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REFORM PATHS IN CENTRAL ASIAN TRANSITION ECONOMIES

by

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The Central Asian economies offer an interesting comparative study in reform paths of formerly centrally planned economies. From fairly similar starting points they have pursued different policies since the demise of the Soviet Union in December 1991. This paper analyzes the reform strategies and their outcomes in Kazakhstan, the Kyrgyz Republic, Turkmenistan and Uzbekistan, omitting Tajikistan whose post-independence history has been dominated by internal conflicts.

In analyzing outcomes the paper will attempt to disentangle the influence of natural resource endowment and initial conditions, availability of external financing and other support, and policy related factors. The four countries are often regarded as similar insofar as they were among the poorest Soviet republics, assigned within the Soviet division of labour to focus on primary products, shut off from the rest of the world, and culturally subordinated. The picture of relative backwardness could be reversed by comparing the countries with neighbours such as Afghanistan, when they would appear as relatively advanced, and it is important not to ignore the benefits such as almost universal literacy which membership in the USSR brought. The four Central Asian republics also differed substantially from one another in their income levels, resource endowment, and industrial structure.

The reform paths can be ranked by commitment to the establishment of a market economy based on private ownership. From most to least reformist, the conventional wisdom places the Kyrgyz Republic first followed by Kazakhstan, Uzbekistan and Turkmenistan (Table 1).¹ This too is a simplification; reform is multi-dimensional. Especially between the two largest Central Asian economies there is growing dispute over whether Kazakhstan's more rapid and less controlled approach to change is superior to

¹ The European Bank for Reconstruction and Development index is reported in its annual *Transition Report* and the World Bank index in the *World Development Report 1996*, p.14; the latter is based on de Melo et al. (1996).

Uzbekistan's gradual and tightly controlled reforms.²

The paper will seek to identify what kind of economic systems are emerging as a result of the differing reform paths in Central Asia. The economic structure and trade specialization depend upon policy choices as well as initial conditions. The degree of government involvement in resource allocation, in ownership, and in provision of social safety nets now varies considerably. Finally, the success or failure of the alternative reform paths in generating non-inflationary growth with more or less unequal distribution of income and wealth is becoming clearer after five years of independence.

1. Initial Conditions

The Central Asian republics (CARs) have a geographical, religious and cultural unity and much shared economic history. This section will first outline those common features, and then describe the significant differences in initial conditions in each of the states which became independent at the end of 1991. It is worth emphasizing that the national borders are artificial, sometimes (as in the Fergana Valley) dividing what would otherwise be an integrated unit, and that there are major regional variations within some of the CARs (especially Kazakhstan). The definition of the republics by the name of the titular group can also be misleading in the more polyglot regions, especially in the cities where intermarriage was widespread; Kazakhstan's population at independence consisted of about two fifths Kazakhs, two fifths

² Dabrowski (1996) identifies six sets of transition strategies adopted in eastern Europe and the former Soviet Union, and even this taxonomy is an oversimplification because countries moved in different ways in the various policy areas and because implementation was often inconsistent over time. Dabrowski includes Uzbekistan in the "no significant change" category, but in housing policy there was a rapid and dramatic change.

Russians, and one fifth other ethnic groups.³ Table 2 presents some basic economic data for the CARs at the time of independence.

The defining geographical features of Central Asia are the two major river systems running from the high mountains in the south-east corner of the region into the Aral Sea, which have provided the basis for irrigated agriculture for centuries. A small area of rain-fed agriculture flourishes in the densely populated Fergana Valley, which is divided between Uzbekistan, the Kyrgyz Republic and Tajikistan. Much of the remainder of the region is desert, which turns into steppeland in Kazakhstan. The CARs were incorporated into the Russian empire in the late 1800s. Under the Tsarist regime some modern infrastructure was installed, but the major economic developments date from the Soviet era.

The CARs were, together with parts of the Caucasus, the most economically backward areas of the USSR. Huge expanses of desert separated the CARs' main population centres from the Soviet heartland. Differing ethnic, cultural and religious make-up also kept the CARs' distinctive flavour, despite large-scale voluntary and involuntary migration within the USSR. Public policy tried to repress the differences by imposing Russian as the common official language, promoting atheism, outlawing archaic social customs (especially related to the economic role of women), and encouraging loyalty to the Soviet Union. While this achieved major social changes and brought clear benefits in areas of education and provision of other basic needs, particularism remained in the CARs and discontent with Slavic domination was often not far beneath the surface.

The CARs' role within the Soviet division of labour was as primary producers, with much of the region becoming dependent on cotton. In the 1950s, under the Virgin Lands scheme, northern

³ In the 1989 census the population consisted of 39.7% Kazakhs, 37.8% Russians, 5.8% Germans and 16.7% other ethnic groups. The estimated ethnic composition in 1995 was 46.0% Kazakhs, 34.8% Russian, 4.9% German and 14.3% others (UNDP *Human Development Report Kazakhstan 1996*, 30).

Kazakhstan became an important grain-growing region. Mineral resources were also developed, often without concern about production costs or ore quality; Kazakhstan became a major producer of coal, lead, silver, chrome and other minerals, while Uzbekistan was the USSR's second largest gold producer. Especially in the later decades of Soviet rule energy production increased in Kazakhstan and Turkmenistan, although it was widely believed in the CARs that energy exploration in the region was neglected at the expense of developing Siberian oilfields.

Industrial development was in part related to the primary product base. Uzbekistan became the major producer of cotton-harvesting machinery, for example, although not an important cotton textile producer. Industrial diversification was prompted by the German invasion in 1941 when whole factories were moved from exposed parts of the western USSR to Tashkent. After the war, the tendency of Soviet planners to seek scale economies by locating new industries in established industrial centres led to the further expansion of Tashkent, which is the only major industrial conurbation in Central Asia (and which was the fourth biggest city in the USSR). Other significant industrial projects aimed at promoting regional development in poorer areas; they became large in relation to the local economy, but did not have solid economic foundations.⁴ The Soviet space centre and major nuclear testing facilities were located in Kazakhstan.

The CARs suffered some undeniable costs from the Soviet era. The most obvious was the environmental degradation which was extreme even by the low standards of centrally planned economies.

⁴ A sugar refinery built in the Kyrgyz Republic to process Cuban sugar accounted for about 3% of GDP in the late 1980s, but became a white elephant when economically realistic freight rates were charged on the input and output; all sugar grown within several thousand kilometres of the refinery is beet sugar, for which the refinery was technically ill-suited. The huge South Tajikistan complex centred on an aluminium smelter in Tursunzade experienced serious set-up problems (Rumer, 1989, 51), which were exacerbated when supplies of bauxite from Guinea were disrupted.

The shrinking of the Aral Sea as a result of the over-expansion of the water-hungry cotton economy has had incalculable negative effects on the region, with well-documented deterioration of health and less predictable long-term consequences including climatic changes.⁵ Radiation problems in Kazakhstan led to environmental groups being more active than elsewhere in the USSR, especially after the Chernobyl disaster highlighted the safety deficiencies of Soviet nuclear installations.

The Soviet economy was planned as a single unit, which imposed major constraints on the newly independent states' ability to pursue independent economic policies. The transport network was not always suited to domestic trade; the railway between the Kyrgyz Republic's two main cities, for example, passes through Uzbekistan, Tajikistan and Kazakhstan. Pipeline networks and power grids were also designed for an integrated Soviet Union. In consequence the individual republics had very open economies, even though they were shut off from buying or selling in world markets. Table 3 highlights this paradox by comparing the CARs' openness to that of the Canadian provinces in the 1980s; total trade as a share of GDP is roughly similar for the two groups, but whereas a third to a half of Canadian provinces' trade was outside Canada, only about a tenth of the CARs' trade was outside the USSR (and most of that was barter trade within Comecon or with third world clients of the USSR). Thus the dissolution of the USSR and collapse of Comecon led to severe disruption, while the CARs were ill-prepared to participate in international trade in the world marketplace.

The CARs enjoyed large net capital inflows during the Soviet era. It is impossible to reconstruct with any precision pre-1992 balance of payments for the republics, because much of the inter-republican transfers took place within the huge all-Union enterprises which played a major role in the USSR. The consensus

⁵ Ironically, western areas of Kazakhstan and Turkmenistan have suffered from an unexplained *rise* in the level of the Caspian Sea, which has inundated coastal areas, including oilfields.

estimates for the CARs are of resource transfers in the order of 10-20% of GDP in the late 1980s (eg. Pomfret, 1995, 72; Griffin, 1996, 19). Some of these were already being rolled back in 1991 as the USSR crumbled, and transfers continued at a dwindling rate after the dissolution of the USSR (this was the main carrot to remain in the ruble zone in 1992/3).⁶ The cessation of transfers, even if it was spread over three years, was unexpected and exacerbated the problems of transition from central planning. During the first half of the 1990s the CARs suffered a drop in gross national expenditure (GNE) which was substantially larger than the decline in output; among transition economies not suffering from armed conflicts, only Mongolia suffered a larger fall in GNE than the CARs during the early 1990s.

In Central Asia, and in the Caucasus, during the Brezhnev era the political leadership lost much of its ideological basis and developed a neofeudal system. While corruption became endemic all across the USSR, the distinctive feature of the southern republics was the emergence of networks based on family or clan loyalties. The most publicized example was Uzbekistan, whose leadership engaged in a huge fraud by misreporting cotton sales, and became the first target of Gorbachev's anti-corruption drive after 1985. The corrupt and often criminal leaders, however, enjoyed strong local support for standing up to Moscow. In December 1986, for example, when a corrupt Kazakh was replaced by a Russian as first secretary of the Kazakh Soviet Republic, mass demonstrations in Almaty had to be dispersed by force, and two people killed by the police were treated as martyrs who would be honoured by a statue after Kazakhstan became independent. One consequence of this

⁶ Although the CARs suffered from the unexpected cessation of transfers, they were fortunate in not having accumulated debt. The CARs agreed to the zero option for dealing with the USSR's external debts and assets (ie. assigning them all to Russia), which allowed the CARs to begin life as independent states free of sovereign debt. Inter-enterprise arrears, for which the state might be held ultimately responsible, were unlikely to be settled when the debtor and creditor were located in different Soviet successor states.

political development was that after independence the incumbent leaders of Kazakhstan, Turkmenistan and Uzbekistan remained in office with essentially the same power structure, just changing their labels from communists to nationalists.

(a) Uzbekistan

Uzbekistan is the most populous of the CARs. It contains the best-known historical centres in the region (Bukhara, Khiva, Samarkand). Tashkent was the first major city taken by Russian forces in the late 1800s, becoming the administrative centre and springboard for the subsequent conquest of the region. Today, Tashkent is the biggest city and has the only important international airport in the CARs.

Outside Tashkent, the economy is agricultural and dominated by cotton, apart from some mixed farming (fruit, vegetables and livestock) in the Fergana Valley. Uzbekistan accounted for almost three quarters of Soviet cotton production (Table 4), and is the world's fourth largest cotton producer. Uzbekistan has some mineral resources, notably gold, whose output was a state secret in Soviet times (but is believed to be the world's eighth largest). At independence Uzbekistan imported most of its primary energy products, although it did have substantial oil refining capacity and was a net exporter of natural gas (Table 5).

The size of the agricultural sector and relative lack of natural resources contributed to Uzbekistan having the lowest per capita GNP among the four CARs covered in this paper (Table 2). The average hides large variations in living standards, with some rural areas, particularly in the west and south of the country, being economically deprived. The Autonomous Republic of Karakalpakstan in the extreme west had lower levels of human development by practically every available indicator, and suffered from the worst ecological consequences of the desiccation of the Aral Sea.

Paradoxically, Uzbekistan could claim to be the most

economically developed of the CARs - plausibly vis-à-vis Turkmenistan and the Kyrgyz Republic, less plausibly vis-à-vis Kazakhstan. Uzbekistan's industrial sector is the most diversified. Its labour force is better educated than those of the Kyrgyz Republic or Turkmenistan. The transport infrastructure is relatively good, at least in the main population centre around Tashkent and in the east. Compared to Kazakhstan, Uzbekistan has an ethnically homogenous population, and although there was some Slavic emigration after independence this was less disruptive than in Kazakhstan.

(b) Kazakhstan

Kazakhstan is the other large CAR, with a smaller population but larger GNP than Uzbekistan. Kazakhstan is also the most diverse of the CARs, and indeed is often considered not to be truly part of Central Asia as in the north it blends imperceptibly into the Siberian steppe.

The share of the labour force in agriculture is smaller (23% in Kazakhstan in 1987, compared to 34-41% in the other CARs), but the Kazakh agricultural sector is a major grain exporter. Much of the grain production is a result of the Virgin Lands program of the 1950s which brought land in northern Kazakhstan into production. The output of livestock products is also far higher in Kazakhstan than in the other CARs (Table 4); Kazakhstan accounted for a quarter of wool production in the USSR. Kazakhstan's cottonfields are concentrated around Chimkent, and the market gardening around Almaty.

The diversity of Kazakhstan's population is related to the large Slavic immigration in the north to farm the Virgin Lands. Earlier Kazakhstan had been the destination for political exiles and for groups considered security risks during the 1941-5 war, notably ethnic Koreans and Germans. The high-tech installations associated with the nuclear program and the Soviet space centre also brought non-Kazakhs into the republic in larger numbers than

in other Soviet republics.

Kazakhstan has the largest oil reserves among the CARs (Table 5). During the Soviet era it was a source of discontent that investment in oil exploration and exploitation was directed to Siberia rather than to Kazakhstan. Since independence Kazakhstan has signed the largest foreign investment contract of any Soviet successor state, with Chevron for the development of the Tengiz oilfield in northwest Kazakhstan.

The oil and mineral endowment, food self-sufficiency and high levels of human capital led many observers to see Kazakhstan as one of the best-placed Soviet successor states in 1991.

(c) The Kyrgyz Republic

The Kyrgyz Republic is mainly mountainous, with its population concentrated in the Fergana Valley in the southwest and the plains around Bishkek in the north. The Kyrgyz, like the Kazakhs, were nomadic pastoralists until the enforced collectivization of the 1930s, and wool remains a major product. The Kyrgyz Republic has some minerals, but few energy resources other than hydroelectric potential.

During the later part of the Soviet era, efforts were made to introduce industries as a regional development policy. Few of these projects had a sound economic basis. Because of their dependence on inputs from elsewhere in the USSR or from other Communist countries and dependence on the whole USSR market for customers, many of these artificial implants faced severe problems as soon as the Soviet economy imploded in 1991. Thus, among the CARs, the Kyrgyz Republic faced the most severe economic problems after becoming independent.

The Kyrgyz Republic also had a distinctive political development in the last years of the USSR. When the Soviet republics appointed, and in some cases elected, executive presidents in 1990 and 1991 the political transition was seamless in most of Central Asia with the established leaders simply

changing their titles to President Karimov in Uzbekistan, President Nazarbayev in Kazakhstan and President Niyazov in Turkmenistan. In the Kyrgyz Republic, however, the Communist Party's unsatisfactory response to ethnic disturbances in the summer of 1990 led to failure to ratify the official candidate for president, and instead the president of the Academy of Sciences, Askar Akayev, became president of the republic. Akayev proved to be an astute enough politician to withstand attempts to unseat him and he remains in power. Although he is no democrat, and has a tendency to rule by decree, Akayev is generally viewed as the least authoritarian ruler in the region.

(d) Turkmenistan

When they were violently incorporated into the Russian empire in the 1880s, the Turkmen were viewed as a backward group of desert nomads. In the 1920s less than 3% of the population was literate.

Education and health services were improved substantially over the next half century, although Turkmenistan continued to have the worst record in the USSR by measures such as infant mortality rates.

Sedentary agriculture was established in the Soviet era by increasing the area of irrigated land. The major irrigation project was the 1500 kilometre-long Karakum Canal (one of the major causes of the Aral Sea disaster) which permitted rapid expansion of cotton cultivation in the 1960s and 1970s (Table 4b).

During the final decade of the USSR, the Turkmen economy became dominated by natural gas. Practically the entire country sits on a field of natural gas, which is relatively easy to tap. In the USSR the relative price of natural gas was well below world levels, so that Turkmenistan could expect an immediate improvement in its terms of trade. Tarr (1994) estimated, using a 1990 base, that moving from Soviet to world prices would lead to a 50% improvement in Turkmenistan's terms of trade - a far more

significant gain than for any other former Soviet republic.⁷

2. Policies

As republics within the USSR, the CARs had similar economic policies, with resources allocated by central planning and assets owned by the state. In the Gorbachev era some Soviet republics did undertake local experiments in economic reform, but the CARs were not among them. During 1992 the CARs were generally preoccupied with institutional matters associated with independence, and economic policies were largely reactive.

Flexibility in many areas of reform was reduced by continued use of the ruble. Thus, all of the CARs followed Russia's price reform in January 1992; not to have done so would have opened the door to commodity arbitrage within the ruble zone. Nevertheless, the degree to which individual CARs tried to shelter their economies from key price rises was an early indicator of relative commitment to the establishment of market-determined prices. The ranking, according to closeness to Russian post-reform prices, was Kazakhstan, the Kyrgyz Republic, Uzbekistan, Turkmenistan (Pomfret, 1995, 53-6).

Privatization was characterized in 1992-3 by paper commitments but little real movement. Some form of privatization or use-rights was generally introduced for small enterprises, housing and land, but little or no progress was made towards privatizing large state-owned enterprises. Labour market reform also proceeded slowly in practice, as open unemployment remained minimal and new social safety nets were not constructed.

In 1993 the CARs all exited from the ruble zone. The Kyrgyz Republic was one of the first former Soviet republics to establish

⁷ Tarr's estimated improvement in the terms of trade was 19% for Kazakhstan and 1% for the Kyrgyz Republic, while Uzbekistan would suffer a 3% deterioration in its terms of trade.

its own currency, in May 1993. Turkmenistan more or less planned its exit for early November, confident in its ability to maintain the national currency's value with the country's natural gas wealth. Kazakhstan and Uzbekistan also left the ruble zone in November 1993, but in a greater rush as they finally rebelled against Russia's conditions for continued membership (Pomfret, 1995, 140-51). Uzbekistan initially issued a temporary currency (the sum coupon), before the banknotes for the new national currency, the sum, were issued in July 1994.

In 1994-6 differentiation in national economic policies became more apparent. By the World Bank classification of transition economies, the Kyrgyz Republic and Kazakhstan were intermediate reformers and Uzbekistan and Turkmenistan slow reformers. This is the consensus ranking of the four countries' degree of commitment to reform, although the European Bank for Reconstruction and Development considers Uzbekistan slightly more reformist than Kazakhstan (Table 1). The problem with any synthetic index of liberalization is that reform is a multi-faceted concept, and any simple rankings are bound to be controversial.

Whatever the differences in extent of reform, there have clearly been differences in style of economic policies. The Kyrgyz Republic has been the most committed reformer, taking the most determined steps. Turkmenistan has been the least committed reformer with a regime concerned more with political stability and distribution of the resource rents, than with creating a market-oriented economy. Kazakhstan and Uzbekistan are both progressing with economic reform, but in Uzbekistan there is far more concern with controlling the process and moving gradually.

(a) Uzbekistan⁸

Uzbekistan has adopted a gradualist reform strategy; official

⁸ This sub-section draws on the more extensive description and analysis in Pomfret and Anderson (1997).

statements denounce rapid change and promote the need for stability. The gradualism is most apparent in fiscal and monetary policy and in price reform. The government has had some success in limiting the budget deficit, but this has been for prudential reasons rather than as part of a macroeconomic policy aimed at containing monetary growth and hence inflation. For most of the post-independence period monetary policy has been of limited significance because the government has relied on price controls as its main anti-inflation weapon.

During 1992-3 Uzbekistan gave the impression of being a reluctant follower of Russian price reforms. By retaining a wider range of price controls than neighbours within the ruble zone, Uzbekistan opened the door to commodity arbitrage, and on several occasions the borders with the Kyrgyz Republic and Kazakhstan were closed. Following the introduction of the national currency in July 1994, however, the government has pursued cautious but cumulatively significant price reforms. All subsidies for consumer goods were eliminated and only flour, sugar and vegetable oil remained subject to rationing; the IMF in its 1996 Staff Country Report (page 11) concluded that "the process of price liberalization was essentially completed" by early 1995.

The degree to which prices are market-determined remains opaque. Some key commodity prices are still far below world prices in 1997, although domestic oil and gas prices were brought substantially closer to world prices in 1996. State orders remain important in agriculture; 60% of the cotton crop and 50% of the grain crop in 1995 were purchased at official procurement prices which were about half of world prices. The government has announced its intention of eliminating state orders for grain in 1997 and for cotton in 1998, but control over cotton prices is the most important source of government revenue so that the latter would have major negative budgetary implications. Most significant of all, the two most critical sets of prices in a market economy, interest rates and exchange rates, remain artificial.

Entrepreneurial banking is discouraged and interest rates controlled, and exchange controls have been tightened in recent years.

In late 1994 Uzbekistan began to pay more attention to macroeconomic stabilization, but actual policy has been cautious. Monetary tightening has occurred, but has been inconsistently implemented.⁹ The drop in inflation in 1995 was less dramatic than in the Kyrgyz Republic or in Kazakhstan (Table 6), and some of Uzbekistan's cumulative inflation performance is due to repression of price increases by controls rather than success in containing the underlying inflation.

Uzbekistan has an open economy, but restrictive trade and foreign exchange policies. Cotton and gold have proven to be buoyant exports. The government has used the exportables as a tax base,¹⁰ and provides substantial protection for import-competing producers in industry and in agriculture. In the mid-1990s trade policy became more liberal, in that tariffs were simplified and reduced, but less relevant, as by 1996 all foreign exchange earnings had to be turned over to the central bank which then allocated foreign exchange to approved importers and other certified buyers. The exchange rate is market-determined at auctions, but access to the official market is controlled. The system simplifies tax collection and permits discretionary control over imports, but leads to substantial resource misallocation. The gap between the official and black market exchange rates has widened, with a premium on foreign currency of over 100% by early 1997.

⁹ As a counterpart to the characterization of Russia's transition strategy as "inconsistent shock therapy" by Popov (1996), Pomfret and Anderson (1997) conclude that "Uzbekistan's macroeconomic policy since 1994 could be characterized as inconsistent gradualism".

¹⁰ Connolly and Vatnick (1994) model the transfer mechanism applied to cotton. Klugman (1996, 19) reports World Bank estimates that the cotton sector provided 13.4% of government revenue in 1993.

Privatization and enterprise reform is difficult to assess in Uzbekistan. There has been no sweeping privatization of large enterprises and land remains state-owned, but housing was almost completely privatized in 1994. Within both agriculture and industry there is some evidence of improved incentive structures, but it is early to assess. State enterprises (to some extent in service sectors such as education and health, as well as in industry) have been captured by incumbent managers, which has increased income inequality but may be conducive to greater efficiency now that the managers have claim to residual profits as well as fixed salaries. In agriculture there has been some limited increase in private farms, and state farms have been turned into cooperatives. The potentially most significant step, initiated in 1995, has been the spread of arrangements whereby individual farmers within cooperatives contract to supply a certain quota at a specified price and then retain a larger share of the above-quota production; this resembles China's successful household responsibility system, but its impact in Uzbekistan has yet to be documented.¹¹

There has been some formation of new enterprises. After negligible foreign investment in the early years of independence, direct foreign investment accounted for 1% of total investment in 1994 and 17% in 1995 (UNDP *Human Development Report Uzbekistan 1996*, 26), before slipping back in 1996. The inflows are dominated by a few large investors: Daewoo, BAT, Newmont Mining, Mercedes Benz and Lonrho. Formation of new small-scale private enterprises has been limited, certainly less than in Kazakhstan or the Kyrgyz Republic, but more than in Turkmenistan. Both foreign investors and indigenous entrepreneurs are deterred by the red tape and corruption in a still heavily regulated economy in which entrepreneurial activity is viewed with official suspicion.

The most distinctive element of government policy has been the

¹¹ Craumer (1995) and Khan (in Griffin, 1996, 65-92) provide differing assessments of agricultural reform in Uzbekistan.

steps taken to provide social security. In many transition economies words have been louder than actions, but Uzbekistan's government has produced some innovative actions. Government spending on education and health has been maintained at least as a share of GDP (Table 8; see also Klugman and Schieber, 1996, and chapters by Hatland and Haycock and by Tibi in Griffin, 1996). Although measures of school maintenance or hospital beds per inhabitant have deteriorated, this appears to be part of a genuine program of improving efficiency from the rigid capital-intensive Soviet approach to education and health. Since 1994 assistance to low income families has been channelled through neighbourhood committees or mahallas; one in five households received money from the mahalla fund in 1995 (Klugman, 1996, 27). The mahalla program has reduced administrative costs and appears to have permitted better targetting of the needy, although there have been some concerns about regional variations in the standards of need.

(b) Kazakhstan

Since independence Kazakhstan has followed a more free-wheeling approach to economic liberalization than Uzbekistan has. Initially many outside observers interpreted this as showing greater commitment to economic reform, underpinned by more favourable initial conditions in terms of natural endowment and human capital.

Kazakhstan's room for manoeuvre is constrained by a delicate ethnic balance, with Kazakhs and Russians almost equal in number in the late 1980s. In 1992-3 Kazakhstan followed Russian price reforms more closely than the other, more cautious, CARs and yet was a strong advocate of retaining the ruble zone. After Kazakhstan did eventually leave the ruble zone in November 1993, its macroeconomic policies were firmer than those of Uzbekistan. In other areas, the Kazakh approach has been laxer than that of Uzbekistan, which can be seen either as a greater commitment to market forces or as actions of a weaker central government. The issue of whether lack of law and order inhibits successful

transition to a more market-oriented economy has come to the forefront in the mid-1990s, often in explicit comparisons between Kazakhstan's faster liberalization and Uzbekistan's gradualism.

Price liberalization was substantially completed in 1992. By early 1993 the only retail prices still regulated were for transportation and communication services, bread and bakery products, baby food, some energy products, and imported medicines.

The signalling function of prices was, however, obscured by hyperinflation within the ruble zone, and this continued after the introduction of the national currency in November 1993 (Table 6). The state order system was abolished in 1993, when a "state needs" system was introduced, by which state procurement for schools, hospitals, etc. and for exports under interstate trade agreements are purchased from voluntary suppliers at negotiated prices.

Foreign trade was controlled in 1992-3, but then substantially liberalized in 1994-5. Licencing and quotas for imports and exports were abolished, and barter transactions prohibited. The average tariff on imports in 1996 was 13%. As in Uzbekistan the effectiveness of price and trade policy reform was undermined by hyperinflation and exchange controls, but on both counts Kazakhstan was more successful, with inflation under reasonable control by 1995 and exchange controls less draconian than in Uzbekistan.

Privatization moved at slow speed in 1991-2, but was addressed more seriously in March 1993 when the government adopted a three-prong strategy:

- * auctioning small-scale state enterprises for cash,
- * converting medium and large enterprises (employing 500-2000 workers) to joint stock companies to be managed by Investment Privatization Funds in which citizens would have shares through a voucher scheme,
- * privatizing very large enterprises on a case by case basis.

In 1994, the first prong was implemented successfully, the coupons for the second prong were distributed, but little progress was made

on the third prong.¹² Land and other natural resources remain state property, although long leases (up to 99 years) are transferrable and inheritable. Housing privatization is the responsibility of local authorities, so that the methods and extent of privatization vary; about half of all dwellings had been privatized by mid-1993, ie. slower progress than in Uzbekistan.

Despite widespread dissatisfaction with the privatization process and many stops and starts on the coupon program, which was terminated in 1996, the ownership situation has been transformed. By 1996 private, mixed, joint stock and other non-state forms of ownership accounted for over 70% of all property. Nevertheless, there is concern about the nature of privatization with much of it being privatization from within, as existing managers took control of state enterprises, often making big material gains for themselves.

Effective reform of the financial sector is a necessary prerequisite for successful privatization. In Kazakhstan non-state enterprises still complain of their limited access to capital markets, despite a big increase in the number of banks. By early 1995 there were 280 banks, up from 5 in 1988 and 72 at the end of 1991, but the three largest specialized state banks and the state Savings Bank held 80% of the assets. Most of the other banks were associated with individual enterprises, and act principally as conduits for state-subsidized credit. An August 1995 presidential decree introduced serious privatization of the banking sector by forbidding enterprises in which the state is a major shareholder from holding stock in banks.

The macroeconomic stabilization program has been successful in

¹² Three factories were quickly sold to foreign corporations (the Almaty central tobacco plant to Phillip Morris, a margarine factory to Unilever and a confectionary factory to R.J.Reynolds), although Unilever pulled out of its deal when the government would not guarantee future supplies of vegetable oils. By 1996 forty-two contracts had been signed, but twelve of these were terminated before coming into effect.

reducing the inflationary effect of government budget deficits. With a declining tax base and difficulties with tax collection, cutting the deficit to less than 5% of GDP by 1996 involved substantial reductions in government expenditure. This process has been threatened by some major projects, such as the removal of the capital,¹³ but has been kept on track. A major burden of the spending cuts has been on the provision of health and education services. Public spending on health has dropped by over forty percent in real terms, with many formerly free services no longer generally available and widening regional disparities in the quality of healthcare - all at a time when economic and ecological problems are increasing the demand for health services. State spending on education has also dropped, from 7% of GDP in 1990 to 3% of the smaller GDP in 1996. Almost half of all kindergartens and day nurseries were closed between 1991 and 1995, while in grade schools physical facilities deteriorated, teacher shortages increased and equipment was in short supply (eg. the number of textbooks issued in 1995 was half that of 1991). As with health services, the provision of education services has become less uniform; private institutions have grown in response to demand, but exacerbate the inequality of access.¹⁴

(c) The Kyrgyz Republic

The Kyrgyz Republic is often lauded as being among "the most active reforming countries of the Commonwealth of Independent States".¹⁵ It was the first CIS country to issue its own national

¹³ The decision to move the capital from Almaty to Akmola (Tselinograd) was announced in 1994, but implementation has been postponed. Akmola is a town which grew out of the Virgin Lands project; its location in north-central Kazakhstan reflects the desire to head off Russian secessionist demands, but also signifies a shift of Kazakhstan's focus away from Central Asia.

¹⁴ The UNDP *Human Development Report Kazakhstan 1996*, 35-49, has a useful discussion of health and education since independence.

¹⁵ The quotation is from the opening sentence of IMF *Staff*

currency with the intention of achieving the macroeconomic stabilization that was impossible within the ruble zone. Trade policy has been liberal and exchange rate policy has been market-based, including full convertibility of the som since May 1995. Privatization and enterprise reform have progressed faster than in other CARs but the Kyrgyz Republic is not the CIS leader in these structural reforms; it lags Russia on performance based measures such as the share of private sector output in GDP or institutional development (Table 1).

The national currency was introduced in May 1993, but monetary control was uneven during that year and the som depreciated substantially (from 4 sum/\$ to 8.5/\$ at year's end). In 1994 the som again depreciated (to 10.66/\$), but then was more or less stabilized (in the range 10.7-11.2) in 1995, which represents a real appreciation. During this period, the Kyrgyz Republic had the best record among the CARs in reducing inflation (Table 6).

The Kyrgyz government did not, however, succeed in controlling its budget deficit, which increased to 12.5% of GDP in 1995. The revenue base shrank as a result of reforms and collection difficulties exacerbated the decline in revenue, which was not matched by expenditure cuts. Monetary balance was maintained in part by confidence in the banking system in 1993-5, which kept money demand down, but appears to be more crucially due to success in obtaining foreign aid. Gross official transfers in 1995 amounted to \$103 million (\$71 m. in bilateral aid and \$32 m. from multilateral institutions), of which \$45m. was technical assistance, \$30m. grants in kind, and \$28m. counterpart funds for budgetary support.

Price reform is essentially complete. State orders were eliminated in 1993, and practically all prices liberalized by 1994.

With low import barriers and limited export taxes, which were abolished in February 1996, the relative price structure should be

based on world prices (allowing for the high transactions cost in the landlocked republic with poor external transport links).

The Kyrgyz privatization program has been the most extensive among the CARs. Practically all small-scale state enterprises (less than 100 employees) and state commercial assets had been sold by cash auction by the end of 1994. The 1994-5 program earmarked 900 medium-sized and large state enterprises for privatization by a mix of coupon and cash auctions, and by the end of 1995 836 enterprises had been auctioned and the government had fully divested itself of state shares in 434 enterprises. The 1996-7 program targets 320 medium and large companies for a similar process, including some of the largest state monopolies. Most state and collective farms have been broken up with individuals holding land-use rights, which were extended to 99 years in November 1995; land leases can be sold or used as collateral, but the land remains state property and must be used for agricultural purposes.

Financial sector reform has aimed at creating appropriate institutions for the conduct of monetary policy and for efficient financial intermediation, but has been hampered by the small market economy and lack of trained personnel. Despite attempts to create market-based financial instruments, the commercial banks ran into serious difficulties in 1995, primarily due to non-performing loans to state enterprises. The government response was to undertake a major restructuring with assistance from the World Bank; two of the four large specialized banks were liquidated in 1996 (the savings bank and the agricultural bank), while the other two large former state banks were recapitalized. Two of the smaller commercial banks had their licences suspended and others were put under direct supervision of the central bank. The outcome, assuming an appropriate regulatory and supervisory framework is developed, should be a sounder financial system than in any other Asian transition economy.

In sum, the Kyrgyz Republic has moved further and faster than

any other CAR in the transition to a market economy, although the progress has been slower than in the Central European transition economies and in some respects slower than in Russia. It is the only CAR whose price liberalization has produced market-determined exchange rates and interest rates, although in both areas market thinness has limited allocative efficiency. Enterprise reform has been less dramatic than price reform, but the momentum has been maintained and by the mid-1990s appeared to reflect a more genuine government commitment to relinquishing control over enterprises than in other CARs.

(d) Turkmenistan

Turkmenistan is at the opposite end of the CAR reform spectrum to the Kyrgyz Republic. Reform of the economy towards a more market-oriented system was minimal during the first four years following the dissolution of the USSR. A highly personalized government has sought to cement popular support by using the resource rents from Turkmenistan's abundant natural gas to provide free services and subsidized staple products. This strategy proved unsustainable and the first significant reforms were announced at the end of 1995, but they are as yet difficult to assess.

Some prices have been freed, but many key prices remained controlled. The government sets an average wage, and payments above this level are subject to a punitive excess wage tax (set at 50% on all wages over 20,000 manat following the January 1996 wage reform). Interest rates and exchange rates are tightly regulated.

Although Turkmenistan anticipated the final dissolution of the ruble zone by introducing the manat at the beginning of 1993, the goal appears to have been to end the restrictions on monetary expansion imposed by membership in the ruble zone rather than to control inflation through monetary policy. Water, gas and electricity are provided free (up to generous limits), rents on public housing are nominal, and retail prices of sugar, rice, tea, butter and flour are subsidized. Monetary policy has been based on

accommodation to the needs of the social protection system, of state enterprises and of prestige construction projects; it has been highly inflationary.

Privatization has progressed slowly and been constrained by the government's unwillingness to cede control. By 1996, 1652 out of 3980 small enterprises targeted for privatization had changed ownership structure and four medium-sized and one large state enterprise had been privatized by auction, but the government has retained a majority shareholding in many of these enterprises. Urban housing privatization has been suspended. The June 1995 agrarian reform replaced state farms and cooperatives by peasant associations, whose members must fulfil state orders but can retain additional output. Although this arrangement has superficial resemblance to China's household responsibility system and Uzbekistan's agrarian reform, in Turkmenistan all produce in key sectors (including cotton, grains and livestock) must be sold at official procurement prices rather than market-determined prices, so that the Turkmenistan situation is less favourable to producers.

The IMF staff team diplomatically described the situation in early 1996 as one of "limited progress" in reform and where "a heavily subsidized public enterprise sector continued to dominate the economy" (*Country Report 96/30*, April 1996). The no-reform strategy gave no incentive for the development of non-traditional sectors.

3. Performance

By any measure the Central Asian republics have suffered an awful economic experience since becoming independent in 1991. Output has fallen substantially, all the CARs experienced hyperinflation in 1992/3, the distribution of income and wealth has become more unequal, and poverty has increased. The output and inflation measures in Table 6 overstate the poor performance by underestimating quality improvements and for other reasons

(Pomfret, 1995, 171-6); greater choice and ability to trade can be welfare-increasing even if output declines,¹⁶ and some higher prices are associated with better quality products. Nevertheless, material living standards have declined for the majority of the CARs' inhabitants and economic insecurity has risen.

The measurement issues become more significant in making comparisons among the CARs. There have undoubtedly been variations in economic performance, but there is disagreement even about the CARs' ranking by performance. To some extent such disagreements are due to confounding of performance with policies; the speed with which a market economy is created becomes a measure of economic success. The disagreements also reflect wish-fulfillment as supporters of rapid reform see better performance indicators in the Kyrgyz Republic and Kazakhstan while advocates of gradualism see relatively better outcomes in Uzbekistan. In this section I will try to consider performance in the narrow sense of satisfying the material needs of a nation's inhabitants.

Uzbekistan had the smallest decline in GDP over the period 1990-5 of any former Soviet republic. Uzbekistan's 1995 GDP was 82% of its 1990 GDP; comparative figures are 45% for Kazakhstan and 50% for the Kyrgyz Republic.¹⁷ Uzbekistan also had relative

¹⁶ The proliferation of kiosks in the major towns has been primarily in response to demand for imported chocolate, cigarettes, alcohol, underwear, condoms, tapes and other consumer products which were either not supplied or were of poor quality in the Soviet era. Privatization of housing, allowing people to exchange housing more readily than in the past, has permitted a better matching of the housing stock to people's wants, eg. as family sizes change or jobs in new locations become available.

¹⁷ The figures, from the CIS Committee of Statistics (reported in the UNDP *Human Development Report Uzbekistan 1996*, p.16), do not provide estimates for Turkmenistan. World Bank data show a similar pattern. In their study of 26 transition economies from Europe, the former USSR and Mongolia, de Melo et al. (1996, 405) compare the lowest GDP figure from the 1990s with GDP in 1989 and Uzbekistan has the highest ratio with a minimum GDP equal to 88% of that in 1989; ratios for other Central Asian republics are Turkmenistan 62%, Kyrgyz Republic 53%, Kazakhstan 49% and Tajikistan 30%.

success in avoiding hyperinflation, never recording a four-digit annual increase in the consumer price index, although by 1995 the Kyrgyz Republic and Kazakhstan had made more progress in reducing inflation. The more controlled economy of Uzbekistan may have more repressed inflation and less undercounting of the output of small-scale private sector activities, ie. a poorer record in reducing inflation and maintaining output than the figures in Table 6 suggest.

Elsewhere in the former Soviet Union and in eastern Europe, vital statistics have underlined the decline in living standards; increased death rates and reduced birth rates have been interpreted as evidence of increased insecurity and economic pessimism. The CARs stand out as exceptions to this pattern. The population figures for the fifteen former Soviet republics from the 1989 census to 1995 show large natural increase in Uzbekistan, Kazakhstan, Tajikistan, Azerbaijan, Turkmenistan and the Kyrgyz Republic, while the other former Soviet republics had small natural increases or declines (Table 7). To some extent this may be cultural, as the six listed republics are those with predominantly Muslim populations, but it also reflects stable life expectancies (as in Table 2), unlike the Russian Federation where the life expectancy for men has fallen dramatically since independence.

The migration figures in Table 7 present a less positive picture with Kazakhstan, the Kyrgyz Republic and Uzbekistan all experiencing large emigration. This has a cultural element as the emigration is overwhelmingly of non-titular ethnic groups, mainly Russians or other European groups, but also Uzbeks and Kazakhs from the Kyrgyz Republic and so forth. The emphasis placed by the new national governments on matters such as the status of the national language clearly make a difference, but poor economic performance is a reinforcing push factor.

Income inequality has almost certainly increased in all former Soviet republics since 1991, but it is difficult to measure. The same applies to poverty. Unemployment figures are practically

meaningless as they reflect the relative attractiveness and specific conditions of unemployment compensation, which tends to be low in all CARs (and hence reported unemployment is low even though many people have lost their jobs and are supported by the extended family or are underemployed in the informal sector). Among those still in the same job as before 1992, there is a widespread phenomenon of workers having assets (unpaid wages accumulated over many months) but living in poverty. There is almost no firm evidence on these phenomena, although the growing frequency of urban riots, often ignited by demands for payment of back-wages, indicates their importance.

Crime has also increased in the 1990s. This is a symptom of economic hardship (eg. in Kazakhstan 45% of arrestees are reported by the UNDP (*Human Development Report Kazakstan 1996*, 61) as having no permanent source of income), as well as of the decline in social control since the end of Communism. The increase in crime appears to be greatest in Kazakhstan and least in Uzbekistan and Turkmenistan, which clearly reflects the tighter central control in the latter two countries, but also raises the question of whether it is a cost of Kazakhstan's economic reform strategy - at least in comparison with Uzbekistan's more gradualist and controlled approach.

Finally, agriculture is still important in the CARs, and even more so given the post-independence decline in industrial output, so that year-to-year performance is susceptible to vagaries of weather. Grain production in Kazakhstan declined sharply from 16.4 million tonnes in 1994 to 9.5 m.t. in 1995, partly due to severe drought in western and central areas, but also ascribed to the deteriorating stock of agricultural machinery. Turkmenistan was also hard hit by harvest failure in 1995, although even more than in Kazakhstan there is a suspicion that economic mismanagement exacerbated the negative impact of adverse weather conditions.

4. Analysis

What has been the relationship between policies and performance? In Section 2 I argued that it is dangerous to seek a simple ranking of the CARs by degree of economic liberalization, although the Kyrgyz Republic has been the most committed to economic reform and Turkmenistan the least committed. Similarly, in Section 3 I argued that simple rankings by economic performance are also fraught, although Uzbekistan appears to have done best in the first five years after independence, and Turkmenistan has done worst. Finding a relationship between policies and performance is more complex, however, because resource endowment and other initial conditions also play a role. Moreover, during the 1991-6 period other forces have interacted with national policies to determine performance, and some of these forces have been exogenous (eg. weather conditions) while others (eg. the amount of external financing) have been related to the policy choices. Finally, although five years is long enough to identify differences in reform paths and their immediate consequences, it is too short to capture the long-term effects of substantial systemic reform, which in most cases only dates from the mid-1990s, rather than from independence.

As with performance evaluation, it is difficult to isolate the analysis from preconceptions or the benefits of hindsight. How, for example, should we rank the CARs with respect to resource endowment? Tarr (1994) in his calculations of the terms of trade impact of moving from Soviet to world prices found Turkmenistan (+50%) and Kazakhstan (+19%) to be big gainers, while Kyrgyzstan (+1%) and Uzbekistan (-3%) would be hardly affected. This fitted with the common perception that Turkmenistan with its natural gas wealth and Kazakhstan with its oil and mineral wealth had suffered from Soviet pricing policies and would enjoy a large windfall gain after independence. Moreover, these two countries had further energy reserves, including Kazakhstan's Tengiz oilfield which quickly attracted the largest foreign investment in the entire former USSR. In practice, however, realization of economic

benefits from the natural gas and oil has been stymied by the pipeline network. Turkmenistan has maintained its gas exports but has experienced payments difficulties, reflected in (notional) capital inflows, while oil flows from Tengiz have been a mere trickle. At the same time, Uzbekistan with its dependence on cotton benefitted from bouyant world markets in 1992-3 and some flexibility in transport outlets. Moreover, Uzbekistan has developed its energy sources, on a modest scale but enough to reduce its imports so that it has not suffered from the expected terms of trade loss. In sum, Turkmenistan and to a lesser extent Kazakhstan looked exceptionally fortunate in 1992, but turned out to be not as blessed as they thought, while Uzbekistan's resource endowment turned out to be not as bad as expected in 1992; behind this superficial assessment lurks the question of whether the reversals of fortune might be due at least in part to more or less astute national policymaking.

The CARs have had differing amounts of external assistance, but this is not independent of economic policy decisions. All benefitted from Russian assistance in 1992 and 1993 when the transfer mechanisms from the Soviet era were wound down rather than abruptly terminated. The most important such mechanisms were currency credits within the ruble zone and Russian products supplied at below world prices. These carrots were the major reason for continued membership in the ruble zone, and they terminated first for the Kyrgyz Republic after its May 1993 exit from the ruble zone and then for Turkmenistan, Kazakhstan and Uzbekistan in November 1993. Since 1993 the World Bank and IMF have led in the provision of external assistance, but the international financial institutions' lending has not been evenly distributed (Table 9); it is heavily skewed towards those CARs adopting reform strategies favoured by the World Bank and IMF, with the Kyrgyz Republic being the first CAR to receive World Bank funds and consistently receiving the most per capita, while Kazakhstan has received the largest total World Bank assistance.

(a) Uzbekistan¹⁸

Even allowing for the conceptual and measurement difficulties, there is general agreement that Uzbekistan has been the most successful of the CARs in maintaining output level since independence. While poverty measurement is even more difficult than output measurement, Uzbekistan appears to have done relatively well in restraining increases in poverty. In social areas such as education and healthcare, Uzbekistan could also claim the best record, which not only helps to avoid widening gaps in income and wealth but lays a firmer foundations for future economic growth. On the other hand, Uzbekistan has lagged Kazakhstan and the Kyrgyz Republic in establishing a market-based economy, and the still heavily distorted prices and readiness to use controls over resource allocation may inhibit long-term growth prospects.

Uzbekistan had some favourable initial conditions. The unexpectedly beneficial trade situation in the early 1990s due to buoyant world cotton prices was reinforced by the country's ability to substitute fairly readily (and apparently not at a major cost in resource misallocation) domestic production for some grain and energy imports. The diversified industrial base had grown reasonably organically since 1945, unlike the artificial implants into the Kyrgyz Republic and Tajikistan, so that although many state enterprises experienced difficulties the industrial sector had some flexibility in adapting to new conditions. In industry and in public service Uzbekistan benefitted from high levels of trained personnel, for its national income level, and suffered much less than Kazakhstan or the Kyrgyz Republic from emigration of trained people after independence.¹⁹

¹⁸ This section draws on the more extensive description and analysis in Pomfret and Anderson (1997).

¹⁹ Emigration from Uzbekistan was about half that from Kazakhstan, and relative to population much smaller than that from the Kyrgyz Republic (Table 7). Moreover, part of the emigration

Some of these favourable conditions could, however, be ascribed to good government too. The development of new grain and energy production and even the continued supply of cotton exports presupposes a certain amount of economic stability, and involved some government initiative. The resilience of the industrial sector could likewise be ascribed to an environment which involved neither rapid imposition of a hard budget constraint nor sweeping reforms which might add to the disruption of supply chains already happening as a result of the collapse of the USSR. For one important enterprise, Uzbekistan Airways, relatively good management and government support were key factors in explaining why Tashkent has developed as an international air transport hub - in contrast to all other cities in the region. The limited emigration could be due to less fear of economic decline or of political subjugation in Uzbekistan, although the greater ethnic homogeneity of Uzbekistan (relative to Kazakhstan or the Kyrgyz Republic) is surely the dominant factor here.

Policy is more clearly responsible for some aspects of performance. Price and exchange controls were the main elements behind the lower peak in hyperinflation, although they had to be reinforced by progress in reducing the budget deficit if the hyperinflation was to be brought down eventually. Uzbekistan's gradualism has helped to maintain the tax base (although so did the strength of cotton earnings), and Uzbekistan has been the most successful of the CARs in controlling the government budget deficit. Doing this while maintaining provision of education and health services better than its neighbours is a major positive achievement. The mahalla system appears to be an efficient method of delivering social security, which has contributed to the relatively good performance with respect to poverty alleviation.

from Uzbekistan consisted of movement of Turkic Central Asians across the Turkmenistan border, which was less economically harmful than the mass emigration of ethnic Slavs and Germans (groups with above average education levels) from Kazakhstan.

The doubts about Uzbekistan's policies concern their ability to generate long-term growth. The IMF and the World Bank have been much less well-inclined towards Uzbekistan than towards Kazakhstan or the Kyrgyz Republic (Table 9), because they see it as not pursuing economic reforms actively enough or in the right way. Uzbekistan has not placed monetary policy aimed at restraining inflation high on its agenda, even though it has in fact done well in reducing the budget deficit. More fundamentally the Uzbekistan government has been suspicious of the market mechanism, and has tight controls over both interest rates and exchange rates. Foreign trade policy is superficially liberal, but, with pervasive exchange controls, trade measures are redundant and in practice government officials wield discretionary control over the composition of imports.

Whether World Bank and IMF support is necessarily a good thing is not self-evident; while lack of such support limits access to foreign capital, it has also engendered greater self-reliance among Uzbekistani officials. Moreover, the absence of systemic change can be overstated. Uzbekistan has moved more slowly than other CIS countries, including the Kyrgyz Republic, and has retained tighter economic and social control than Kazakhstan, but it has not followed a no-reform path, as Turkmenistan tried to do. There is no doubt that Uzbekistan is moving towards a more market-oriented system, and that in areas like housing it moved fast and in other areas (such as agriculture or provision of social services) it moved imaginatively in what appear to be desirable directions. The relationship between policy and the market model being established will be discussed in the next section.

(b) Kazakhstan

Kazakhstan is the natural point of comparison with Uzbekistan, given their similarity in economic size (Uzbekistan has the larger population, Kazakhstan the larger GDP), which underlies competition for leadership in the region. Kazakhstan has moved significantly

faster than Uzbekistan in price and enterprise reform, reflecting the government's greater willingness to relinquish control over resource allocation. President Nazarbayev of Kazakhstan has also been viewed as more liberal in political and social matters than President Karimov of Uzbekistan, although in 1995 and 1996 the Kazakhstan government appeared to be becoming increasingly authoritarian. As a result of these perceptions, Kazakhstan has enjoyed greater external assistance than Uzbekistan (Table 9).

Kazakhstan's performance since independence has been strongly influenced by its resource base. It is the only significant grain exporter among the CARs (it was third in the USSR behind Russia and Ukraine), and a disastrous harvest like that of 1995 has economy-wide impact. The major hope for prosperity after independence lay in oil exports, and Chevron's multi-billion dollar contract to develop the Tengiz oilfield is the largest DFI project in the former USSR. While the potential of Tengiz and other oil and gas fields remains undoubted, difficulties with existing pipelines through Russia and Ukraine and in financing new pipeline routes to the Indian Ocean or the Mediterranean have proven far more severe than expected; five years after independence no concrete progress has been made in improving physical outlets. Thus, Kazakhstan's economic record since independence has fallen well short of expectations.

Has government policy alleviated or exacerbated this performance shortfall? In broad outline, Kazakhstan's economic policy has followed Russia's path; Popov's description of Russian reforms as inconsistent shock therapy applies to Kazakhstan, but with less shock and more inconsistency. Extensive price liberalization should have improved resource allocation, but there is considerable dissatisfaction over the disposal of state assets and the role of the government, which are both viewed as having enriched an elite while impoverishing the majority. Again as in Russia, there is evidence of increased crime, and fears that criminal organizations have become overpowerful.

From an economic perspective, a key shortcoming of Kazakhstan's reform path up to the mid-1990s was the failure to create an entrepreneurial financial sector. Banks acted as conduits for state funds to well-connected enterprises, which had often been privatized from within so that the managers became rich at public expense. Whether this will be a long-term feature of Kazakhstan's economy depends upon the implementation of the financial reforms signalled in late 1995. A related shortcoming was the decline in government spending on healthcare, education and other social services, which would have been more beneficial than using public funds to subsidize state or formerly state enterprises.

President Nazarbayev's room for manoeuvre is restricted by the delicate ethnic balance. Inconsistencies in economic policies are often driven by short-term political imperatives, aimed at satisfying Kazakh nationalists or retaining support of the large Russian minority.²⁰ This may be manifested as following Russia's lead, which places constraints on domestic policy. Remaining in the ruble zone through 1992-3 restricted ability to pursue independent monetary policy, and the current enthusiasm for a customs union with Russia will constrain Kazakhstan's trade policy independence (since the customs union's external trade policy will be set by Russia). Economically unjustifiable policies, such as the proposed relocation of the capital city have their roots in the ethnic problem (in this case attempting to avert secessionist tendencies in the north by placing the capital further north).

Kazakhstan's economic prospects, which were generally regarded as the brightest of the CARs in 1992, now seem less rosy. Outside

²⁰ Policy towards China is affected by similar considerations. After growing rapidly in 1992, from a low base, trade with China shrank in the following years, discouraged by the Kazakhstan government. Foreign investment from China has also been limited by concerns over excessive Chinese economic influence. It is difficult to distinguish between whether these concerns are based on anti-Chinese feeling or on a desire to remain in the Russian rather than the Chinese sphere. Melet (1996) analyzes Kazakhstan's and the Kyrgyz Republic's relations with China since 1992.

the IMF and World Bank, there is an increasing sense that Uzbekistan's gradualism may have been more successful than Kazakhstan's more radical but inconsistent reform path, but the jury is really still out. Kazakhstan has gone further in establishing a functioning price system with appropriate relative prices (ie. domestic prices are closer to world prices with Kazakhstan's more liberal external economic policies), and the false path in financial sector development is not irrevocable. In practice much will depend on the future of grain and especially energy exports. If routes can be found for efficient pipeline facilities to tidewater ports, then Kazakhstan's economic prospects will rapidly improve and support for continued marketization will grow. If the economy continues to stagnate, then it could enter a vicious circle in a semi-reformed state characterized by widespread graft and anti-competitive behaviour which inhibits growth and becomes self-sustaining.

(c) The Kyrgyz Republic

The Kyrgyz Republic is difficult to assess, because it had the least favourable initial condition in terms of resource endowment but has enjoyed the most external support. It is also controversial because of its espousal of the rapid macro-led reforms advocated by the World Bank and IMF.

One indicator of the Kyrgyz Republic's poor underlying prospects has been the limited response of foreign investors to the opportunities presented in the most reformist CAR. Direct foreign investment (DFI) did rise, from \$10 million in 1993 to \$45 million and \$61 million in 1995, and there were 363 registered joint ventures by the end of 1995. This record was, however, dominated by a single project, the Kumtor gold project, in which DFI was \$30 million in 1994 and \$45 million in 1995.

The Kyrgyz Republic has been the most successful CAR in controlling inflation. This has a policy basis in the early decision to introduce a national currency, and after 1994

successfully maintaining the currency's value without resorting to exchange controls or other non-market methods. Yet the success is fraudulent in one key respect; it was not achieved by controlling the budget deficit and hence reducing the need for inflationary finance. The Kyrgyz Republic was able to avoid the dilemma because it received generous external support which helped the government to finance spending far in excess of domestic revenue. The anti-inflation policies were successful, not because of the policies' direct impact but because they induced foreign governments and institutions to lend sufficient to cover the budget deficit.

The Kyrgyz Republic has been less successful in maintaining output levels. This may be an inevitable consequence of rapid reform in a former Soviet economy, exacerbated by a poor resource base. Certainly, in comparison to Uzbekistan, which started with lower income levels than the Kyrgyz Republic, the Kyrgyz Republic has had a disappointing performance in 1992-6. It could be argued that the Kyrgyz Republic, with its more fundamental reforms of enterprises and the financial system already in place, may have performed less well than Uzbekistan in the short-run but has better long-term prospects; only time will tell whether this is true.

(d) Turkmenistan

Turkmenistan's economic performance is the easiest to assess. The government's policy of non-reform, trying to retain the pre-existing structure while currying support by giveaways based on the natural resource rents, had collapsed by 1995. There was some misfortune insofar as the difficulties of obtaining payment from Ukraine and Georgia for natural gas exports, and impossibility of redirecting gas exports due to the inherited infrastructure, had not been predicted by outsiders as well as by the national government. Nevertheless, the total failure of the non-gas economy since 1992 can be blamed on the lack of incentives in the unreformed economy. The economy retains the non-market features of the Soviet era without the benefits of central planners to allocate

resources, so that it functions even worse than in the years prior to the dismantlement of central planning in 1987/8.

The extent of Turkmenistan's economic failure is hard to document as the international agencies have ceased to produce output estimates since 1993 (and any which do exist are little more than guesses). Continuing hyperinflation in 1995 and 1996, when it had receded in the other CARs, and the collapse of the currency on the black market are the most evident signs of economic disarray. In the tightly monitored country, reports of opposition to government policies are censored, but news of riots against the economic conditions began to filter out in 1996.

5. Differing Market Models

The various reform paths adopted by the independent governments of the CARs have implications not just for economic performance but also for the nature of the reformed economy. All the governments have abandoned central planning, at least as it operated in the USSR,²¹ but they have expressed different ideas of the type of market-oriented economy which they wish to establish. Moreover, there may be gaps between the policy aims and their effect, or between the stated policies and their actual implementation.

This section will analyze the differing market models which are emerging. The most obvious difference is the degree of government involvement, but this can have many dimensions. All the CAR governments profess concern about providing social safety nets, although all lack the resources to match their targets and the approaches differ substantially. Policies towards resource allocation and especially the direction of capital formation are more diverse in theory, with Kazakhstan and the Kyrgyz Republic

²¹ Soviet-style planning was not a real option, because the central planning mechanism had been dismantled in 1987/8 and the independent CARs lacked the trained staff to reinstate it even if they wished.

showing greater adherence to market principles, but in practice all of the CARs' governments have shown reluctance to leave resource allocation to market forces, at least beyond small-scale producers and traders; this is most clearly shown in the limited emergence of entrepreneurial financial institutions. Most officials still have a suspicion of loosening their control, a predilection for administrative solutions to serious economic problems, and a bias towards heavy or hi-tech industries as the defining elements of a modern economy.

(a) Uzbekistan

Uzbekistan has developed the most sophisticated managed market model among the CARs. After independence the government had a suspicion of the market mechanism, especially as it affected large industrial enterprises and the key commodity exports, cotton and gold. Government policy has also been characterized by caution.

The government moved quickly to privatize housing, which posed no problem, and moved more slowly to privatize other small-scale productive enterprises and to change the incentive structure in agriculture, which might have more uncertain economic consequences.

Despite the differing speeds, by 1996 all of these policies had been implemented. The prices facing agents in these reformed sectors had also been liberalized, although indirectly of course potential housebuyers, farmers and other small-scale producers were affected by the regulated interest and exchange rates.

The cotton sector is more complex. There is a tradition of extensive government involvement, which has its basis in the need to manage the irrigation facilities upon which cotton cultivation depends.²² Cotton exports were marketed through inter-governmental contracts in the Soviet era; this has been changing since independence, but there is a continuing belief that Uzbekistan has market power in world cotton markets and that the government should

²² The water management ministry was the largest government ministry in the Uzbek Soviet Republic.

prevent ruinous competition in selling the nation's cotton. Cotton also provides an important source of government revenue, which is most easily levied by manipulating prices paid to producers through state orders. Both economic theory and empirical evidence suggest that the market power and fiscal motivations for government intervention are unlikely to be valid; propping up Uzbek cotton export prices will lead to loss of market share as there are many alternative cotton-growing locations in the world, and taxing producers directly or indirectly will reduce the incentive to farmers and will encourage illicit marketing. Nevertheless, with respect to both cotton and gold, the government sees these as national resources which require government management.

A similar attitude pervades government policy towards the industrial sector, although in a more selective form. The government has loosened its control over small-scale production units and has allowed direct foreign investment in some sectors. Tight control over capital allocation and imports, however, reflects a concern to ensure that desirable industrial enterprises are sheltered from foreign competition. The danger in such an approach is that it will ossify an inappropriate economic structure. The lesson from developing countries' policies over the last half century is that import-substituting industrialization might stimulate growth in the short-run, but is a dead-end with respect to sustained growth. Thus, Uzbekistan's current industrial policy is likely to require modification if the government is to set the economy on a feasible long-run growth path.

Government intervention is more firmly based in areas of social policy. The government's commitment to limit the reduction in its spending on health and education represents the most promising approach in any CAR to retaining the major benefits from the Soviet era in these areas. The mahalla scheme is an interesting experiment in dealing with the universal problem of transition economies: how to establish an effective social safety net with diminishing resources? By decentralizing decision-making

into community-based organs the Uzbekistan government is attempting to reduce costs and ensure effective targetting by taking a leaf out of the EU's book on subsidiarity. The extent to which the mahallas resurrect traditional institutions is debatable, but the Uzbekistan government is making a constructive appeal to tradition, in contrast to many empty such appeals in other CARs.

(b) Kazakhstan

The Kazakhstan government has been more willing than the Uzbekistan government to cede economic control at both the micro and macro level. The extent to which this represents a commitment to a competitive market model has, however, become increasingly a matter of debate. Alienation of state assets has largely been to the benefit of insiders, and anti-competitive market structures have often remained in place after the change of ownership. Reduced government intervention has exacerbated the increased income and wealth inequality by cutting off social security in the short-run and by reducing the capability of disadvantaged people to acquire the human capital which will enable them to improve their economic situation.

As with all of the CARs, however, this must be an interim report on the emerging market model, because elements of the current situation are unstable. Large increases in oil revenues will have an unpredictable impact on the political and economic structure. More immediately, the evolution of financial reform will have a critical impact on the ability of producers to compete on a level-playing field; if capital markets start to operate impartially with entrepreneurial financial institutions attracting and allocating funds on the basis of price (ie. interest rates), this will erode the benefits of government and other contacts, increase economic efficiency, and reduce the prospect of ending up with crony capitalism.

(c) The Kyrgyz Republic

The Kyrgyz Republic has been the CAR which has most closely followed the World Bank and IMF blueprints for transition. Priority was given to price reform, supported by inflation control and integration into world markets. The Kyrgyz Republic had by 1997 the purest market model among the CARs. The sustainability of this market model depends upon two factors. Price stabilization has been achieved by large injections of foreign financial assistance rather than by internal fiscal control, which raises the spectres of welfare dependence and of loss of sovereignty if advice from Washington DC has to be followed in order to sustain the flows of assistance. The Kyrgyz Republic is the most isolated and resource-poor of the four CARs covered in this study. Even with good policies the economic future is unpromising, and this could lead to a backlash against the market model.

(d) Turkmenistan

Turkmenistan adopted a populist model based on absolute political power for a leader who would satisfy his people's economic needs. The model was based on abundant resource rents, and implementation broke down when these rents proved to be limited. The non-market model of 1992-5 was unsustainable, but at the time of writing it is unclear what will replace it. In some respects Turkmenistan's reform path is starting to resemble that of Uzbekistan, but there appear to be critical differences in commitment.

6. Conclusions

The Central Asian economies offer a natural experiment in the adoption of differing reform paths. Unfortunately, the conclusions are obscured by significant differences in initial conditions and in external environment, and even more by the drawn out nature of the transition from central planning. None of the CARs had even contemplated independent economic reform before mid-1991, and even

the relatively rapid reformers had not completed their reform programs by 1997. Thus, any assessment of reform paths and the ensuing market models must be an interim assessment.

Turkmenistan yields the strongest conclusions. It was one of a handful of transition economies in which autocratic governments adopted non-reform strategies. These strategies have all failed, but Turkmenistan is a good test of the unsustainability of the strategy, because at independence Turkmenistan was considered to be very favourably placed in terms of resource endowment and since independence it has not suffered from invasion or civil war. The extremely poor economic performance since independence can be related directly to the chosen reform path.

At the other end of the reform spectrum, the Kyrgyz Republic has been lauded for its purposive moves to a market economy despite poor economic prospects. Although it has benefitted from more substantial foreign assistance than any other CAR, the Kyrgyz Republic's economic performance has been poor. Of course, this could be due to its unfavourable resource endowment, but so far the Kyrgyz Republic's record does not lend support to the rapid reform strategy led by price and trade liberalization and macroeconomic stabilization, which the World Bank and other international economic institutions have espoused.

The most interesting comparative reform paths are those of Uzbekistan and Kazakhstan. Uzbekistan has adopted a gradual reform strategy with a heavy government hand restraining the pace of change and helping to provide social security. Kazakhstan has had a more freewheeling approach to economic policy, but has not yet created a well-functioning market economy and is in danger of creating a market model in which cronyism or criminal organizations play a more significant role than the price mechanism.

How the situation develops over the next decade will be influenced by the economic dynamics already set in motion, but also by the individual rulers. All of the CARs are to a greater or lesser extent autocracies, with the presidents setting their

personal stamp on policymaking. Reservations about Turkmenistan's future are partly based on assumptions that President Nyazov has little commitment to genuine reform, while optimism about Kazakhstan's future is often based on positive perceptions of President Nazarbayev's economic policy goals. Mistaken perceptions or any changes in political leadership would upset predictions of future developments.

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Table 2: Central Asian Republics: Basic Economic Data

	Population (millions) mid-1992	Area (thousand sq. kms.)	GNP per capita 1991 (US\$)	Life expectancy (years)
Kazakhstan	17.1	2,717	2,470	69
Kyrgyzstan	4.6	199	1,550	66
Tajikistan	5.6	143	1,050	69
Turkmenistan	3.9	488	1,700	66
Uzbekistan	21.4	447	1,350	69

Sources: ESCAP Population Data Sheet, August 1992; World Bank World Development Report 1993, p.238-9.

Table 3: Comparison of Trade Flows, CARs and Canadian Provinces

trade	Total trade as % of GDP $((X+M)/2)/GDP$	Intra-regional trade as share of total
<u>CARs (1988)</u>		
Kazakhstan	33.9	86.3
Kyrgyzstan	45.2	86.9
Turkmenistan	39.3	89.1
Uzbekistan	39.5	85.8
<u>Canadian Provinces (1984)</u>		
Alberta	39.1	60.3
British Columbia	33.6	38.3
Manitoba	40.3	61.0
New Brunswick	61.5	51.5
Newfoundland	45.6	59.1
Nova Scotia	49.9	54.0
Ontario	49.5	33.9
Prince Edward Island	50.5	75.5
Quebec	42.2	48.0
Saskatchewan	51.4	52.2

Source: IMF Common Issues and Interrepublic Relations in the Former USSR, Washington DC, April 1992, p.37.

Table 4: Major Agricultural Products

(a) 1990-2 average production (in thousand metric tons)

	Kaz.	Kyrg.	Turk.	Uzb.
Cereals	23,218	1,432	5711	985
Seed cotton	288	661	3934	568
Fruits	270	141	2221	120
Vegetables	1,220	424	3863	650
Meat (slaughtered weight)	1,510	210	100	510
Milk & milk products	5,265	961	4713	675
Wool (metric tons)	169,230	59,867	26,300	41,133

Source: Pomfret (1995, 34)

(b) Area sown with cotton, 1950-88 (thousand hectares)

	1950	1960	1970	1980	1988
Uzbekistan	1098	1387	1709	1878	2017
Turkmenistan	153	222	397	508	636
Kazakhstan	97	106	118	127	128
Kyrgyz Republic	65	71	75	76	32

Source: Lewis (1992, 144)

Table 5: Oil and Natural Gas in Central Asia, 1991.

	Reserves ^a	Production	Consumption
		(in thousand b/d o.e.)	
<u>(a) Oil</u>			
Kazakhstan	2140	530	430
Kyrgyzstan	25	5	55
Turkmenistan	210	110	200
Uzbekistan	115	55	205
<u>(b) Natural Gas</u>			
Kazakhstan	1830	130	225
Kyrgyzstan	6	-	35
Turkmenistan	2720	1395	135
Uzbekistan	1820	695	565

Note: a - oil reserves, proved and probable, in million tons; natural gas reserves, proved, in billion cubic metres.

Source: Petromin, September 1993, p.40.

Table 6: GDP growth and inflation in the Central Asian republics

(a) GDP growth rate (percent)

Country	1971 -80	1981 -9	1990	1991	1992	1993	1994	1995
	ave.	ave						
Kazakst an	4.4	2.0	-4.6	-6.8	-13.0	-15.6	-25.0	-9.0
Kyrgyz Rep	4.4	4.0	6.9	-9.1	-15.8	-16.3	-26.5	-6.0
Tajikis tan	4.9	3.3	-2.4	-8.7	-30.0	-27.6	-15.0	-12.0
Turkmen istan	4.0	4.0	0.8	-5.0	-5.4	na	na	-5.0
Uzbekis tan	6.2	3.4	2.0	-0.5	-11.1	-2.4	-4.5	-2.0

(b) Average annual inflation rates (percent)

Country	1990	1991	1992	1993	1994	1995
Kazakstan	4.2	91.0	1610.0	1760.0	1980.0	180.0
Kyrgyz Rep	3.0	85.0	854.6	1208.7	280.0	45.0
Tajikistan	4.0	111.6	1157.0	2195.0	452.0	635.0
Turkmenistan	4.6	102.5	492.9	3102.0	2400.0	1800.0
Uzbekistan	3.1	82.2	645.0	534.0	746.0	315.0

Source: World Bank *World Development Report 1996*, 173-4.

Table 8: Allocation of General Government Spending
(as percent of GDP)

	USSR (1989)	Kazakstan (1994)	Uzbekistan (1994)
Education & health	7.4	4.7	16.5
Social protection	7.4	5.7	7.4
Support for the economy	14.1	11.4	12.2
Capital & restructuring	7.2	0.2	3.9
Law enforcement	0.9	1.3	...
Defence	8.0	0.8	...
Administration	0.3	0.7	1.0
Interest	0.7	0.3	...
Other	3.5	4.2	7.0
TOTAL	49.5	29.3	48.0

Source: Cheasty and Davis (1996).

Table 9: Lending Operations of the World Bank in Central Asia
(commitments in millions of US dollars by fiscal year)

	1993	1994	1995	1996	Total	per cap.
Kazakhstan		274	283	260	817	49
Kyrgyz Republic	60	78	77	98	313	70
Tajikistan				5	5	1
Turkmenistan			25		25	6
Uzbekistan		21	226		247	11

Note: the per capita amount in the final column is the total divided by the 1995 population estimate in Table 7.

Source: World Bank, reported in Transition, 8, February 1997, 3.1