

Kazakhstan and the Ruble

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Summary:

This case study was written to introduce issues of exchange rate regimes and optimal currency areas to undergraduate courses in international economics and economic development. The students will find a prior understanding of macroeconomics useful.

The case study sets up a specific task for the class: to choose whether or not Kazakhstan should remain within the ruble zone. The issues that are raised lead quickly, however, into the whole range of issues involved in the choice of exchange rate regime.

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Note from the author:

I am pleased to be able to distribute this case study on the Internet, and have no objection to faculty use of the case in educational settings. I ask two things: (1) that the cases not be resold to students, and (2) that you contact me at the above address with an evaluation of the case study and your success with it in the classroom.

The administrators and fellows of the Pew Faculty Fellowship in International Affairs have been a continuing source of inspiration to me as I have developed this and other cases. Thanks to all of them for their support.

Kazakhstan and the Ruble (A)

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Introduction.

On 1 January 1992 President Nursultan Nazarbayev and the leaders of Kazakhstan faced a challenging and novel new year. During much of 1991 (and indeed since the 1920s) Kazakhstan had been a constituent republic of the Soviet Union (USSR). In this union, the government in Kazakhstan was charged solely with the implementation of policy formulated in the Soviet capital of Moscow. With the dissolution of the USSR in late 1991, Alma Ata has become not only the capital city of Kazakhstan but a seat of independent policy-making. The course of policy in 1992 depended upon the choices of President Nazarbayev and his advisers.

One of the more contentious decisions necessary was the choice of currency for economic transactions in Kazakhstan. During the period of the Soviet Union, Kazakhstan used the Soviet ruble; however, with independence this choice could be reconsidered. The two dominant alternatives were the continued use of the ruble and the creation of a new Kazakhstan currency. Each had its following, with supporting arguments drawn both from politics and from economics. However, everyone recognized that the choice must be made immediately: without a clearly defined medium of exchange, domestic and international transactions would be stifled.

Background information.

Kazakhstan is a large landlocked economy of Central Asia. Its southern border is shared with Iran and Commonwealth members Turmenistan, Uzbekistan and Kirgizstan. China borders the country on the east, while to the west and north lies Russia. Its landmass is 2.7 million square kilometers, or just smaller than that of India, while its population of 16.8 million leaves it relatively underpopulated. There are a large number of ethnic groups represented. The Kazakhs now represent only 40 percent of the total population, with ethnic Russians almost as numerous. The balance is a mix of people of German, Chinese and Turkic descent.

The economy is richly endowed with natural resources. Among the mineral resources found in exploitable amounts within the economy are oil, associated gas, coal, copper, nickel, gold, titanium, tungsten, molybdenum, lead, zinc, manganese, aluminum and iron ore. Its vast lands support a wide variety of rainfed (in the north) and irrigated (in the south) agriculture. Livestock husbandry is the traditional industry of the indigenous Kazakh people based upon the extensive opportunities for grazing.

Industrialization has largely been natural resource-based. Processing plants for both ferrous and non-ferrous metals have been developed, especially in the northern and eastern sections of the economy close to the mineral deposits. Refineries and petrochemical plants also take advantage of the existing hydrocarbon resources. Agro-industries exploit the southern crops of cotton and sugar beets as well as the harvests of fruits and vegetables throughout the economy.

Characteristics of International Trade and Payments.

The economy of Kazakhstan is tightly integrated with those of Russia and the other republics of the former Soviet Union (now referred to as the Commonwealth of Independent States). The transport and communication grids tend to connect points in Kazakhstan with points in Russia, for example, more easily than with other points in Kazakhstan.

Kazakhstan's economic isolation from countries outside the Commonwealth parallels its integration with the former republics. It shares a common border only with China, with whom it had often-antagonistic relations during the past 50 years. The geography of desert and mountains to the south discouraged trade with Iran, Pakistan, Afghanistan and the rest of south Asia. The small share of exports and the few air connections to destinations other than the republics testify to this isolation.

As a result, trade outside the Soviet Union had historically been a very small portion of total Kazakhstan trade, with shipments to and from other republics of the Soviet Union being much more important to the Kazakhstan economy.

Inter-republican and International Trade (at domestic prices, millions of rubles)			
	1987	1988	1989
Exports			
Inter-republic	8337.3	8201.1	
Rest of World	473.8	827.1	892.8
Imports			
Inter-republic	13768.3	14570.7	
Rest of World	2583.7	2733.7	2998.3

Source: GOSKOMSTAT USSR

Kazakhstan ran substantial trade deficits with both sets of partners during the periods in question.¹ This continued as well through 1990 and 1991.²

Russia is its major trading partner. Exports to Russia when evaluated in domestic prices are 60 percent of total exports, while imports from Russia account for over two-thirds of total imports. The high degree of integration of the former Soviet republics led to quite active and diffuse international trading patterns

¹ Domestic pricing of these products does not provide a reliable indication of the actual resource transfers, but similar calculations using world prices provide the same conclusion: Kazakhstan was a large net importer from both other republics and the rest of the world.

²At least one source -- trade agreements among republics -- reaches the diametrically opposed conclusion. However, the preponderance of statistical evidence agrees with the conclusion of large deficits.

among Commonwealth countries. The pattern of trade has been largely constant in the last 20 years, with imports mainly machinery and consumer goods while exports are predominantly agriculture, heavy industry, crude oil, non-ferrous metals and meat. China is the largest non-Commonwealth trading partner, with Eastern Europe also important. The articles purchased on world markets were by and large manufactured equipment and producers' goods, while the exports to non-Commonwealth markets were mainly resource-based.

International Payments Mechanisms. Settlement of payments for inter-republican flows within the Soviet Union took place through the correspondent balances of the republican national banks with GOSBANK.³ Trade between the republics had been denominated in rubles. The clearance time has ranged from 3 days to 2 months, but with the value of the ruble stable this wait was not in the past an exorbitant burden. Trade with the rest of the world has been coordinated by state trading organizations, with settlements of international payments taking place through the Foreign Trade Bank centered in Moscow with branches in republican capitals.

Exchange of rubles for foreign exchange in January took place at a substantial premium in informal markets. The government used 2 rubles/US dollar as a conversion rate for national accounts. 4.5 rubles/US dollar became the official Commonwealth quote while the informal rate was 100-120 rubles/US dollar.

Legacies of Soviet political and economic policies. USSR President Gorbachev's policy of perestroika mandated a transition from command to market economy that was quite disruptive to the economy of Kazakhstan. A downward trend in real output in Kazakhstan is datable in part to a 1988 revision in the law governing the Ministry for supply and distribution of goods in the Soviet Union (GOSSNAB). International trade that once depended upon the "command" instrument of trade agreements among republics was faltering as the country searched for a "market" equivalent.

The government of the Soviet Union during 1990 and 1991 embarked upon a fiscal policy characterized by large budget deficits. The monetary integration of the republics within the USSR became a source of inflationary pressure in Kazakhstan. Budget deficits within the Soviet Union, and later Russia, were financed through bonds sold to the State Bank (GOSBANK). The subsequent increase in currency in circulation caused inflationary pressures throughout the USSR. These were repressed through government controls over prices, but surfaced in the form of rationing and queuing to purchase the scarce goods.

³The settlement accounts were held by the MFO, affiliate institutions of each of the GOSBANKs.

Retail prices in Kazakhstan: inflation by quarter, 1991⁴

	1991 First	1991 Second	1991 Third	1991 Fourth
All goods	12.4	95.8	106.1	127.3
Foodstuffs	8.8	87.0	99.0	116.7
Non-food	15.8	103.5	111.6	136.7
Services	0.9	61.3	73.4	86.9

Source: GOSKOMSTAT Kazakhstan

The USSR government raised its controlled prices twice during 1991 but maintained strict controls over the prices of goods and services.

The 1991 budget of Kazakhstan was strongly in deficit as well and totalled 46 percent of total revenues.⁵ This contributed to the inflationary impetus of Soviet fiscal policies as intra-Union transfers provided the resources to balance the budget. The planned state government budget deficit for 1992 of 10.9 billion rubles was 13 percent of government revenue.

Institutional responses to the breakup of the USSR. In macroeconomic decision-making, Kazakhstan followed the sensible course of assigning responsibility to the local agencies of formerly Union-wide ministries. This led, however, to some irregularities by international standards -- for example, official foreign-exchange holdings are placed in the Foreign Trade Bank rather than in the National Bank.

Kazakhstan maintained the USSR's common tariff on trade with non-Commonwealth countries. It remained in the ruble monetary zone. There was also an agreement among Commonwealth members to share responsibility for the international debts incurred by the Soviet Union.

The break-up of the banking system of the Soviet Union was not accompanied by a distribution of assets, either domestic or foreign, to the constituent republics. Rather, in most cases the Russian republic's financial system appropriated those assets. The Foreign Trade Bank of Kazakhstan, for example, at that time had only minor holdings of foreign assets that were not claims on foreign exchange held in the Russian Foreign Trade or Central Bank.

⁴ Inflation rates represent percentage increase in prices in that quarter relative to the price of the same good in the corresponding quarter of the previous year.

⁵ This includes both revenues and Stabilization Fund contributions.

Commodity price liberalization occurred more rapidly in Russia than in Kazakhstan during the last quarter of 1991. This led to price discrepancies for staple goods and caused large flows of goods from Kazakhstan to Russia in arbitrage (smuggling). The government's response has been to close the border to all trade with Russia (effective December 16) and to initiate talks for coordination of price liberalization. This led to a communication by Mr. Gaidar, Vice-Minister of Economics in Russia, that gave the economics officials of Kazakhstan advance warning of Russia's price liberalization announcement of January 2.

Decision-making framework.

The President's economic advisors informed him that the choice of currency for Kazakhstan is closely related to questions raised in the theoretical economic literature on the choice of exchange rate regime (see Annex A). The theoretical and practical discussions in the European Community context on "optimal currency areas" (Annex B) also outline costs and benefits associated with his decision. A thorough analysis of the country's monetary dilemma required summary of and a decision rule derived from these sources.

The President had two objectives to satisfy through his choice. He was convinced of the importance of export orientation in this period of economic transformation, and looked for a policy that furthered this goal. He was also cognizant, however, that he had to foster national identity and unity.

Other institutional decisions were highly interdependent with this choice. The price liberalization decision had to be taken concurrently, as discussed above, and this involved recognition that the effect of inflation in Russia and other trading partners depends upon the choice of exchange rate regime. Kazakhstan had further up to that time relied for international trade on markets and suppliers in the republics of the former Soviet Union, but the officials of the Ministry of Foreign Economic Relations advised that international obligations (e.g., for servicing the Soviet debt) required a large jump in exports to countries which paid in foreign exchange.

This case study does not represent historical meetings or conversations within the government of Kazakhstan. It is constructed from the author's reading of events in this country to highlight the choices actually facing that government at a time of crisis for pedagogical purposes. It should not be interpreted as a historical text.

Annex A: Theoretical References on the Choice of Exchange Rate Regime.

Possible exchange rate regimes.

Review your international economics text.

Arguments in favor of various regimes.

You may find useful the following:

R. McCullough: "Unexpected Real Consequences of Floating Exchange Rates", in Adams, J.: The Contemporary International Economy: A Reader, 2nd edition. New York, NY: St. Martin's Press, 1985.

Niels Thygesen, "Exchange-Rate Experiences and Policies of Small Countries: Some European Examples of the 1970s", Princeton Essays in International Finance 136, December 1979.

Causes of High Inflation.

You may find useful the following:

R. Dornbusch, F. Sturzenegger and H. Wolf: "Extreme Inflation: Dynamics and Stabilization", Brookings Papers on Economic Activity 2/1990.

Michael Bruno, "High Inflation and the Nominal Anchors of an Open Economy", Princeton Essays in International Finance 183, June 1991.

Economic Reform in the former Soviet Union.

For further readings in these areas examine the following:

Symposium on the Soviet Economies after Communism, Brookings Papers on Economic Activity 1991/2.

Symposium on Economic Transition in the Soviet Union and Eastern Europe, Journal of Economic Perspectives 5, Fall 1991.

David Lipton and Jeffrey Sachs, "Prospects for Russia's Economic Reform", Brookings Papers on Economic Activity 1992/2.

Annex B: Literature on Optimal Currency Areas

Traditional sources of information about this include :

Ed Tower and Thomas Willett, "The Theory of Optimum Currency Areas and Exchange Rate Flexibility", Princeton Essays in International Finance 11, 1976.

Y. Ishiyama, "The Theory of Optimum Currency Areas: A Survey", IMF Staff Papers, July 1975.

More recently:

Alberto Giovanninni, "The Transition to European Monetary Union", Princeton Essays in International Finance 178, November 1990.

Matthew Canzoneri and Carol Rogers, "Is the European Community an Optimal Currency Area? Optimal Taxation vs. the Cost of Multiple Currencies", American Economic Review 80, 1990, pp. 419-433.

FIGURE 1

Kazakhstan and the Ruble (B)

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On April 1 President Nazarbayev re-assembled his advisors to consider the question of the choice of currency. On January 1 they had advised to stay the course with the ruble as the national currency. The President now has a quarter-year of economic experience with the system and wishes to revisit the decision.

Economic performance in the first quarter of 1992.

In early January, the government re-affirmed its acceptance of the ruble as the currency of Kazakhstan. It also initiated a sweeping price liberalization program on 2 January that paralleled that of Russia. Price controls for most goods were removed. For a number of essential goods the prices were increased (in most cases by factors of 3 to 5) and then controlled at the higher level.¹

These price increases did not induce an immediate increase in supply of essential goods, so the municipality of Alma Ata in January introduced ration cards issued to each resident for their purchase. By April 1, the number of goods covered by the ration card had been reduced to 5. The goods available through the ration card may also be available in other markets (bazaars, open-air stands) and can be purchased in those places without the ration card.

Average inflation in consumer prices was 308 percent for the first quarter of 1992 when compared with the last quarter of 1991, while wholesale prices rose in excess of 600 percent over the same period.² Nominal wages have risen during the first quarter, although less rapidly than inflation.³ The minimum wage on 1 April

¹ There is a listing of these goods and the percentage increases in controlled price in Annex C.

² The consumer price index is reported as defined in State Statistical Committee (GOSKOMSTAT) statistics as the average price for the quarter over the average price of the last quarter of 1991. The comparable wholesale price is derived by considering the average February and November price indices as representative of the quarterly average. Then the inflation rate underlying the February statistic (1375 percent) is divided by the comparable annual inflation rate for the previous November (210 percent). This understates the quarter-to-quarter inflation rate to the extent that there was non-zero inflation in November 1990 through February 1991.

³ Workers of the industrial sector have the highest wage of the government payroll. Statistics from GOSKOMSTAT indicate that the government's wage in industry rose by 307 percent when the July 1991 wage is compared to the average wage for the first quarter of 1992 (2255.3 vs. 553.5). Consumer price inflation between July 31 and the fourth-quarter average in 1991 causes a fall in the real wage.

of 342 rubles/month remains far below the average monthly wage in the government sector of 1393 rubles/month for the first quarter of 1992.⁴

Production in most sectors for the first quarter of the year ran behind the comparable levels of the previous year (which was itself a year of economic contraction). The shortfalls were especially noticeable in sectors dependent upon Russian or other Commonwealth suppliers for productive inputs.

Presidents Nazarbayev and Yeltsin in January 1992 signed an agreement prohibiting the levying of duties on international trade between Kazakhstan and Russia. The bans on trade between the two countries were lifted on 16 January.

A cash shortage has developed in Kazakhstan in the first quarter of 1992. There are insufficient stocks of rubles to denominate transactions -- this is leading to production difficulties and the build-up of arrears among firms. Further, the government is unable to find sufficient cash to pay its employees. Restrictive measures have been taken to circumvent this shortage, including limits on cash withdrawals from savings accounts and direct deposit of payroll into the savings banks.⁵

Large premia remain on the price of foreign exchange. The informal exchange rate for dollars has risen to 140-150 rubles/dollar, while the government has followed Russia in adopting the rate 55 rubles/dollar for most official purposes. There has also been a "tourist rate" of 110 rubles/dollar introduced.

Intra-Commonwealth trade has been disrupted by the falling value of the ruble. Much of the present trade is either in barter terms (with equivalent value assured by pricing in foreign currency) or in exchange for foreign currency. Transport services have followed the same pattern.

TURANBANK, a recently privatized commercial bank of Kazakhstan, has implemented an alternative to the NBR-based payments mechanism. According to their evidence, NBK's clearance lag for typical intra-Commonwealth transactions in rubles was 10 to 15 days in January. TURANBANK has established a 90-percent owned corporation in Moscow called the RUSKIKAZAKBANK to reduce that clearance lag to 1/2 day. Subsidiary corporations are also planned for Belarus, Ukraine and St. Petersburg.

Senior government officials have been worried about Russia's approach to ruble policy. They cited reports that Russia suggested treating ruble balances in the NBK as interest-bearing debts to Russia, and spoke of declaring the ruble its national currency. In their opinion, these wouldn't happen if the ruble were truly the currency of the entire ruble zone. There was further concern (fueled by a news interview with Kagalovsky of Russia) that the IMF-led ruble stabilization fund would be appropriated by Russia for its own growth and development. The resolution of disputes over the ruble zone had important ramifications for the fiscal situation in Kazakhstan. The original budget for 1992 included an annual excess of expenditures over revenues to be financed through issuance of ruble notes by the National Bank of Russia (NBR). If Kazakhstan must now

⁴ This average does not include the 100 percent increase in salaries of certain lower-paid government workers (employees working for health organizations, education, culture, science, legislative organizations, courts and state agencies financed by the budget) also mandated on 1 May 1992.

⁵ Checks are rarely used in Kazakhstan economic transactions, although the government is encouraging adoption of such activity.

"buy" its rubles from NBR, it would lose the resources budgeted through seigneurage and/or the inflation tax.

Budgetary information for the first quarter of the year is encouraging. Revenues in real terms are down below the government's forecast, but expenditures have fallen by even more in real terms. As a result, the budget on a quarterly basis had been in surplus. There was concern among budget officials, however, that future quarters would be deficitary -- there was increased social pressure for expenditures on social safety net items.

Ethnic tension is increasing, although it has not yet reached the fever pitch of neighboring Tajikistan. Kazakhs are more openly (and pointedly) inquiring when the ethnic Russians will be "going home". There has in fact been an exodus of ethnic Germans and Russians, and these are often the more highly skilled citizens of Kazakhstan.

Decision time.

President Nazarbayev has not changed his objectives. Will you change your policy advice?

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Annex C: Price Control Increases of 2 January 1992

<u>Consumer good</u>	<u>Percent price increase</u>	
bread (first and second grade)		300
milk/milk products (low fat content)		300
child nutrition		300
salt		400
sugar		350
vegetable oil		300
vodka and alcoholic spirits		450
matches		400
medicines		400
artificial limbs and prophylactics		400
petrol		300
diesel fuel		280
kerosene and other domestic fuels		500
condensed gas		500
natural gas		300
electric power (rural) ⁶		400
electric power (city)		200
water use		300
rental (including stay in hotels)		0
rail transport		300
water transport	200	
air transport		400
motor transport (except in-city)		350
basic communications services		300

⁶ The increase in prices of domestic power was defined as 8 kopecks per kilowatt-hour for rural residents and 12 kopecks per kilowatt-hour for urban residents. In the last category, houses with stationary electric ranges and electric heating faced an increase of only 8 kopecks per kilowatt-hour. The corresponding percentages in the table were furnished by SEC.

<u>Producer good</u>	<u>Percent price increase</u>
Coal:	
engineering	500
coking	800
Oil, associated gas and gas condensate	500
Natural gas and LNG	500
Motor and boiler room fuel, and kerosene	480
Electric power	400
for agricultural consumers, max. tariff is 8 kopecks/kwh	
Mangyshlak Power Complex	690
Heat energy	400
Mangyshlak Power Complex	510
Precious metals and stones	to be announced
Railway transport	
interrepublican	830
local and republican	500
loading/unloading	500
Sea transport	500
Air transport	500
River transport	350
Motor transport	360
Basic communications services	300 on average

Source: GOSKOMSTAT Kazakhstan

Kazakhstan and the Ruble
Instructor's Notes: Patrick Conway

This case study is designed to complement discussions in courses of international economics or economic development on the subject of exchange rate regimes and optimal currency areas. It may also be useful in political economy and international finance courses.

The "vision thing".

The case study sets up a specific task for the class: to choose whether or not to remain within the ruble zone. The issues that are raised lead quickly, however, into the whole range of issues involved in the choice of exchange rate regime.

I proceeded with three goals in mind:

- (1) Developing a decision rule based on the theoretical literature to support the choice of exchange rate regime.
- (2) Examining the specific issues of the transition among former Soviet states and their relevance to the choice of the ruble.
- (3) Relating the choice to the literature on hyperinflation.

Relation to outside readings.

I began this section of the course with a general discussion of the problems facing Kazakhstan. We then turned to the theoretical references on the choice of regime, transition in former Soviet states, and hyperinflation found in the annexes of the case study. Each student had a chance to present and discuss these results, with the reminder that these issues would be of importance in defining the decision rule requested by the President.

The timing was as follows:

- (a) Readings on choice of regime and transition issues;
- (b) Case Study A;
- (c) Readings on hyperinflation;
- (d) Case Study B.

Caveat.

This discussion moved rather too smoothly to a conclusion against use of the ruble. Counter to accepted wisdom in 1991, the students have absorbed the accepted wisdom of today -- that the ruble is a worthless currency. Using this case then means focusing more on the ancillary question of the exchange rate regime to choose after rejecting the ruble.

The structure of the course was an experiment at interweaving case and non-case materials. I was not displeased with the outcome, although the students felt "whipsawed" at times between case discussion and theoretical readings.