerbaijan	-0.5	3.9	9.6	2.8	60.0
Kazakhstan	10.9	6.5	7.6	2.9	65.0
Turkmenistan	15.0	6.8	-	1.4	25.0
<b>Non-oil Exporters</b>					
Kyrgyz Republic	19.1	3.0	4.4	3.0	75.0
Tajikistan	46.0	11.2	7.1	2.5	50.0
Uzbekistan	32.1	9.7	7.8	2.4	45.0

<sup>1</sup>This is a simple average of individual scores on the extent of reform in privatization, markets and trade, and financial institutions. The average scores range from 1 to 4 where 1 represents no change from a rigid centrally-planned economy and 4 represents the standards of an industrial market economy.

<sup>2</sup>EBRD staff estimates.

Sources: ADB (2005a); ADB (2006); EBRD (2005).

Economic reforms were also implemented across the region, albeit at different levels. According to EBRD (2005), significant progress toward a market economy was achieved by 2005 through economic reform in the Kyrgyz Republic and, to a somewhat lesser extent, in Azerbaijan and Kazakhstan. Higher EBRD average transition indicator scores for these reform-minded economies compared with other CARs is one indication.<sup>11</sup> The reform-

<sup>11</sup> The widely cited EBRD Transition Indicator Score is based on the perceptions of its country economists. Pomfret (2003a) among others regards qualitative perception data about progress in reform as being less reliable than quantitative indicators (e.g. effective rates of protection). Given concerns about the quality and reliability of data in the CARs, however, this indicator offers a useful albeit impressionistic measure of reform progress.

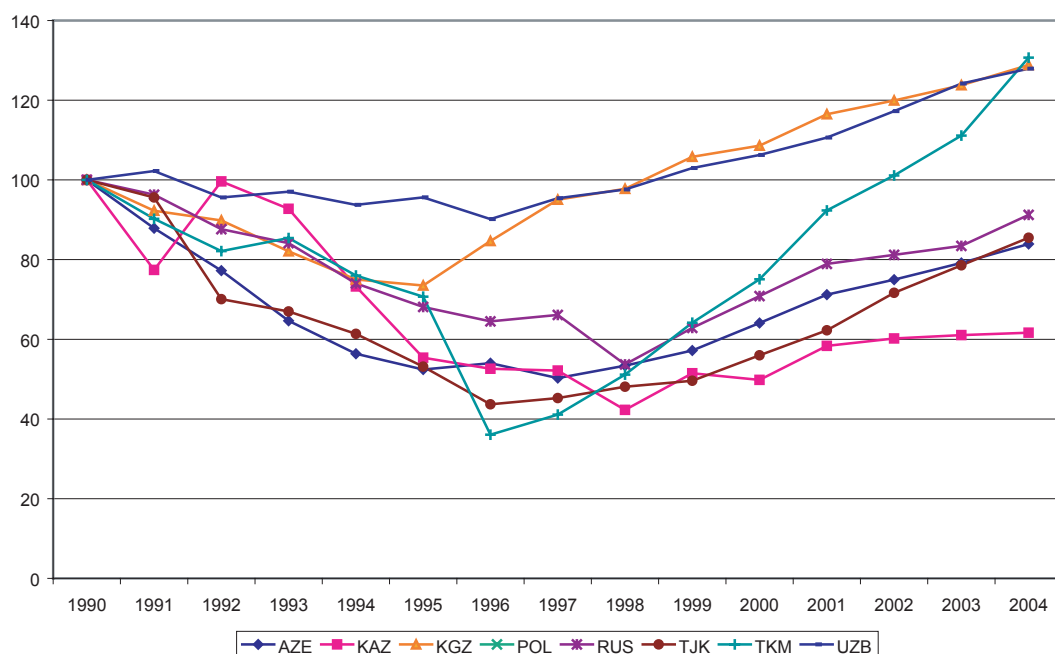


mindful CARs that applied small scale privatization as well as liberalization of prices, trade and foreign exchange systems have improved the most. Currently, the Kyrgyz Republic has the most open trade regime in the region and in 1998, joined the World Trade Organization (WTO)—the only CAR to do so.<sup>12</sup> Kazakhstan is also reforming its trade regime and laws and is on its way toward joining WTO. Reform agendas still to be tackled in these CARs include large scale privatization, banking reform and interest rate liberalization, and building a competition policy. Among the other CARs, Uzbekistan and Tajikistan have made progress recently in price liberalization and small scale privatization. By contrast, Turkmenistan remains largely unreformed with little prospect of adopting market-oriented reforms in the near future.<sup>13</sup> Better macroeconomic management and economic reform have typically provided a more conducive environment for private sector development in the region. As expected, estimates of private sector shares in GDP in 2005 were higher in the reform-minded CARs (between 60–75%) relative to other CARs.

## Agricultural Upturn

Since the late 1990s, agriculture was a major driver of growth in the non-oil exporting CARs—particularly the Kyrgyz Republic and Uzbekistan (Figure 2). This derived from generally favorable weather conditions, high world prices for cotton and wheat, along with several agricultural reforms. Some productivity gains were also achieved in collective farms producing cotton and wheat.

Figure 2: Real Value-Added in Agriculture Index, 1990–2004  
(1990=100)



Source: World Bank, *World Development Indicators online*.

The Kyrgyz Republic's wide ranging agricultural reforms emphasized collective farm privatization. An estimated 70% of farm land is now privately owned (World Bank, 2005). Moreover, price and quantity controls were largely removed, public monopolies dismantled, and public investment in the rehabilitation of irrigation systems was increased. Uzbekistan, by contrast, undertook limited agricultural reform (Rumer, 2002; Rozelle and Swinnen, 2004). In an attempt to improve food security, small garden plots to grow fruits and vegetables were granted to

<sup>12</sup> See Mogilevsky (2004) for details of the trade regime and the WTO accession process in the Kyrgyz Republic.

<sup>13</sup> According to IMF (2004) and EBRD (2005), Turkmenistan has maintained an inward-oriented, state-controlled development strategy since independence with extensive central management over capital allocations, domestic prices, production, and foreign trade. Exploitation of extensive gas reserves—which have financed prestige infrastructure projects (particularly Ashkhabad) and welfare—have enabled it to postpone the transition to a market economy.

peasants in the early 1990s by Presidential Decree. By the late 1990s, privatization took the form of dismantling agricultural cooperatives (known as “shirkats”), distributing land leases to individual farmers, conditional on farmers using the land in accordance with state orders. State control remains pervasive in Uzbekistan for agricultural purchasing, pricing, subsidies, distribution, and provision of inputs.

## **Political Stability**

Improved political stability in the late-1990s was also a significant factor contributing to the region’s economic revival. The most notable developments were (i) the ending of the civil war in Tajikistan in 1997 and (ii) the 1994 signing of a ceasefire resolving the conflict between Armenia and Azerbaijan. Tajikistan is remarkable among post-conflict economies for its speed in forming a functioning government, its focus on implementing an economic development agenda and in seeking aid from multilateral institutions (World Bank, 2005). The ceasefire enabled Azerbaijan to reduce defense expenditures, invest in infrastructure, and concentrate more on attracting FDI into oil and gas. The ceasefire, booming oil and gas industry, and a high growth environment also stimulated domestic investment in industries closely linked to oil and gas.

## **Other Features of the Revival**

### **Structural Change**

Central Asia’s revival has been driven by structural changes that have shifted production away from agriculture toward industrial goods and minerals. This shift was obvious in the oil and gas-exporting CARs. Between 1998 and 2004, industry’s share of GDP rose from 36% to 54% in Azerbaijan and from 31% to 39% in Kazakhstan (Table 6).<sup>14</sup> While oil and gas continue to drive the industrial sector in these economies, manufacturing has also grown. And manufacturing growth in the CARs is closely linked to the emergence of manufactured exports, which grew at about 10% per annum for the region as a whole during 1998–2003. In 2003, the CARs aggregate manufactured exports reached \$3.7 billion. Export growth from the oil-exporting CARs was averaged about 11% per year (see Table 4). For non-oil exporting countries, export performance was more modest but has accelerated since 2001. The largest economies—Kazakhstan (\$2.1 billion) and Uzbekistan (\$785 million)—were the region’s largest manufacturing exporters.

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<sup>14</sup> In Turkmenistan, the share of industry in GDP remained constant at 44% during 1998-2001 according to World Bank *World Development Indicators* on-line.

**Table 6: Industry and Manufactured Exports in the CARs**

Country	Share of Industry in GDP <sup>1</sup> (%)		Average Annual Manufactured Export Growth (current \$)	Manufactured Exports (\$ millions)	Major Manufactured Exports (% of total)
	1998	2004	1998–2003	2003	2003
<b>Oil Exporters</b>					
Azerbaijan	36	54	11.2%	134.4	Machinery (21%), Chemicals (38%), Iron & Steel (20%)
Kazakhstan	31	39	10.1%	2,117.0	Iron & Steel (70%)
Turkmenistan	44	44 <sup>2</sup>	23.0%	225.0	Textiles & Garments (83%)
<b>Non-oil Exporters</b>					
Kyrgyz Republic	23	23 <sup>3</sup>	5.4%	193.1	Textiles & Garments (37%)
Tajikistan	22	21	7.4%	250.1	Textiles & Garments (92%)
Uzbekistan	26	22	8.5%	785.0	n.a.
<b>Total CARs</b>			<b>9.9%</b>	<b>3,705.0</b>	

n.a. = not available

<sup>1</sup> 2001

<sup>2</sup> 2003

<sup>3</sup> Industry comprises mining, manufacturing, construction, and utilities..

Sources: Author's estimates based on data from International Monetary Fund; National Statistics Committee of the Kyrgyz Republic; and *World Development Indicators Online* (World Bank).

The structure of manufactured exports varies from country to country. Some CARs have specialized in labor-intensive activities while others have moved toward more capital and technology-intensive activities (Wignaraja, 2005). Textiles and garments, for example, account for 80% of manufactured exports in Tajikistan and Turkmenistan, and 37% in the Kyrgyz Republic. While a detailed breakdown of Uzbekistan's manufactured exports is unavailable, they are thought to be largely in textiles and transport.<sup>15</sup> In Kazakhstan's, 70% of its large manufactured export base consists of iron and steel products, with the rest chemicals, plastics and machinery. Azerbaijan's much smaller export base is a mix of iron and steel, chemicals, and machinery.

Concentrating on one or two exports is inevitable in the early stages of an export-led manufacturing growth—as in the CARs. This is particularly true when suddenly thrust into international markets with little experience and logistics from being land-locked. Still, export concentration means greater vulnerability to internal or external shocks that affect specific industries. This is now recognized within the region. Kazakhstan in particular is trying to foster economic diversification away from extractive raw materials using an Innovative Industrial Development Strategy (IIDS) 2003–2015, which was introduced in 2003 (see GOK, 2003). The program will complement existing economic reforms rather than supplement them. IIDS emphasizes the creation of priority industrial clusters and supports investment institutions, industrial credit, and innovation.<sup>16</sup> IIDS remains in its first phase— involving diagnostic studies, training, and institution-building—so it is still too early to assess its impact on Kazakhstan's eventual export performance.

Natural resource availability, lower transport costs, incentive policies, and initial conditions are some factors responsible for the improved manufactured export performance and the pattern of product specialization in

<sup>15</sup>As Wall (2003) notes: "Most of Uzbekistan's export trade take place under state trading arrangements. Trade data being a state secret in Uzbekistan, it is not possible to carry out any serious analysis of export policy, but such aggregate data as are available show that in 2002 cotton fiber, energy and gold accounted for 70% of total official exports... All export data is thought to be highly unreliable", (pp. 32–33).

<sup>16</sup>Detailed studies undertaken by the Center for Marketing and Analytical Research of Kazakhstan have identified seven priority industrial clusters: tourism, oil and gas engineering, food, textile, logistics services, metallurgy, and construction materials.



the region since the late 1990s (Gormart, 2003a; Freinkman *et. al.* 2004; World Bank, 2004; Wignaraja, 2005). Some common explanations underlie the record of reform-minded CARs. For example, the emergence of textiles and garments as major exports in the Kyrgyz Republic and Tajikistan is associated with availability of inexpensive cotton, new foreign investment, relatively inexpensive yet skilled labor, and the implementation of market-oriented reforms. Growth in iron, steel, and chemical exports from Kazakhstan and Azerbaijan reflect the abundance of iron ore and crude reserves, FDI, improvements in macroeconomic management, ample supplies high-tech manpower, and significant infrastructure investments. New investments rehabilitated existing capacity and created new production facilities.

Turkmenistan and, to a lesser extent, Uzbekistan, have largely followed inward-oriented economic policies inherited from the former Soviet Union, with export growth linked to raw material availability and some special circumstances. Uzbekistan's textile exports mainly derive from domestic firms which have the advantages of cheap cotton, low labor costs, a protected domestic market, and the demand and proximity to regional markets. Turkmenistan attracted export-oriented foreign investment in textiles and garments from Turkey through by way of their close historical ties, inexpensive cotton, and the highly-subsidized power driving production.

## Poverty Reduction

After generally increasing from 1990 to 1997, poverty levels have slowly dropped in the years since (Table 7). Based on ADB and World Bank estimates over the past six years, poverty incidence was between 28% and 30% in oil-exporting Kazakhstan and Turkmenistan, and in Uzbekistan. In Azerbaijan, the Kyrgyz Republic, and Tajikistan estimates of poverty incidence were nearly twice as high, ranging from 48% to 57%. For the region as a whole, poverty incidence averages 40%.

**Table 7: Poverty Estimates**

	<b>National Poverty Incidence</b> (population below poverty line, %)	
	Early Period	Recent Period
<b>Oil Exporters</b>		
Azerbaijan	68.1 (1995)	49.6 (2001)
Kazakhstan	34.6 (1996)	27.9 (2002)
Turkmenistan	...	29.9 (1998)
<b>Non-oil Exporters</b>		
Kyrgyz Republic	51.0 (1997)	47.6 (2001)
Tajikistan	...	56.6 (2003)
Uzbekistan	...	27.5 (2000)
<b>CARs</b>		39.9

Sources: ADB (2004a), World Bank (2005b).

... = not available.

Lower inflation rates, stronger growth, creation of new external trade links, and the restoration of social and political stability contributed to the decline in poverty in the CARs.<sup>17</sup> In addition, remittance income from unskilled and semi-skilled overseas workers in Turkey, Russia, and Kazakhstan has become an important source of income for the poorer segments of society in the non-oil exporting CARs. There has also been a trickle down effect

<sup>17</sup> See Gormart (2003b), World Bank (2005c), and Dowling and Wignaraja (2005).

from labor intensive industries—such as garments—newly developed within the region. For social development, foreign aid has also contributed to poverty reduction, particularly in the Kyrgyz Republic and Tajikistan.

Rural poverty remains a significant problem in some CARs as many urban unemployed move to rural areas looking for work, but find few opportunities on state farms. Income disparities and poverty are more pronounced in certain subregions—for example, the Ferghana Valley and border regions of Kazakhstan, the Kyrgyz Republic, and Tajikistan). Still, despite some regional inequalities, overall income distribution is reasonably equitable with an average Gini coefficient of 33.2%.

In terms of Millennium Development Goals (MDG's), the CARs have made some progress, but there is agenda long way to go, with concern that Kazakhstan, Tajikistan, and Uzbekistan will not make the 2015 deadline. In fact, the distance to achieving some targets appears to be lengthening. There is evidence of high, increasing rates of malnutrition in Tajikistan and Uzbekistan. Education standards have also slipped and the effects of the collapse in the social sector in some CARs deteriorated health. The second Asian regional report on MDGs—*A Future Within Reach: Reshaping Institutions in a Region of Disparities to Meet the Millennium Development Goals in Asia and the Pacific* (ADB, the United Nations Development Programme (UNDP) and the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), September 2005)—calls for a reshaping of national and local institutions involved in the delivery of services to help achieve the MDGs. Key issues include improving the provision and quality services, reducing barriers to access services, and broadening the range of providers. The report also analyzes how regional cooperation and trends toward economic integration can help speed the development process.

## Policy Trends

Type I and Type II policies were important in enabling the CARs to begin returning GDP to pre-1990 levels. This was particularly important in creating a more stable and attractive environment for FDI in Kazakhstan and Azerbaijan, and to increase agricultural efficiency—and thus profits—in the Kyrgyz Republic. Still, the main impetus for the revival since the late 1990s was higher commodity prices for oil and gas, cotton, gold, and metals, along with the restoration of political stability in some CARs. The People's Republic of China's rapid economic growth and inelastic global demand for these commodities helped this bullish external environment for the CARs.

Type III policies were relatively unused since 1990 as only Kazakhstan has recently started to introduce industrial competitiveness policies through its Innovative Industrial Strategy, 2003–2015 (see GOK, 2003). Although Azerbaijan and Uzbekistan are studying their own industrial competitiveness, they have yet to design or implement relevant market-friendly policies. To varying degrees, CARs participate in the various regional initiatives to address the constraints of being small, land-locked economies. These include the Commonwealth of Independent States (CIS), Eurasia Economic Community (EuRASEC), Shanghai Cooperation Agreement, Central Asian Economic Community (CAEC), and the Single Economic Space and the Special Program for the Economies of Central Asia (SPECA). Most have differing and sometimes conflicting objectives and overlap country coverage.<sup>18</sup> Because of this, these initiatives have had limited impact thus far in harmonizing regional objectives in the key areas of trade, energy, and transportation (see Pomfret, 2003b).<sup>19</sup> Table 8 describes the relative level of implementation.

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<sup>18</sup> See UNDP (2005) and [aric.adb.org](http://aric.adb.org) for details.

<sup>19</sup> The Central Asia Regional Economic Cooperation Program (CAREC) was initiated in 1997 to improve living standards and reduce poverty in CAREC countries through more effective regional cooperation. To date, the CAREC program has focused on financing infrastructure projects and improving the regional policy environment in the areas of transport, energy, trade policy and trade facilitation. The countries covered include the CARs as well as Afghanistan, PRC and Mongolia. Furthermore, the CAREC Program is underpinned by alliance of multilateral institutions (ADB, IMF, World Bank and EBRD) with ADB serving as the CAREC secretariat.

Table 8: Implementation of Policy Typology <sup>1</sup>			
	Type I & II	Type III	
	Economic Reform	Industrial Competitiveness	Regional Cooperation
Oil Exporters			
Azerbaijan	High	Low	Medium
Kazakhstan	High	Medium	Medium
Turkmenistan	Low	Low	Low
Non-oil Exporters			
Kyrgyz Republic	High	Low	High
Tajikistan	Medium	Low	High
Uzbekistan	Medium	Low	Low
<sup>1</sup> High = strong implementation. Source: Author's estimates			

Recent proliferation of bilateral free trade agreements (FTAs) in the region has added an additional layer of complexity (Table 8). In 1995, there were three ADB developing member country FTAs (two bilateral and one cross-regional) notified to the WTO. By March 2006, there were 18, with another 21 FTAs already signed or being implemented but which had not yet been registered with the WTO. Each CAR now has at least one FTA in place with each other and some have several overlapping accords. The drive toward political alliances, foreign investment, and market access for small land-locked economies seem to be the main drivers of FTAs in the region. However, the proliferation of a large number of bilateral arrangements can lead to the “spaghetti bowl” effect—a term popularized by Bhagwati (2002). There can be harmful effects caused by multiple rules of origin arising from overlapping agreements among signatories of FTAs. Complex rules of origin increase administrative and business costs, particularly for SMEs which have limited capacity to absorb them.<sup>20</sup> Also, if they have large transactions costs, these rules can deter foreign investment and trade. Thus, an economic case can be made for streamlining rules of origin and other procedures that affect business in the CARs by consolidating overlapping bilateral FTAs. The goal could be a region wide FTA with relatively low trade barriers compared with the rest of the world, adopting standards and trade rules compatible with WTO agreements.

<sup>20</sup> No estimates are available of the costs associated with rules of origin for FTAs in Central Asia. A recent literature survey by Tapp (2005) indicates that administrative costs to enterprises pertaining to rules of origin from the EU are in the range of 3% to 5% of the value of exports while that for NAFTA is less than 2%.

Table 9: FTAs/FAAs in Central Asia (as of March 2006)

**A. Summary of WTO Status**

	WTO Notified	Not Notified	Total
<b>Total</b>	<b>18</b>	<b>21</b>	<b>39</b>
<b>Central Asia only</b>	<b>5</b>	<b>7</b>	<b>12</b>
<b>Cross-regional</b>	<b>13</b>	<b>14</b>	<b>27</b>
Central Asia and others	12	13	25
Multi-Regional	1	1	2

**B. Individual FTAs in Central Asia**

Agreements	Date	Status	WTO Notification
<b>Central Asia 1 ( Central Asia 7)</b>			
Tajikistan-Armenia FTA	1994	FTA signed	
Azerbaijan-Uzbekistan FTA	1996	FTA signed	
Azerbaijan-Turkmenistan FTA	1996	FTA signed	
Tajikistan-Kyrgyz FTA	1996	FTA signed	
Tajikistan-Uzbekistan FTA	1996	FTA signed	
Azerbaijan-Kazakhstan FTA	1997	FTA signed	
Uzbekistan-Kazakhstan FTA	1997	FTA signed	
Armenia-Kyrgyz FTA	1995	FTA Under Implementation	Yes
Kyrgyz-Kazakhstan FTA	1995	FTA Under Implementation	Yes
Armenia-Turkmenistan FTA	1996	FTA Under Implementation	Yes
Kyrgyz-Uzbekistan FTA	1996	FTA Under Implementation	Yes
Armenia-Kazakhstan FTA	2001	FTA Under Implementation	Yes
<b>Cross-regional</b>			
Pakistan-Kazakhstan PTA	2003	PTA proposed	
Pakistan -Tajikistan PTA	2004	PTA proposed	
Azerbaijan-Russia FTA	1992	FTA signed	
Uzbekistan-Russia FTA	1992	FTA signed	
CIS FTA <sup>1</sup>	1994	FTA signed	Yes
Tajikistan-Russia FTA	1994	FTA signed	
Azerbaijan-Moldova FTA	1995	FTA signed	
Azerbaijan-Ukraine FTA	1995	FTA signed	
Uzbekistan-Georgia FTA	1995	FTA signed	
Uzbekistan-Moldova FTA	1995	FTA signed	
Tajikistan-Belarus FTA	1998	FTA signed	
Tajikistan-Ukraine FTA	2001	FTA signed	
GUAM FTA <sup>2</sup>	2002	FTA signed	
Common Economic Space <sup>3</sup>	2003	FTA signed	
Armenia-Russia FTA	1992	FTA Under Implementation	Yes
Kyrgyz-Russia FTA	1993	FTA Under Implementation	Yes
Armenia-Moldova FTA	1995	FTA Under Implementation	Yes
Armenia-Ukraine FTA	1996	FTA Under Implementation	Yes
Azerbaijan-Georgia FTA	1996	FTA Under Implementation	Yes
Kyrgyz-Moldova FTA	1996	FTA Under Implementation	Yes
Armenia-Georgia FTA	1998	FTA Under Implementation	Yes
Kyrgyz-Ukraine FTA	1998	FTA Under Implementation	Yes
Kazakhstan-Georgia FTA	1999	FTA Under Implementation	Yes
Turkmenistan-Georgia FTA	2000	FTA under implementation	Yes
EurAsEC Customs Union <sup>4</sup>	2001	FTA Under Implementation	Yes
<b>Multi-regional</b>			
SCO FTA <sup>5</sup>	2003	FTA Proposed	
ECOTA	2003	FTA Signed	Yes

<sup>1</sup>Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyz Republic, Moldova, Russia, Tajikistan, Ukraine, Uzbekistan

<sup>2</sup>Azerbaijan, Georgia, Moldova, Ukraine

<sup>3</sup>Belarus, Kazakhstan, Russia, Ukraine

<sup>4</sup>Belarus, Kazakhstan, Kyrgyz Republic, Russia, Tajikistan, Uzbekistan

<sup>5</sup>PRC, Kazakhstan, Kyrgyz, Tajikistan, Uzbekistan, Russia

Two recent studies shed light on the gains from adopting Type III policies in Central Asia. First, using a general equilibrium approach, the UNDP Human Development Report for Central Asia (UNDP, 2005) concludes that the region's GDP could be 50–100% higher in 10 years following a comprehensive program of regional cooperation and integration.<sup>21</sup> This program would include reduction in trade costs through more efficient transit, better coordination of water use and flood control, more efficient energy pricing and management, and cooperation in education and knowledge sharing. UNDP suggests that the cumulative gains would be even higher if this highly dynamic regional economy becomes fully integrated with its neighbors and the world economy. It also indicates that smaller and poor economies of the region—the Kyrgyz Republic and Tajikistan—would benefit even more. “The benefits from regional cooperation are likely to be distributed in a way that on average helps the poor more than the better off, according to the report.” (p. 207).

In the second study, using a scenario planning approach, per capita incomes in the region could double by 2015 and poverty could halve if the region adopted policies for economic reforms, regional cooperation, and industrial competitiveness (Dowling and Wignaraja, 2006). Policy reforms would include acceleration in privatization, better corporate governance, financial sector liberalization, and export promotion. Regional cooperation would include an integrated road and rail network, streamlining customs codes and border procedures, and developing a regional energy market and infrastructure. Industrial competitiveness policies would promote diversification, link enterprises into global value chains, upgrade supplier development, restructuring technology institutions, and fostering partnerships between government and the private sector.

## **V. Assessment and Conclusions**

The CARs experienced a decline in output equivalent to that of the United States Great Depression. With limited policy reform and the economic downturn that followed the breakup of the Soviet Union, some observers were ready to write off the CARs as hopeless cases. Isolated geographically, suffering severe disruptions and a breakdown in traditional market structures, and facing a lack of alternative trade and supply opportunities, it may be easy to understand the early hopelessness. As isolated, landlocked provinces within a large centrally-planned economy, the CARs after independence had to deal with a huge gap in capacity and lack of experience in governance, both in the public and private sectors (particularly as many Russian managers and expatriates returned home). This predicament can not be overemphasized when assessing the CARs performance since 1990.

The CARs slowly began to cope with this myriad assortment of problems (see Starr, 2004). And the evidence accumulated since the transition recession bottomed out in the mid-1990s suggests that, quite to the contrary, economic revival is underway. While the oil exporting countries of Azerbaijan, Kazakhstan, and Turkmenistan show more robust economic activity, the non-oil exporters of the Kyrgyz Republic, Tajikistan, and Uzbekistan are also growing more rapidly. Structural change, particularly the expansion of the manufacturing sector, along with poverty reduction, has accompanied the accelerated growth in the region.

This experience highlights both the importance of the speed of reform and the nature of the policy mix—based on initial conditions—to build a successful transition. The evidence further casts doubt on whether the Type I big bang approach to economic transition is appropriate in light of local conditions (see Newbery, 1991; Rana and Dowling, 1993; Rana, 1995). Generally, the approach had limited impact in 1990-1996 in the CARs. There were disruptions in trade and production with other members of the former Soviet Union, migration of skilled personnel, political instability, loss of investment confidence, and isolation from external markets. With this backdrop, local entrepreneurs were unable to disentangle reform incentives from innate volatility, which also contributed to a lack of foreign investor confidence with the exception of the mineral sector (where the rents remained high). Furthermore, policies adopted did not address the preconditions for growth—efficient and well-functioning markets for goods, services, and factors of production. Nor did they deal with the critical issue of reforming and upgrading institutions from the Soviet era, whether the legal system, bureaucratic procedures, and the technical education and capacity building required in a market economy.



The route Turkmenistan took suggests that a complete lack of reform is not a viable option in the long-term if developing a competitive market economy is the goal (the revival in growth since 1998 was a direct result of higher gas and cotton prices, Turkmenistan's primary exports). Excessive state interference or domestic distortions from the inward, Soviet-style economic policies hinder private sector activity and market development, with the exception of the energy sector. Rural poverty will also likely persist without the agricultural reforms or social investments in health and education.

For Uzbekistan—the only CAR that followed a gradual policy adjustment strategy—there was a smaller output decline than the more reformist CARs.<sup>22</sup> This gradual approach to policy reform shows the importance of keeping some continuity of institutions during transition. Recent performance, however, indicates that now is the time to move on.. Inward-orientation, import substitution, and excessive state intervention from the Soviet era have run their course. The economy may be primed for new economic policies aimed at boosting the private sector in developing a market economy.

With higher commodity prices (particularly oil and gas), an upturn in agriculture, and better implementation of Type I and Type II policies, local and foreign investors can see the incentives effects from the mid-1990s, particularly in Azerbaijan and Kazakhstan. As a result, FDI increased with domestic investment following suit. These factors drove the rapid acceleration in growth since 1998. Structural change, manufactured exports, and poverty reduction accompanied this growth.

The Kyrgyz Republic is the economy reputed to be the best reformer in Central Asia. However, after some minor gains, it has been characterized by a marked lack of foreign investment, domestic manufacturing competitiveness, and high economic growth. This suggests that further policy measures are needed to accelerate growth in this small, resource-poor, landlocked economy.

Short-term, prospects for the CARs are optimistic. Through 2008, international financial institutions project annual economic growth in Central Asia to be close to 10% (ADB, 2006 and IMF, 2005). Although inflation is expected to rise somewhat, growth among oil exporters will continue to be propelled by a combination of high world oil and gas prices, buoyant international energy demand, continued inflows of FDI, and larger investments in modern infrastructure. For the non-oil exporters, growth will be somewhat slower. A lot will depend on favorable non-oil export commodity prices (e.g. cotton, gold, aluminum, and other metals) to aid in financing expansion in the services sector, and the cost of implementing economic reforms.

The gains from better allocation of existing resources, however, could slow as the revival continues. To sustain future growth, Type III policies to increase industrial competitiveness and regional cooperation need to be added to the policy mix. These include measures to accumulate higher levels of technology and capacity at the corporate level, vital to boosting industrial competitiveness. Market expansion through regional cooperation to realize economies of scale should be paramount. Also, the interaction of FDI inflows within the context of regional cooperation will enhance the ability of the CARs to reap the benefits of a dynamic comparative advantage for individual countries and the region as a whole..

In this paper, we show that initial conditions and policies are critical to economic success during transition. Relying on a “one-size-fits-all” approach that emphasizes rapid reform has brought limited gains in the small, land-locked transition economies of Central Asia. Without the recent boom in commodity prices and continued resource exploitation, the region might have witnessed a much more prolonged period of economic stagnation. To sustain growth during transition, the case was made for a more gradual and more comprehensive approach that includes policy reform, regional cooperation, and industrial competitiveness. Implementing a more comprehensive policy agenda requires political stability and good governance, a strong commitment to a nationally agreed policy agenda, and investment in capacity building for economic policy management in an open economy (Dowling and Valenzuela, 2004).

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<sup>22</sup> Others have referred to the relatively limited output decline in Uzbekistan during the early 1990s amidst cautious economic reform as the “Uzbek puzzle”. Loukoianova and Unigovskaya (2004) suggest that Uzbekistan's economic performance may have been overestimated and that its official GDP data are less accurate than those of the other CIS countries. Meanwhile, Zettelmeyer (1998) argues that Uzbekistan's output drop was cushioned by a low initial industrialization, its cotton production which could be readily sold on international markets and its self-sufficiency in energy.

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