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March 25, 1992

To: Members of the Executive Board

From: The Secretary

Subject: Profile of Statistical Sources on Real Sector Data
for Six Former Soviet Republics

There is attached for the information of Executive Directors a paper which presents statistical profiles for six former Soviet republics. This paper will serve as background for the pre-membership economic reviews of the republics of the former U.S.S.R., scheduled for late March and early April.

Mr. C. Patel (ext. 7952) or Mr. Gürgen (ext. 7927) is available to answer technical or factual questions relating to this paper.

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Profile of Statistical Sources on Real Sector Data
for Six Former Soviet Republics 1/

Prepared by the General Economy Division
of the Statistics Department

Approved by John B. McLenaghan

March 24, 1992

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1/ The republics are: Azerbaijan, Belarus, Kazakhstan, Latvia, the Russian Federation, and Ukraine.

I. Introduction

The recent dissolution of the Soviet Union and the resulting independence of its former republics present economic challenges that are readily perceived, if not easily resolved. Less apparent to many observers are the statistical challenges that independence presents. Whereas central institutions previously oversaw the methodology, compilation, and collection of uniform statistical indicators for all republics, the republics now appear to be free to determine for themselves the indicators to compile and the methodologies to employ in assembling statistics. In addition, there is, in many of the republics, a dawning realization that traditional indicators geared to a command economy are ill-suited for use in monitoring economic trends in a more market-oriented setting.

These developments have precipitated requests from the former Soviet republics for technical assistance in adapting their statistical systems to international standards. For assistance to be effective, western institutions must first have a clear understanding of statistical indicators compiled by the republics at present. This paper is an initial effort to present an overview of statistical sources on real sector data for six republics: Azerbaijan, Belarus, Kazakhstan, Latvia, the Russian Federation, and Ukraine. These republics were selected because they are among the most populous of the newly formed Commonwealth of Independent States (C.I.S.) and Baltic States; they produce a significant proportion of the Commonwealth's output; and they comprise a cross-section of the region's geographical diversity.

The body of this paper consists of three parts. The first section provides an overview of: (1) the statistical framework in the C.I.S. and its member states, (2) methodologies used in compiling real sector statistics, (3) data sources, and (4) issues in the further development of statistics. A separate note (5) on price statistics is also included. This note reflects the strong interest expressed by the European II Department of the Fund and the republics themselves, in this area of technical assistance. The second section presents a brief profile for each of the six republics of annual statistical data on the real sector. Data which appear in this section are unrevised figures drawn primarily from published sources specified in Section IV, and may differ from the most recent official revisions appearing in Pre-Membership Economic Review Papers. A substantial volume of real sector data exists at the republic level, though it is oriented to the needs of a planned economy. The series included in these tables are meant to provide only a representative sampling of available data. The last section of the paper summarizes the specific statistical references used to prepare the statistical tables for each republic.

II. Overview of Statistical Data on the Real Sector

1. Statistical framework

a. Institutions

In the former Soviet Union, organization of statistical work on the real sector was highly centralized under the auspices of the State Committee on Statistics (generally referred to as Goskomstat U.S.S.R.). Headquartered in Moscow, this organization oversaw the development of standard methodologies for compiling all real sector indicators, issued all statistical questionnaires, and coordinated the collection of data by a vast network of republic, oblast, and rayon statistical offices. ^{1/} Within this framework, statistical offices at the republic level served as little more than processing centers for data requested by central authorities; republic-level offices exercised little control over the data collected or the methodologies used in compiling statistical indicators.

On December 31, 1991, C.I.S. authorities abolished Goskomstat U.S.S.R. but Goskomstats at the republic level were allowed to continue operating by local governments. However, the focus of operations for republican Goskomstats was fundamentally transformed from gathering data that met national/union needs to compiling indicators for use by authorities at the republic level. As a result, provision of statistics by republican Goskomstats to central C.I.S. institutions became essentially voluntary rather than mandatory, and statistical offices at the republic level could tailor methodologies and indicator systems to conform more closely with local policy needs. For example, if a southern republic with labor absorption problems anticipated short-term difficulties stemming from the introduction of market reforms, its statistical offices could begin compiling unemployment indicators without first seeking clearance from central authorities.

The opportunities presented by this situation to statisticians at the republic level did not come without costs. Experts in statistical methodology had been concentrated in Moscow and, without their assistance, Goskomstats at the republic level were ill-equipped to undertake independent responsibility for work in areas such as national accounts and price statistics. Moreover, a central statistical authority was no longer available to help ensure the consistency of selected indicators, such as

^{1/} Administrative regions at the republic level had their own Goskomstats, which served as the link between national headquarters and lower level statistical offices. These lower level offices were organized first at the oblast, or region, level (and also for krays, national districts, and major metropolitan areas). Within each of these regions, statistical offices were organized for each rayon, or district.

interrepublic trade statistics. Ukraine sought to address these problems by elevating its statistical office to a ministerial function so that statistical issues would receive attention at the highest possible level. Elsewhere in the C.I.S., interest grew in establishing a cooperative association to address the needs of republic-level statistical offices.

On February 6, 1991, an agreement was signed in Minsk by nine states (Armenia, Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, the Russian Federation, Tajikistan, Turkmenistan, and Uzbekistan) to establish a Statistical Committee of the C.I.S. The Chairman, Mikhail Korolev (a former Director of Goskomstat U.S.S.R.), is responsible for overseeing an institution that will attempt to coordinate the activities of statistical offices of C.I.S. member states, develop unified methodological standards and classification systems through consultation with these offices, and render assistance in converting statistical indicators to international standards. The Statistical Committee of the C.I.S. will also compile interrepublic trade statistics and other C.I.S. composite indicators and will have exclusive rights to publish aggregate data for the C.I.S. However, the failure of Georgia, Moldova, and Ukraine to sign the agreement suggests some ambivalence about a central institution that might impinge on the autonomy of statistical work at the republic level.

b. Statistical indicators compiled

Real sector statistical indicators compiled by the C.I.S. and the Baltic states are, with rare exception, the same indicators compiled in earlier years under the authority of Goskomstat U.S.S.R. These indicators include national accounts that use the socialist MPS (System of Material Product Balances) framework, price indices, employment, wages and income, production, capital stock, trade turnover, population, and various social indicators. Methodologies underlying the compilation of these indicators are discussed in section II.2 of this paper.

Traditional indicators continue to be compiled because republican statistical authorities have been reviewing methodological changes needed to adapt their statistical systems to more market-oriented economies and have not yet created new questionnaires. Notable exceptions exist as regards national accounts and price statistics. Most republics have experimented with estimating GDP by using conversion keys in the last few years, 1/ and Goskomstat of the Russian Federation hopes to estimate a full set of SNA 2/ income and expenditure accounts by December 1992. As regards price statistics, Latvia, Russia, Kazakhstan, and Ukraine have attempted to

1/ Conversion keys are simple tables of items to be added or subtracted from net material product (an MPS national accounts aggregate) to obtain gross domestic product (GDP).

2/ United Nations, A System of National Accounts, ST/STAT/SER.F/2/Rev.3 (New York, 1968).

calculate hybrid consumer price indices (CPIs) by using price data from the retail and service price indices in conjunction with statistics from household expenditure surveys.

c. Data collection methods

Methods used to collect statistical data on the real sector rely predominantly on complete enumeration rather than sample surveys. For example, rather than base estimates of industrial output on a representative sample of industrial enterprises, Goskomstats at the republic level rely on statistical reports completed by every manufacturing facility. While sample surveys are almost certainly less expensive than complete enumeration, verification of compliance with economic plans cannot be obtained without reports from each enterprise. Despite the demise of central planning in the republics, the forms and reporting systems remain.

Sample surveys are employed on a limited basis in statistical offices at the republic level. Surveys are regularly carried out on household incomes and expenditures. Indices of retail prices for goods and services, agriculture procurement prices, and wholesale industrial prices are also carried out by using sample surveys, though sample sizes tend to be substantially larger than those employed in western countries.

Compilation of real sector indicators by republican statistical offices is frequently hampered by the poor quality of data processing equipment. The scarcity of microcomputers and statistical software necessitates hand tabulation of many indicators. These problems notwithstanding, traditional methods of communication between various levels of statistical offices remain effective.

2. Methodological overview

a. National accounts

National accounts regularly compiled at the republic level are MPS measures of national income produced (net material product or NMP) and national income expended. A number of republics have also experimented with calculating the SNA concept of gross domestic product (GDP), though all such estimates to date have been based on MPS accounts.

National income produced (NMP) is the sum of net value of output (value added less depreciation) for the six branches of material production: (1) industry; (2) agriculture; (3) construction; (4) transport and communications; (5) trade, supply, and procurement; and (6) services serving material production. Net value of output for each branch may be calculated by adding total factor incomes, or by subtracting material inputs and depreciation from gross value of output. NMP differs from GDP in that it excludes depreciation and value added for nonmaterial service sectors.

National income utilized consists of consumption and accumulation. Consumption within the MPS framework covers private consumption, material expenditures of institutions serving the public, and material expenditures on scientific research and management. Accumulation includes investment in productive assets (assets serving the material production sectors), investment in nonproductive assets (assets serving the nonproductive service sectors), and stockbuilding. National income utilized differs from GDP in that it excludes final expenditures on nonmaterial services, net exports, and losses, whereas GDP includes them. Because national income utilized excludes net exports and losses, it is also rarely equal to national income produced (NMP).

Virtually all of the republics profiled in this paper have estimated GDP for selected years, but only three (Azerbaijan, Kazakhstan, and Latvia) have published these estimates in their statistical yearbooks. The methodology used by all the republics to generate these estimates is essentially the same: depreciation and estimates of value added for nonmaterial services (personal transport, banking and insurance, government services, etc.) are added to national income produced (NMP), and value added in the nonmaterial service sectors implicit in the net value of output of the material production sectors is deducted to prevent double-counting. No estimates exist of gross national product (GNP), presumably because data are unavailable on net factor income from abroad. However, these ad hoc efforts do not address the basic issue of using the SNA as a unifying framework for generating standard macroeconomic aggregates and organizing data resources, implementing internationally comparable industrial and sectoral classification systems, and establishing linkages with other statistical systems (government finance statistics, balance of payments statistics, monetary statistics, and price statistics). A conversion of national accounts should do more than emphasize the derivation of GDP estimates by applying simple conversion keys to existing MPS aggregates. An effective conversion should focus on adaptation of the data collection and classification system to permit calculation of the full set of SNA accounts and tables. To date, only the Russian Federation Goskomstat is attempting to estimate a full set of SNA income and expenditure accounts from basic data rather than from adjustments to existing MPS national accounts aggregates. The self-imposed goal for completing this task--for the Federation as a whole and for each of the Federation's 78 oblasts--is December 1992.

Constant price indices of national income produced (NMP) and national income expended are calculated by linking together indices calculated at different price bases. The current reference year is 1985, though data with a reference year of 1980 are also published.

b. Population statistics

Population data for 1970, 1979, and 1989 are drawn from population censuses conducted in mid-January of these years. Population data for other

years consist of January 1 estimates made by Goskomstat U.S.S.R. on the basis of population census data and information on births and deaths compiled by offices of the "Registry of Acts of Civil Status" (ZAGS). These population data are reported on a de facto basis, i.e., republic population figures include both permanent and temporary residents in residence and exclude long-term de jure residents who are temporarily in other republics or abroad. Military residents, who may be included in population totals for their republics of origin, constitute a possible exception.

c. Price statistics

Statistical offices at the republic level have regularly compiled indices of retail prices, kolkhoz (collective farm) market prices, and agricultural procurement prices. In 1990, indices of service prices and wholesale industrial prices were initiated in a number of republics (such as the Russian Federation) at the instigation of Goskomstat U.S.S.R. Since the retail price index and preliminary consumer price indices are discussed in greater detail in section II.5 of this paper, only an overview of price indices is provided here.

The retail price index monitors price movements for consumer goods in state and cooperative trade. The index is based on prices that are gathered, in all regional and territorial towns, for approximately 1,000 representative items. In Latvia, for example, prices are recorded for 950 items. These prices are then aggregated into 90 commodity groups. Retail trade turnover statistics (rather than the expenditure weights from household surveys used for consumer price indices) are used as weights for the retail price index. A harmonic mean formula is used to calculate the index, which is equivalent to a Paasche index with current weights. The reference year for the index is presently 1985, though indices with a reference year of 1980 are also published. The index has been compiled on a monthly basis since January 1991; annual data are available for earlier years. Monthly data are not published in true, fixed-base index form; changes are shown only by comparison with data for a single previous period (such as the previous month or same month of the preceding year).

To adjust for "hidden inflation" caused by the introduction of upgraded products with price increases in excess of their quality improvements, Goskomstat U.S.S.R. undertook a major revision of the retail price index in 1989. Despite this revision, it is generally believed that the retail price index has historically understated the true rate of inflation. Realistic prices were not imputed for commodities unavailable at survey times because of shortages, and prices of goods on parallel markets were excluded from the surveys. Latvian statistical authorities sought to rectify this limitation

in 1990 by introducing an index of average prices (including government, cooperative, and private market prices) of goods purchased. 1/

Under central planning, the retail price index was a traditional tool for micromanagement of the economy. The authorities expected to use the index, together with simultaneously gathered retail delivery and sales data, to monitor plan fulfillment at the regional level (oblast) and, at the same time, to provide some indication of emerging local supply shortages. However, the index was never meant to be used for cost-of-living analysis or measurement of inflation, and it therefore provides inconsistent coverage of price movements. Use of the Paasche formula for aggregation allows changes in both prices and weights to be reflected in the month-to-month movements of the index and requires an increasingly difficult updating of weights each month. The data collection system is complicated and requires the services of thousands of agents whose efforts might more productively be used in other statistical endeavors. In many republics, the sample of outlets is not adequate to cover newly established private shops and markets. Coverage is therefore biased toward traditionally state-owned and cooperative outlets. Statisticians have recently experienced difficulty in obtaining sales data from private shops for use as weights and have been forced to employ ad hoc estimates of uncertain reliability. Because of these problems, replacement of the retail price index with a consumer price index--a positive step that is overdue--is being explored in Latvia, Lithuania, Kazakhstan, the Russian Federation, and Ukraine.

The kolkhoz (collective farm) market price index is based on a sample survey of agricultural product prices in kolkhoz (collective farm) markets. Prices in these markets are essentially unregulated, though coverage of price changes is complicated by uncertainties regarding sample sizes and weighting procedures. The fact that statistical yearbooks rarely publish this series as an index with a fixed base year generally forces one to chain-link data from subsequent yearbooks to generate a long-term series.

Initiated in 1984, the agricultural procurement price index is a Paasche index with state procurement levels of agricultural products serving as weights. The index is presented in most sources with a base year of 1983, though it is reproduced in statistical tables here with a 1985 base. Twenty-two classes of agricultural products are included in the index, which covers what was once 90 percent of total agricultural production for the entire Soviet Union. The index only covers changes in official procurement prices for agricultural products and omits prices paid for goods in rural free markets. Even though state procurement prices for agricultural products were essentially constant from 1983-1989, the index rises because it factors in the effective price increase resulting from bonuses provided

1/ Pre-1990 data for this Latvian index were based on price change estimates made by the authorities; the authorities' estimates were based on partial data.

for production quota overfulfillment or from subsidization of high agricultural production costs.

Little is known about the methodologies employed in compiling indices of service prices and wholesale industrial prices other than the fact that the service price index is of the Paasche variety. The only statistical yearbook found to contain these indices is the 1990 yearbook for the Russian Federation. This yearbook publishes the wholesale industrial price index for 1990 only and presents data on service prices only for the first half of 1991. In the spring of 1991, statistical authorities in Ukraine began compiling their industrial price index on the basis of approximately 500 product prices gleaned from surveys conducted in 1,500 industrial establishments. The Ukraine index is a chain-link Laspeyres index that uses the previous year as the base and weighting period.

d. Production statistics

The industrial production index measures real changes in gross industrial output. It is not a value added index but an index of the gross value output at constant prices of all finished and partially finished industrial products. Industrial output includes manufacturing, raw mineral mining and processing, oil and gas extraction and refining, and electricity generation and distribution. The index is essentially a composite that is comprised of a series of chained Laspeyres indices of gross industrial output calculated at different price bases. For example, the current version of the index is calculated at 1982 constant prices for 1985-1991, but other price bases were used for earlier years. Component indices are calculated by using essentially a Laspeyres formula (gross value of output levels are divided at a given constant price base by reference year values). The current reference year for the composite index is 1985, although data with a 1980 reference year are also reported in recent statistical yearbooks.

Data on the physical output of crude oil, natural gas, coal, lignite, iron ore, magnesium, and other raw materials are available from data included in comprehensive statistical reports completed on a monthly basis by industrial enterprises. Sample surveys are not employed to compile these data, as all production units are required to report. The extent to which adjustments are made to standardize for varying quality levels of output is unknown.

The index of agricultural output is a gross output index similar in design to the index of industrial output. It, too, is a chained Laspeyres index, although 1983 prices are used for valuing output in recent years.

e. Wage and employment indices

Average monthly wage statistics are compiled only for workers and staff in the state sector. Industrial sectors covered include manufacturing,

mining, oil and gas extraction and refining, and electricity generation and distribution. Wages, salaries, and--presumably--bonuses of state sector workers are included in average wage calculations. Excluded are the earnings of cooperative and kolkhoz (collective farm) workers, income received from the sale of agricultural crops, pensions and scholarships, and interest income. Selected republic yearbooks contain separate data on incomes for kolkhoz workers, however. The international comparability of average wage statistics is unknown in terms of concepts, coverage, and quality.

Until very recently, employment levels were published only for staff and workers in the state sector and in kolkhozes. Excluded were workers in private cooperatives, farmers engaged in private subsidiary agriculture, and self-employed artisans. In 1990, comprehensive employment statistics, which included workers outside the state and kolkhoz sectors, began to emerge. As these data are still quite scarce at the republic level (only the Russian Federation has published the full table of labor balances and only for a single year), this paper includes only the traditional employment figures outlined previously. Employment data include the traditional material production sectors (agriculture, industry, construction, transport and communications, trade and technical supply, and information services), as well as "nonproductive" services (housing, social services, education, scientific research, banking and insurance, and government). Data are gathered via comprehensive reports submitted to republic-level Goskomstats by state enterprises and kolkhozes.

Industrial employment within this framework includes staff and workers in the state sector only. Aside from workers excluded in total employment, industrial employment also omits kolkhoz employees. Industry here includes manufacturing, mining, oil and gas extraction and refining, and electricity generation and distribution. Instead of sample surveys of enterprises or household surveys, comprehensive reports completed by all state enterprises serve as the basis for compilation of this indicator.

f. External trade statistics

Annual trade data are available by republic at both domestic and world prices for 1978-1990, though statistics for 1990 are not generally available for all republics. Originally compiled by Goskomstat U.S.S.R. to facilitate the calculation of the final expenditure portions of 1987 input-output tables for each republic, these data were first published in the journal Vestnik Statistiki in 1990. As such, only the 1987 data are benchmark figures. Data for later years are estimates and extrapolations based on the 1987 data. Interrepublic trade data for years prior to 1987 are probably available for years in which benchmark input-output tables have been compiled (1959, 1972, 1977, and 1982). At present, the best sources for current interrepublic trade statistics are economic yearbooks (Narodnoye kozhyaistvo) or handbooks (Tskifrakh) that now provide export and import totals and details on the commodity composition of trade.

In compiling external trade statistics by republic, statistical authorities have traditionally differentiated between overall imports and exports (vvoz and vyvoz), interrepublic trade, and trade with foreign countries (import and eksport). Interrepublic trade estimates are based on data supplied by enterprises and trading firms in regards to the origin and destination of deliveries within the boundaries of the former U.S.S.R. Foreign trade statistics for each republic, however, are based on customs trade returns compiled by the Ministry of Foreign Economic Relations and Trade. While it is more common to see both sets of trade statistics published in domestic ruble prices, interrepublic and foreign trade statistics at the republic level are also published in world prices that are converted to rubles. Because of subsidies and turnover taxes, overall trade balances for republics can differ substantially, whether they are calculated in domestic or world prices. For example, the Russian Federation's 1988 trade deficit of 33 billion rubles at domestic prices is transformed to a trade surplus of 31 billion rubles when expressed in world prices.

Materials provided by Goskomstat U.S.S.R. to the Fund's Research Department confirm that interrepublic trade data for 1987 are internally consistent; that is, bilateral commodity trade flows between republics reconcile with one another and sum to reported export and import totals. Whether the same is true for interrepublic trade data for earlier and later years is unknown. Apparently, the same commodity-specific conversion factors used in the construction of export and import columns of the national input-output tables compiled by Goskomstat U.S.S.R. were used to derive, in world prices, exports and imports for each republic.

The valuation basis of republican trade statistics is uncertain. However, given their origin as vectors in input-output tables, both import and export data were probably compiled essentially on an f.o.b. basis. Trade margins elsewhere in the input-output tables would theoretically have included insurance and freight factors for imports.

The comparability of historical, republic-level export and import statistics with external trade statistics of other countries is problematic. It is assumed for most market economies that external trade statistics reflect transactions valued at world prices (allowing for tariffs or subsidies). This is theoretically true for the external trade statistics of the former Soviet republics stated as being at world prices, though there are a number of complications. To convert interrepublic trade data to world prices, statisticians at Goskomstat U.S.S.R. employed ratios of the average world to domestic prices paid in U.S.S.R. foreign trade for 1,000 items, using official exchange rates (the commercial rate) to convert world price data to ruble equivalents. For manufactured goods, however, price comparisons can be misleading if there is no attempt to standardize quality levels, and the extent to which this consideration was taken into account by Soviet statisticians is unknown. Since quality levels can differ dramatically between goods traded on external markets and those traded between the former Soviet republics, it is probable that there is some bias

in the price ratios for manufactured goods, and therefore error in the estimates of interrepublic trade at world prices.

Valuation problems aside, there are problems of coverage that complicate comparisons of external trade data of the former Soviet republics with trade statistics of other countries. For example, external trade that took place through Moscow-based foreign trade organizations was registered as trade of the Russian Federation, regardless of its origin or destination. At least part of defense-related trade flows are also excluded from republican trade statistics. These statistics are not customs trade data, of course, and were not designed with international comparability in mind. They will nonetheless be used to make international comparisons, and one should be aware of the potential valuation and coverage problems when this is done.

3. General sources of statistical data

Statistical indicators on the real sector are compiled by Goskomstats at the republic level. These offices are therefore the primary source of real sector data. For purposes of assembling statistical profiles in this paper, recourse was thus made to yearbooks which Goskomstats at the republic level have regularly issued. It is important to note that because published sources were the primary references used to compile statistical tables appearing in Section III, data for recent years are unrevised and may differ from the most recent official revisions appearing in Pre-Membership Economic Review Papers.

While statistical offices at the republic level currently issue a wide variety of publications, each has annually published a statistical yearbook (e.g., Narodnoe Khozyaistvo Azerbaidzhanskoi SSR V'1987 Godu, or People's Economy of Azerbaijan SSR, 1987) and a smaller statistical abstract (e.g., Azerbaijan V'Tskifrakh or Azerbaijan in Figures). A number of these references were available from the Joint Bank-Fund Library, though most of the more recent references could only be obtained from staff who have travelled to the republics on mission. The U.S. Census Bureau Center for International Research also provided a number of useful references from its wide-ranging collection of Russian-language materials.

A particular drawback in using published references is that one must splice together data from a variety of yearbooks to obtain a complete time series. This problem was particularly daunting as regards price indices and indices of industrial production. Because base years vary from publication to publication, data must be chain-linked to create unified time series. In the future, it would be preferable for the Fund to make arrangements with republic level Goskomstats to provide time series directly. Publication of longer time series, as is done in other countries, might also be encouraged.

4. Issues in the further development of statistics

As noted earlier, real sector statistical indicators currently compiled by former Soviet republics have their origin in the development and monitoring of national economic plans. They are thus not particularly well-suited to the needs of market economies, nor do they necessarily address the specific concerns of particular republics. Transforming statistical work on the real sector to address these concerns will require both institutional and methodological changes.

Institutionally, the effective machinery to carry out statistical work on the real sector exists within republics, though the focus needs to be changed to meet the demands of market economies. As an essential first step, statistical agencies at the republic level should give high priority to training staff in standard international statistical methodologies and to transforming traditional data collection and compilation procedures. Without this training, it will be extremely difficult to introduce new market-oriented indicators, such as GDP, using international practices rather than simply adjusting existing statistics. Transforming the current emphasis in data collection procedures from complete enumeration to acquiring more data via sample surveys will free up resources and permit more rapid coverage of rapidly growing private sector activities. Consideration should also be given to raising the independence and profile of statistical agencies within republican governments. Greater visibility would help ensure that statistical work meets the needs of policymakers and encourage a high-level forum for determining how scarce budgetary resources might best be allocated to upgrade staff and data processing resources in statistical work. Finally, a strong effort could be made by the newly formed Statistical Committee of the C.I.S., in cooperation with international organizations, to assist the republics in familiarizing themselves with new statistical methodologies and in establishing mutually agreeable standards.

Methodologically, statisticians at the republic level should give high priority to adopting new measures of price change, converting their national accounts from the MPS to the SNA, developing internally consistent and internationally comparable external trade statistics, and compiling measures of labor force participation and unemployment. Recommendations on price statistics are summarized in section II.5. As regards national accounts, adoption of the SNA will provide coverage of service sector activities currently omitted by the MPS accounts, and compilation of the full set of SNA accounts will establish a reliable means to detect any inadvertent omissions or double counting of service sector output. Adoption of the SNA will also enable the republics to draw on the collective experience of dozens of market economies in resolving common accounting and valuation problems. Moreover, the SNA can serve as the unifying framework for the development of an internally consistent set of macroeconomic aggregates and as a means to develop linkages with price statistics, balance of payments, and government finance statistics. Regular external trade statistics are

needed in the compilation of national accounts at the republic level, and for the merchandise trade account of the balance of payments. Finally, assessment of the effect of policy changes on the effective use of human resources of each republic would be vastly enhanced if, rather than relying on traditional balance tables of labor resources, the republics compiled employment and unemployment statistics in the context of regular labor force surveys.

These recommendations cannot be implemented immediately; nor do many of the republics have the domestic resources to undertake the changes independently. Consequently, the Fund, in conjunction with other international organizations, is pursuing a coordinated program of technical statistical assistance for the former Soviet republics. This assistance, which is being coordinated by Mr. Jean Ripert at the request of the Fund's Managing Director, is offered with hope that it will help provide the statistical underpinnings for monitoring the increasingly market-oriented economic developments in the Soviet republics. As regards work on real sector statistics, it is anticipated that the Organization for Economic Cooperation and Development (OECD) will take the lead in providing technical assistance on national accounts, and the Statistical Office of the European Communities (EUROSTAT) will contribute its expertise in business registers and other subjects. For its part, the Fund has initiated assistance to the former Soviet republics on monetary, balance of payments, and government finance statistics. As regards statistics on the *real sector*, however, assistance is being focused initially on the development of consumer price indices. The program will focus in the short-term on development of consumer price indices in Russia, Latvia, and Lithuania; in the next quarter, the program will be extended to Estonia, Ukraine, and Belarus and possibly to Kyrgyzstan or Moldova. Further assistance is anticipated on trade statistics as well, in part to facilitate the compilation of balance of payment statistics at the republic level.

5. Price statistics: status and prospects

a. Background

The range and reliability of price statistics for individual member states of the C.I.S. and the Baltic states suffer from certain deficiencies; these statistics fall short of what is needed for the formation and monitoring of economic policy as restructuring proceeds. Existing statistics generally concentrate on prices paid by the household sector, rather than on those paid to producers. Also, existing statistics reflect various ad hoc adjustments made to the indices by statisticians in the former Goskomstat of the U.S.S.R.

The rapid pace of price deregulation and the uncertainties regarding future price policies pose major challenges for official statisticians in adapting price statistics to current needs. The former Soviet system did not require all statisticians to develop professional competence in the

concepts and methodologies of price indices for a well-developed, market-based economy. Adapting price statistics of the former Soviet republics to meet future needs requires a careful examination of the methodologies underlying existing indices and the source data for prices and weights, the consistency of new indices with international guidelines, and the training needs of statisticians.

b. Price indices: weights and commodity selection

Present indices used to assess consumer price level movements are, in many cases, overly reliant on retail sales data as the basis for commodity weights. Even if the valuation method matches consumer purchase expenditure, such data are unsatisfactory for purposes of compiling a consumer price index (CPI). Retail sales cannot discriminate between differing household subgroup expenditure/consumption patterns and may also include sales to nonhousehold groups. In fact, a retail price index based on retail-based weights could be regarded as a form of producer price index, i.e., a producer output price index for the retail distribution industry rather than a version of the CPI.

While the coverage of consumption goods included in existing indices reflects the full-coverage basis of retail surveys by the former U.S.S.R. statistical system and appears adequate, the coverage of services varies from partial to nil. Resources can be wasted by surveying the prices of an overly broad commodity regimen, as control over the maintenance of quality specifications of priced commodities can be deficient. A balance between the range of representative goods and services priced and the amount of quality control in the price survey operation needs to be maintained.

Similar problems for existing producer price indices are arising and also need appropriate attention.

c. Price data needed for satisfactory indices

Prices and retail trade data are currently collected from state and cooperative stores and in Kolkhoz markets during the first 20 days of the month. Prices are collected from a large sample of urban centers (in Russia, 800 centers are covered out of a total of 2,000). Data for food items are collected on a weekly basis. Price quotations for each item are averaged for outlets and regions by using weights based on delivery or sales data. Therefore, changes in the average price for an item do, in addition to "pure" price changes, also reflect "structural" changes (e.g., price quotations from expensive shops may have a smaller weight in the current period in comparison with their weight in previous periods).

Price collection procedures for the retail price index are overly complicated (about 30 different forms are used) and require large staff resources (for Russia, there are 3,500 price collectors). Furthermore, in the context of price liberalization and privatization, emerging private

retailers and wholesalers are less willing than former government organizations to provide sales data needed for weights.

A valid CPI should measure changes in the level of actual prices paid by consumers. This means, first, that price surveys should be conducted in a manner that ensures the recording of true prices paid by consumers. "List" prices are, therefore, data of only partial relevance, and surveys of sales establishments should not be accepted unless it is certain that such reported prices reflect what purchasers are paying.

A further key consideration is that a CPI should be a pure price index and not an average transaction price index. A CPI should not measure a change merely because consumers are buying a different mix of specific quality commodities or because available commodities display variations in quality from one price survey period to another. This principle requires that staff who conduct price surveys must be trained to understand the quality of commodities for which prices are surveyed and techniques for collecting information that allows correction for changes in price resulting from changes in quality. For example, a canned foodstuff may remain unchanged in price when the content quantity/volume decreases or change in price if its quantity/volume changes. Also, an appliance could be replaced by a more expensive, but technologically improved version, or lower production standards could lead to diminished consumer utility through shorter use life of the product.

As market mechanisms develop, the provision of consumer credit with variation in price between cash and credit sales and the acceptance of trade-in as partial payment will undoubtedly occur. Index procedures to cope with these complications are needed in a sound CPI.

d. Index concept, aggregation of data, and related concepts

As household income changes and the utility derived from particular goods and services changes through preference or taste factors, it is not possible to prepare a theoretically correct comparison of price level changes for more than two periods close together in time. Therefore, the preparation of a CPI time series beyond a binary comparison requires some relaxation in theoretical criteria of index construction. Availability of on-going data for index weighting purposes is a further relevant factor.

Almost all official CPIs in most developed countries (particularly OECD countries) are based, as a practical compromise, on the Laspeyres concept with fixed base period commodity weights and tight control over the continuity of priced commodity specification. The lack of ongoing household expenditure survey data in market economies is a major factor behind this situation; otherwise, serious consideration of annually revised, chain-linked CPIs would doubtlessly have resulted. Individual republics, however, have inherited the ongoing household surveys of the Soviet system, and it might eventually be appropriate for these countries to adopt a more frequent

revision policy with chain-linked indices, even when the current high level of price inflation declines. Correct indication of trends in the real price level (with some degree of absolute error tolerated when very high levels prevail) is essential, and turning points and acceleration and deceleration in inflation must be reliably and promptly identified.

The question of what regional subindices or household sector subgroups are needed will arise in most countries. The methodology for addressing this issue is generally available if the necessary household expenditure survey data can be obtained.

e. Strategy of IMF technical assistance

In the short term, technical assistance provided by the Fund to the former Soviet republics should have the objectives of reviewing user needs as regards price statistics, analysis of the current index methods and coverage, and formulation of measures needed to improve the reliability and standards of price indices. These tasks should be pursued in a pragmatic way that recognizes inadequacies in data, institutional limitations, and the urgency of implementing measures to improve the reliability of price statistics. Generally, short-term recommendations on revised methods would be designed flexibly to be largely consistent with any long-term index improvement program and with international guidelines. The price statistics program of any republic should ideally cover the entire range of prices--producer, consumer, and external trade. In recognition of existing expertise in compiling measures of retail price change within the republics, and the growing acceptance of the CPI as an indicator of inflation, technical assistance from the Fund should initially be concentrated on developing consumer price indices. Producer price indices may ultimately best be pursued in the context of developing national accounts in the SNA format at constant prices, and price indices for exports and imports presume the existence of detailed and reliable customs trade statistics that are not yet regularly available at the republic level. Within these parameters, specific tasks to undertake with consumer price indices are:

(1) Evaluate the introduction of household expenditure data as the basis for CPI commodity weights.

(2) Analyze existing retail and CPI price surveys, particularly of those retail outlets operated by the private sector and of state shops selling goods for which prices are no longer controlled. This analysis must be performed to evaluate the representativeness of outlet samples and the consistency of price data collected. Studying measures to improve the coverage of service prices is also essential. While the mode of calculation of a CPI does affect that which is being measured, it is a demonstrable fact that a Laspeyres index (whether on a constant price base or chain-linked) is not unduly sensitive to commodity weighting data over periods of up to five years (at least when inflation is no more than moderate) but is very sensitive to the quality of price data. This fact suggests that individual

country solutions to index number issues should pay exceptionally close attention to obtaining good quality price data within the broad framework of international guidelines.

(3) Study the implications of the present system of changing monthly weights and how these assist or detract from statistical accommodation of further price deregulation or measurement of seasonality in price change.

(4) Formulate an action plan for republic-level Goskomstats to prepare a revised monthly CPI and, where advisable, design ad hoc CPIs measuring price change on a more frequent basis.

(5) Where necessary, conduct training sessions on the data collection and methodology of CPI compilation.

With appropriate changes, the same basic approach may be applied to the development of other price indicators, such as producer price indices and external trade indices.

Implementation of these tasks should involve review, by Fund staff and consultants, of existing work practices and the preparation of documentation on methodology and practices. The outcome of these short-term technical assistance missions should be the speedy preparation and release of improved indices designed to facilitate policy formation and monitoring (including identification of turning points) of the change to market-based economy proceeds.

In the longer term, the objective should be for countries in the region to prepare, on a regular basis, a comprehensive range of price statistics comparable to the current standards of the most developed countries. This goal would be facilitated by holding training courses and seminars in the field or at the forthcoming Vienna Institute and by providing specific ad hoc assistance to individual countries when circumstances suggest that this would be prudent. It may also be worthwhile to examine the organization, administrative status, and legal power of republican statistical offices in order to suggest changes that could enhance the ability of these organizations to monitor price changes.

III. Statistical Profiles

NOTE: Data are unrevised figures drawn primarily from published sources specified in Section IV, and may differ from the most recent official revisions appearing in Pre-Membership Economic Review Papers.

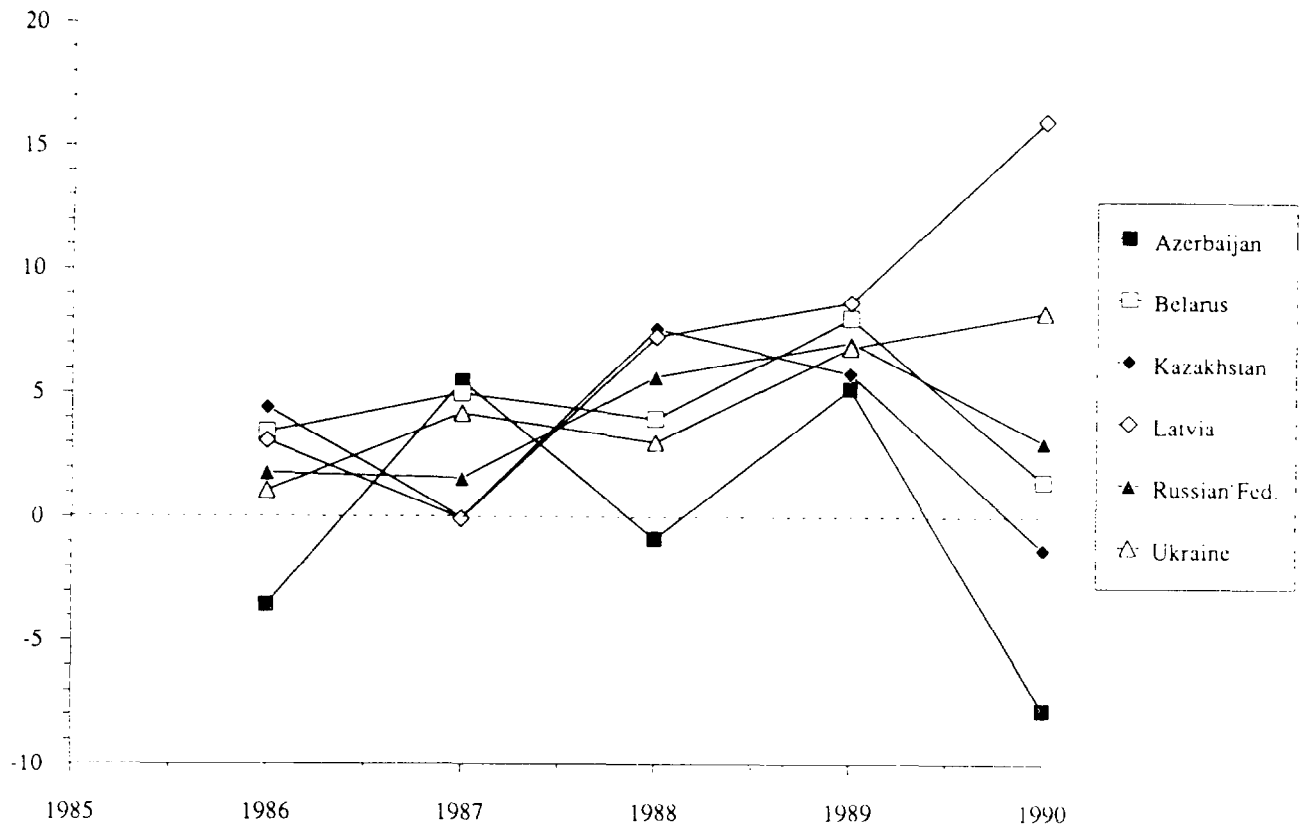
1. Summary Tables

<u>Chart</u>	<u>Page</u>
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Chart 1. Gross Domestic Product (SNA) at Current Prices
(Official Statistics)
(In Millions of Rubles)

<u>Republic</u>	<u>1980</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>
Azerbaijan				14655	14971	15421	14545	
Belarus	23550	29720						
Kazakhstan	21268	27947		37700	39200	40900	40600	
Latvia	7904	9030	9325	9463	9956	10928	11921	22305
Russian Fed.	367200	473400						
Ukraine	105684	128270	130600	136300	142200	154100	164800	

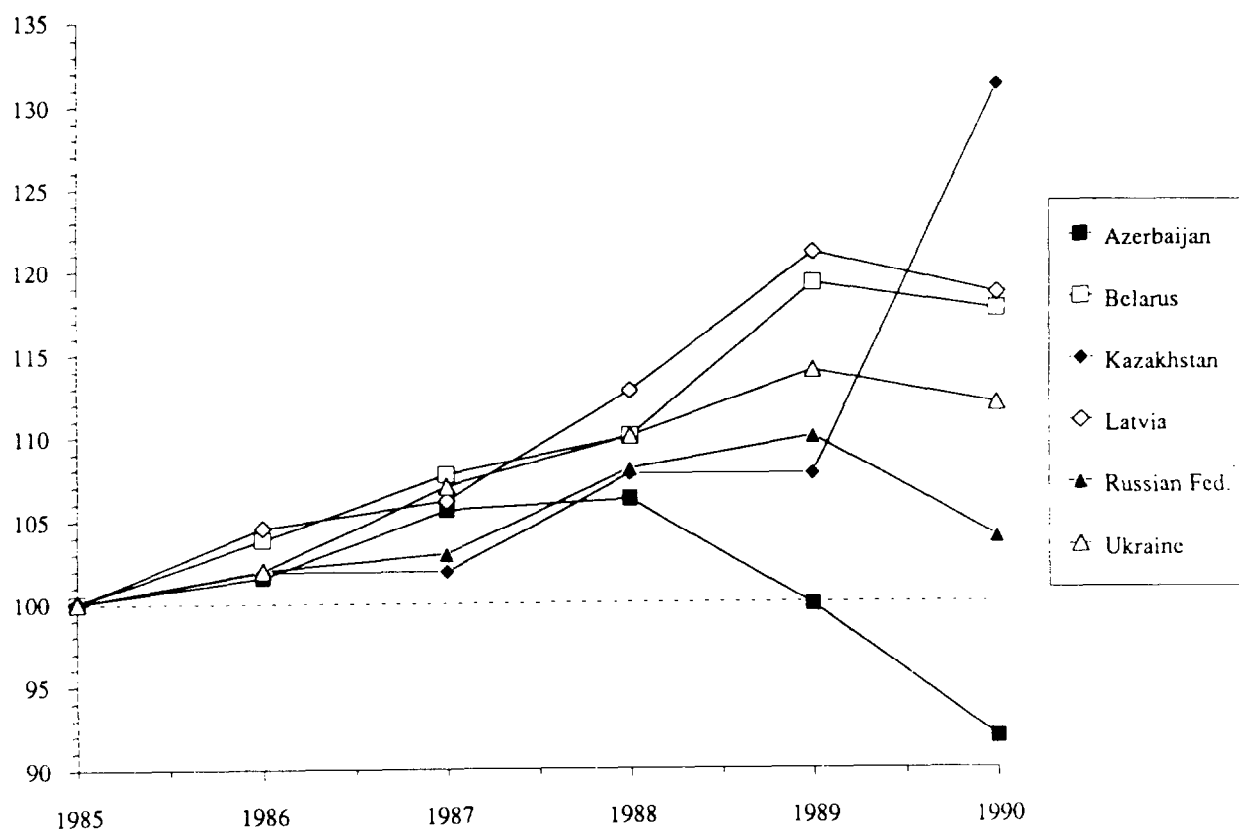
Chart 2. Net Material Product At Current Prices
(Percentage Change from Previous Year)



(In Millions of Rubles)

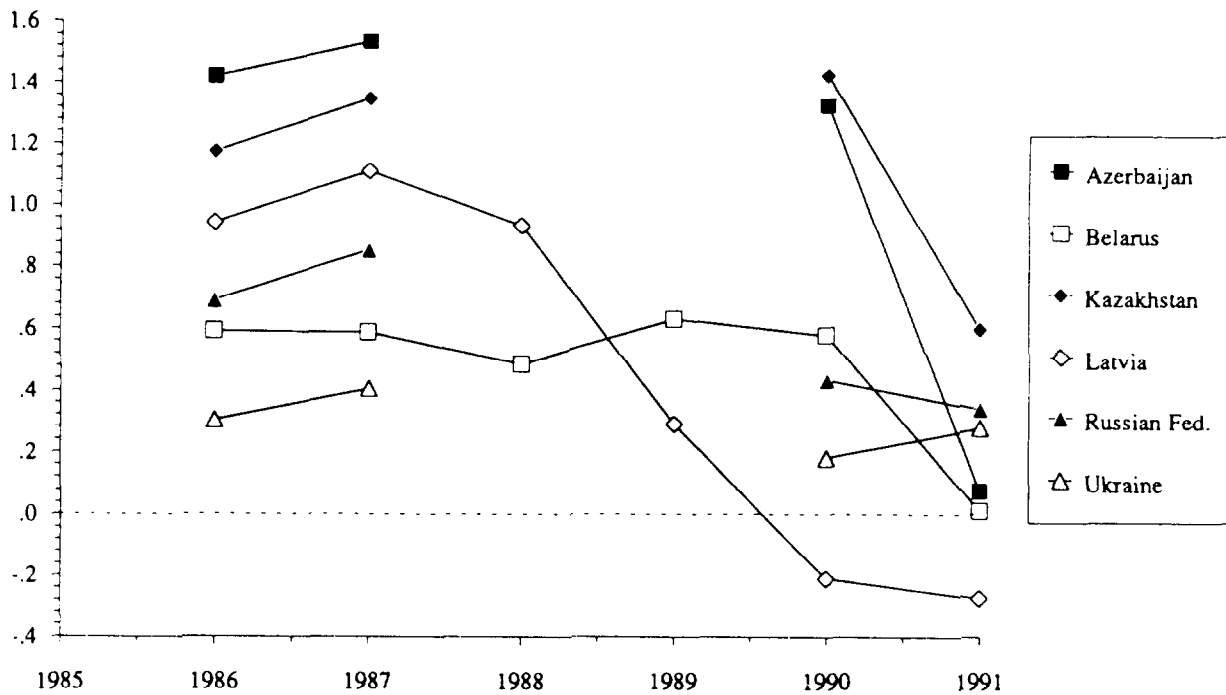
Republic	1980	1985	1986	1987	1988	1989	1990
Azerbaijan	9065	10815	10432	11005	10910	11477	10582
Belarus	18400	23200	24000	25200	26200	28300	28700
Kazakhstan	20572	23938	24994	24993	26896	28458	28088
Latvia	5790	6350	6545	6543	7021	7630	8854
Russian Fed.	274100	352700	359000	364700	385400	412700	425200
Ukraine	77000	94000	95000	99000	102000	109000	118000

Chart 3. Net Material Product At Constant Prices
(1985=100)



Republic	1980	1985	1986	1987	1988	1989	1990
Azerbaijan	79.1	100.0	101.6	105.6	106.2	99.8	91.9
Belarus	76.9	100.0	103.8	107.7	110.0	119.2	117.7
Kazakhstan	96.2	100.0	101.9	101.9	107.7	107.7	131.3
Latvia	84.8	100.0	104.6	106.2	112.8	121.1	118.7
Russian Fed.		100.0	102.0	103.0	108.0	110.0	104.0
Ukraine		100.0	102.0	107.0	110.0	114.0	112.0

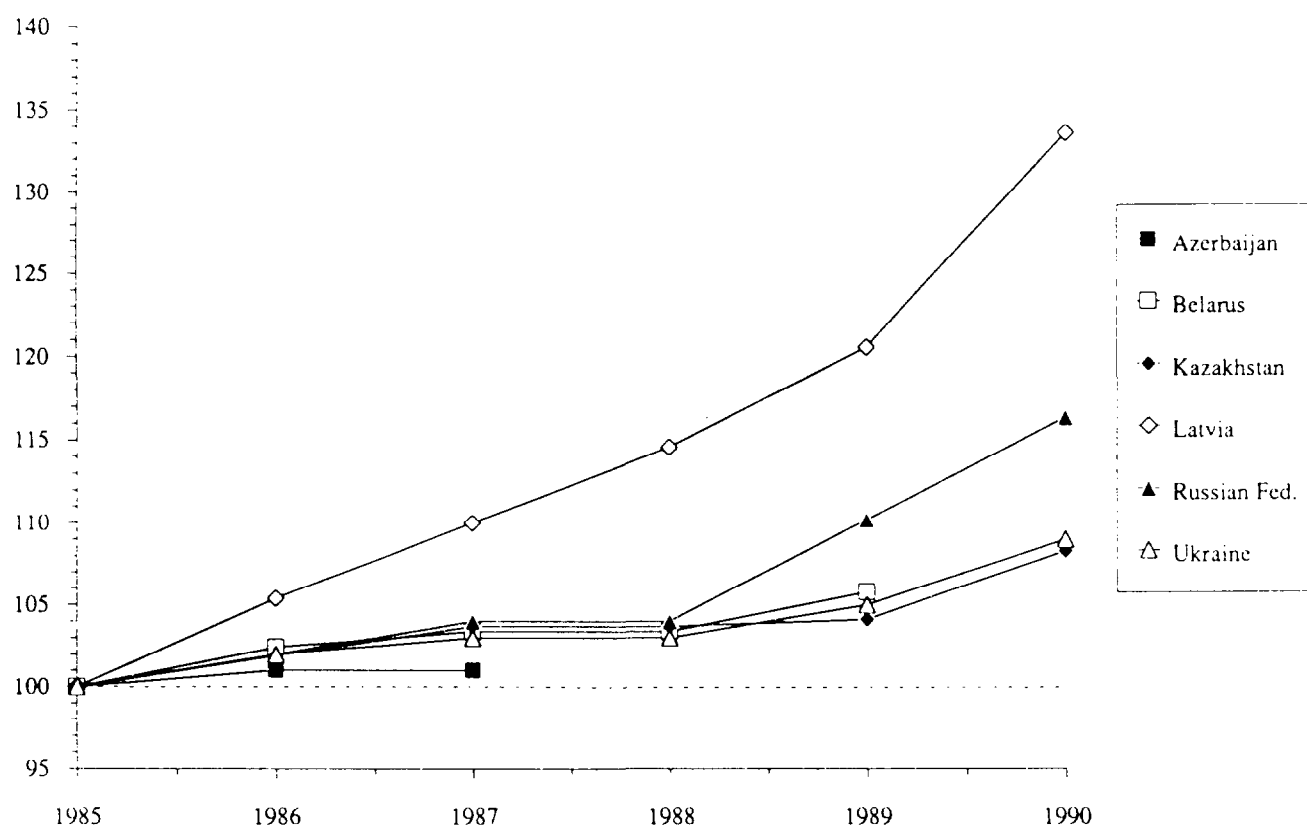
Chart 4. Population
(Percentage Change from Previous Year)



(In Thousands of Persons)

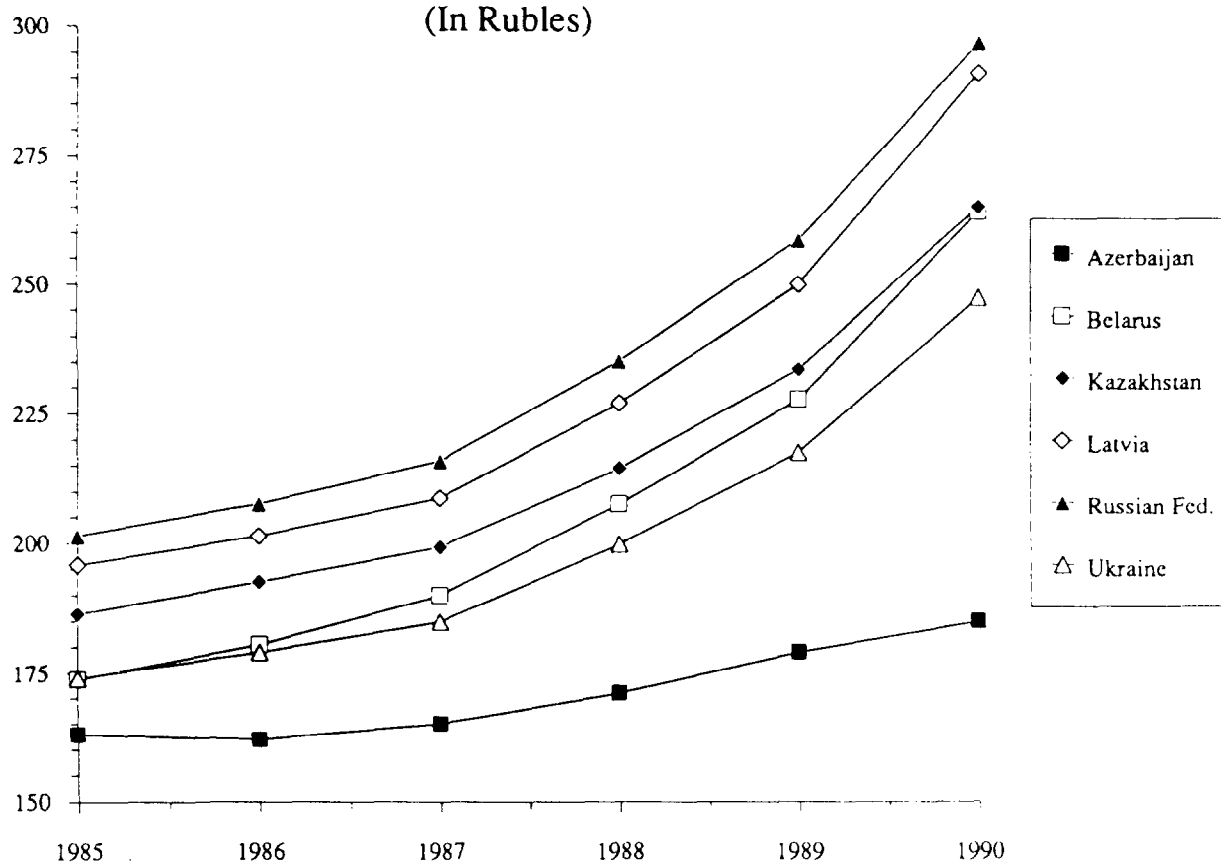
Republic	1980	1985	1986	1987	1988	1989	1990	1991
Azerbaijan	6112	6614	6708	6811		7038	7131	7137
Belarus	9622	9969	10028	10087	10136	10200	10259	10260
Kazakhstan	14858	15842	16028	16244		16465	16700	16800
Latvia	2515	2588	2612	2641	2666	2674	2668	2661
Russian Fed.	138365	143090	144080	145311		147400	148041	148543
Ukraine	49953	50840	50994	51201		51707	51800	51944

Chart 5. Retail Price Index
(1985=100)



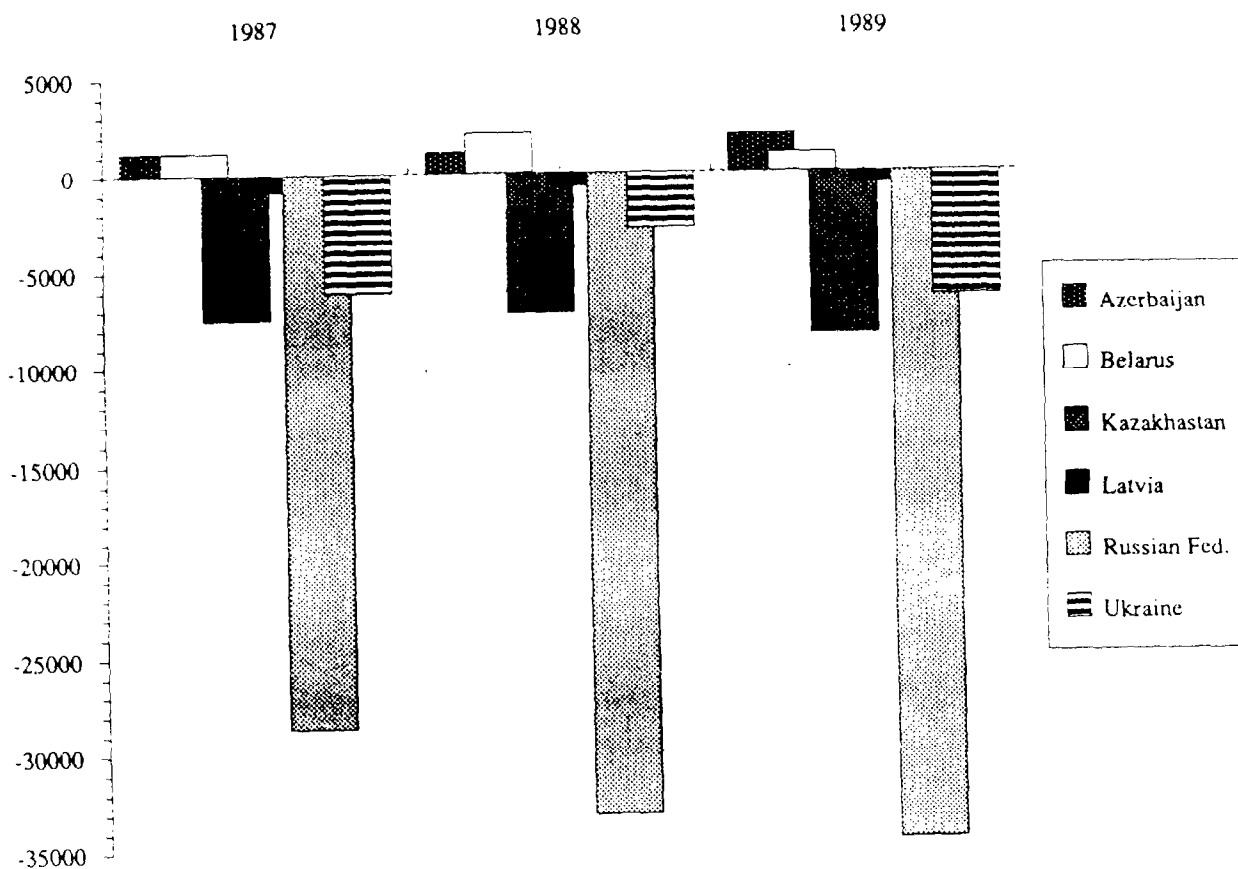
Republic	1980	1985	1986	1987	1988	1989	1990
Azerbaijan	96.0	100.0	101.0	101.0			
Belarus	95.1	100.0	102.4	103.4	103.4	105.8	
Kazakhstan	94.9	100.0	101.9	103.7	103.7	104.1	108.3
Latvia		100.0	105.4	110.0	114.6	120.6	133.7
Russian Fed.	95.2	100.0	102.0	104.0	104.0	110.2	116.4
Ukraine	96.0	100.0	102.0	103.0	103.0	105.0	109.0

Chart 6. Average Monthly Wages,
State Sector Overall
(In Rubles)



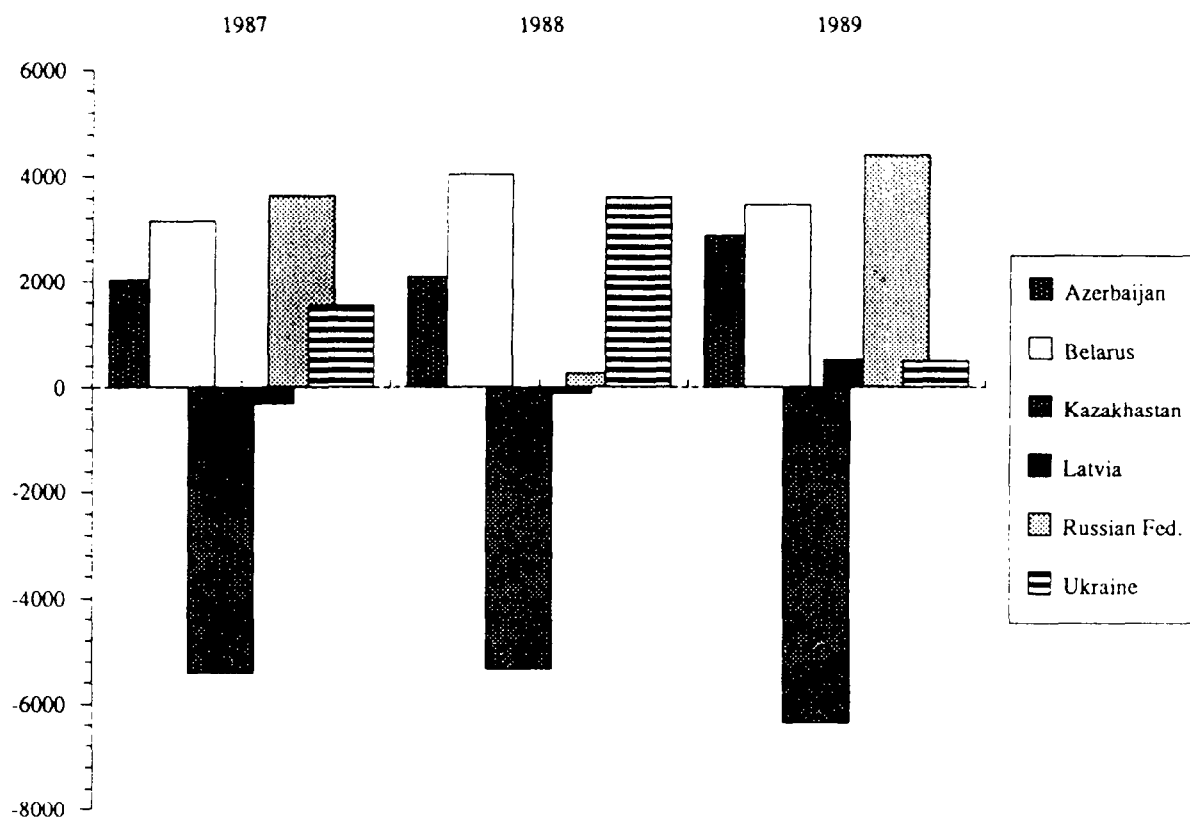
Republic	1980	1985	1986	1987	1988	1989	1990
Azerbaijan	148.0	163.0	162.0	165.0	171.0	179.0	185.0
Byelarus	150.0	173.7	180.5	190.0	207.6	227.8	264.1
Kazakhstan	167.1	186.5	192.7	199.3	214.6	233.6	265.0
Latvia	171.4	195.9	201.4	208.9	227.0	249.9	290.9
Russian Fed.	177.7	201.4	207.8	216.1	235.2	258.6	296.8
Ukraine	155.1	173.9	179.0	185.0	199.8	217.7	247.3

Chart 7. Balance — Total Trade
(At Domestic Prices, in Millions of Rubles)



Republic	Exports			Imports			Balance		
	1987	1988	1989	1987	1988	1989	1987	1988	1989
Azerbaijan	6762	6782	7122	5553	5672	5189	1209	1110	1933
Belarus	18864	19917	20301	17707	17844	19347	1157	2073	954
Kazakhstan	8811	9165	9094	16352	16420	17569	-7541	-7255	-8475
Latvia	4693	4896	5413	5594	5591	6030	-901	-695	-617
Russian Fed.	102710	102538	109606	131470	135865	144266	-28760	-33327	-34660
Ukraine	43998	46935	48062	50180	49862	54540	-6182	-2927	-6478

Chart 8. Balance — Inter-Republic Trade
(At Domestic Prices, in Millions of Rubles)



Republic	Exports			Imports			Balance		
	1987	1988	1989	1987	1988	1989	1987	1988	1989
Azerbaijan	6291	6358	6675	4251	4258	3794	2040	2100	2881
Belarus	17228	18222	18310	14083	14171	14834	3145	4051	3476
Kazakhstan	8337	8337	8201	13768	13686	14571	-5431	-5349	-6370
Latvia	4313	4515	5039	4626	4633	4520	-313	-118	519
Russian Fed.	70854	69224	75067	67206	68964	70668	3648	260	4399
Ukraine	37729	40055	40467	36169	36432	39971	1560	3623	496

2. Tables for Individual Republics

<u>Republic</u>	<u>Page</u>
Azerbaijan	28
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Russian Federation	36
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I. Main Real Sector Indicators: Azerbaijan

90R		1980	1985	1986	1987	1988	1989	1990
<hr/>								
	NATIONAL ACCOUNTS (SNA)							
	(At current prices, million rubles)							
99B.ZN...AFD14	Gross Domestic Product (GDP)				14655	14971	15421	14545
97.A.ZN...AFD14	Industry				5643	5584	5737	5396
97.B.ZN...AFD14	Agriculture				3429	3458	3501	3389
97.C.ZN...AFD14	Construction				1612	1647	1372	1207
97.D.ZN...AFD14	Transport and Communications				645	659	632	582
97.E.ZN...AFD14	Trade, Supply, and Procurement				791	838	1218	931
97.F.ZN...AFD14	Services				2535	2785	2961	3040
<hr/>								
	NATIONAL ACCOUNTS (SNA)							
	(Constant price indices, 1987=100)							
99B.PZN...AFD14	GDP Index				100.0	102.8	97.5	91.8
<hr/>								
	NATIONAL ACCOUNTS (MPS)							
	(At current prices, million rubles)							
99M.ZN...AFD14	National Income Produced (NMP)	9065	10815	10432	11005	10910	11477	10582
97MA.ZN...AFD14	Industry	4061	4499	4214	4688	4593	4958	3725
97MB.ZN...AFD14	Agriculture	2538	3439	3223	3269	3295	3524	4011
97MC.ZN...AFD14	Construction	825	1276	1408	1464	1451	1343	1259
97MD.ZN...AFD14	Transport & Communications	281	357	386	363	360	344	561
97ME.ZN...AFD14	Trade, Supply and Other	1360	1244	1200	1222	1211	1308	1026
99ME.ZN...AFD14	National Income Expended	6835	9010	8625	9130	9214	8390	10335
92M.ZN...AFD14	Consumption	4964	6187	6377	6691	7049	7283	8006
96MF.ZN...AFD14	Private Consumption							
91MA.ZN...AFD14	Public Institution Expenses							
91MB.ZN...AFD14	Science & Management Expenses							
93M.ZN...AFD14	Accumulation	1871	2823	2248	2439	2165	1107	2329
93ME.ZN...AFD14	Accumulation of Fixed Assets							
93MI.ZN...AFD14	Stockbuilding							
90MN.ZN...AFD14	Net exports and losses	2230	1805	1807	1875	1696	3087	247
<hr/>								
	NATIONAL ACCOUNTS (MPS)							
	(Constant price indices, 1980=100)							
99M.PZN...AFD14	National Income Produced (NMP)	100.0	126.5	128.5	133.6	134.4	126.3	116.2
97MAPZN...AFD14	Industry	100.0	128.5	146.7	157.1			
97MBPZN...AFD14	Agriculture	100.0	108.4	100.9	104.3			
97MCPZN...AFD14	Construction	100.0	139.4	148.7	159.6			
97MDPZN...AFD14	Transport & Communications	100.0	119.6	129.7	122.1			
97MEPZN...AFD14	Trade, Supply and Other	100.0	140.5	133.3	130.7			
99MEPZN...AFD14	National Income Expended							
92M.PZN...AFD14	Consumption							
96MFPZN...AFD14	Private Consumption							
91MAPZN...AFD14	Public Institution Expenses							
91MBPZN...AFD14	Science & Management Expenses							
93M.PZN...AFD14	Accumulation							
93MEPZN...AFD14	Accumulation of Fixed Assets							
93MIPZN...AFD14	Stockbuilding							
90MNPZN...AFD14	Net exports and losses							

II. Main Real Sector Indicators: Azerbaijan

60R		1980	1985	1986	1987	1988	1989	1990	1991

	POPULATION								
992..ZN...AAD19	Population (thousands)	6112	6614	6708	6811		7038	7131	7137
	PRICES (1985=100)								
64...ZS...AAD16	Retail Price Index	96	100	101	101				
6415.ZS...AAD16	Food products	95	100	103	106				
6415NZS...AAD16	Non-food products	96	100	99	98				
64C..ZS...AAD16	Kolkhoz Market Price Index								
	EARNINGS								
	Average Monthly Wages (in rubles)								
65...SZS...AAD10	Average Wage: State Sector Overall	148	163	162	165	171	179	185	
65EYSZS...AAD10	Average Wage: State Industry	165	182	184	188	197	209	212	
6501SZS...AAD10	Average Wage: State Agriculture	139	159	142	133	134	140	142	
	PRODUCTION								
	(constant price indices, 1985=100)								
66...ZS...AAD16	Overall Industrial Production	76.9	100.0	98.0	101.6	105.1	105.8	99.1	
6640.ZS...AAD16	Oil and gas	99.6	100.0	103.1	104.6	102.7	93.0	84.2	
6629.ZS...AAD16	Machinery and metal-working	62.9	100.0	109.3	118.3	123.2	124.6	116.1	
66..LZS...AAD16	Light industry	87.0	100.0	101.6	101.7	100.5	102.0	90.5	
6615.ZS...AAD16	Food products	68.5	100.0	80.6	84.0	95.5	103.0	103.4	
6601.ZS...AAD16	Overall Agricultural Production	86.3	100.0	98.0	97.0	93.9	85.6	83.6	
	EMPLOYMENT								
	(In thousands of persons)								
67...ZS...AAD19	Total Employment, State & Kolkhoz	2085	2357	2420	2441	2419	2412	2482	
67..SZS...AAD19	Total State Employment	1802.3	2058.2	2101.7	2127.4	2114.5	2103.6	2156.6	
67EYSZS...AAD19	Industrial Employment, State	400.1	446.3	458.1	456.3	453.4	438	437	
6701SZS...AAD19	Agricultural Employment, State	327.3	380.7	391.5	385.8	372.2	363	370	
67A..ZS...AAD19	Total Kolkhoz Employment	283	299	318	314	304	308	325	
	INTERNATIONAL TRADE								
	(In Millions of Rubles								
	At Domestic Prices)								
70...ZS...AFD22	Exports				6,762.4	6,782.0	7,122.0		
70A..ZS...AFD22	Exports, Inter-Republic				6,290.8	6,357.5	6,674.9		
70B..ZS...AAD22	Exports, Rest of World				471.6	424.5	448.0		
71...ZS...AAD22	Imports				5,553.3	5,672.2	5,189.0		
71A..ZS...AAD22	Imports, Inter-Republic				4,250.9	4,258.2	3,794.3		
71B..ZS...AAD22	Imports, Rest of World				1,302.4	1,414.0	1,395.5		
	(In Millions of Rubles								
	At World Prices)								
70..WZS...AAD22	Exports				5,113.0	4,600.0	4,990.0		
70A.WZS...AAD22	Exports, Inter-Republic				4,796.0		4,589.9		
70B.WZS...AAD22	Exports, Rest of World				317.0		400.6		
71..WZS...AAD22	Imports				5,161.0	5,100.0	4,234.0		
71A.WZS...AAD22	Imports, Inter-Republic				4,585.0		3,545.0		
71B.WZS...AAD22	Imports, Rest of World				576.0		689.1		

I. Main Real Sector Indicators: Belarus

90R		1980	1985	1986	1987	1988	1989	1990
<hr/>								
	NATIONAL ACCOUNTS (SNA)							
	(At current prices, million rubles)							
99B..ZN...AFD14	Gross Domestic Product (GDP)	23550	29720					
	NATIONAL ACCOUNTS (MPS)							
	(At current prices, million rubles)							
99M..ZN...AFD14	National Income Produced (NMP)	18400	23200	24000	25200	26200	28300	28700
97MA.ZN...AFD14	Industry	9500	9400	10100	11100	11200	12600	13500
97MB.ZN...AFD14	Agriculture	3400	7000	6800	6800	7300	7400	6400
97MC.ZN...AFD14	Construction	1600	2100	2400	2600	2700	3100	3200
97MD.ZN...AFD14	Transport & Communications	600	900	1000	1000	1100	1200	1200
97ME.ZN...AFD14	Trade, Supply and Other	3300	3800	3700	3700	3900	4000	4400
99ME.ZN...AFD14	National Income Expended	15700	19700	21300	22000	22100	25200	26500
92M..ZN...AFD14	Consumption	12600	15400	15700	16500	17000	18100	20600
96MF.ZN...AFD14	Private Consumption							
91MA.ZN...AFD14	Public Institution Expenses							
91MB.ZN...AFD14	Science & Management Expenses							
93M..ZN...AFD14	Accumulation	3100	4300	5600	5500	5100	7100	5900
93ME.ZN...AFD14	Accumulation of Fixed Assets							
93MI.ZN...AFD14	Stockbuilding							
90MN.ZN...AFD14	Net exports and losses	2700	3500	2700	3200	4100	3100	2200
	NATIONAL ACCOUNTS (MPS)							
	(Constant price indices, 1980=100)							
99M.PZN...AFD14	National Income Produced (NMP)	100.0	130.0	136.0	141.0	144.0	155.0	153.0
97MAPZN...AFD14	Industry							
97MBPZN...AFD14	Agriculture							
97MCPZN...AFD14	Construction							
97MDPZN...AFD14	Transport & Communications							
97MEPZN...AFD14	Trade, Supply and Other							
99MEPZN...AFD14	National Income Expended	100.0	130.0	135.0	140.0	143.0	155.0	153.0
92M.PZN...AFD14	Consumption							
96MFPZN...AFD14	Private Consumption							
91MAPZN...AFD14	Public Institution Expenses							
91MBPZN...AFD14	Science & Management Expenses							
93M.PZN...AFD14	Accumulation							
93MEPZN...AFD14	Accumulation of Fixed Assets							
93MIPZN...AFD14	Stockbuilding							
90MNPZN...AFD14	Net exports and losses							

II. Main Real Sector Indicators: Belarus

60R		1980	1985	1986	1987	1988	1989	1990	1991

	POPULATION								
99Z..ZN...AAD19	Population (thousands)	9622	9969	10028	10087	10136	10200	10259	10260
	PRICES (1985=100)								
64...ZS...AAD16	Retail Price Index	95.1	100.0	102.4	103.4	103.4	105.8		
6415.ZS...AAD16	Food products	91.6	100.0	106.3	110.2	110.3	111.5		
6415NZS...AAD16	Non-food products	98.8	100.0	99.1	98.0	98.0	101.0		
64C..ZS...AAD16	Kolkhoz Market Price Index	90.0	100.0	97.0	104.0	118.0	101.0	136.0	
	EARNINGS								
	Average Monthly Wages (in rubles)								
65..SZS...AAD10	Average Wage: State Sector Overall	150.0	173.7	180.5	190.0	207.6	227.8	264.1	
65EYSZS...AAD10	Average Wage: State Industry	165.8	191.0	196.8	204.3	225.6	246.3	279.1	
6501.ZS...AAD10	Average Wage: State Agriculture	122.0	163.5	176.7	188.0	201.9	225.1	258.6	
	PRODUCTION								
	(Constant price indices, 1985=100)								
66...ZS...AAD16	Overall Industrial Production	77.5	100.0	107.0	114.0	121.0	127.0	129.0	
6640.ZS...AAD16	Machinery and metal-working	66.2	100.0	110.0	119.0	129.0	138.0	143.0	
6624.ZS...AAD16	Chemicals	76.9	100.0	108.0	115.0	123.0	127.0	128.0	
66..LZS...AAD16	Light industry	84.0	100.0	103.0	106.0	111.0	114.0	115.0	
66..OZS...AAD16	Other	90.9	100.0	95.0	97.0	99.3	105.0	106.0	
6601.ZS...AAD16	Overall Agricultural Production	78.9	100.0	106.9	107.0	99.3	108.1	101.7	
	EMPLOYMENT								
	(In thousands of persons)								
67...ZS...AAD19	Total Employment, State & Kolkhoz	4808	4987	5002	5010	4983	4966	4851	
67..SZS...AAD19	Total State Employment	4046	4271	4302	4326	4320	4310	4235	
67EYSZS...AAD19	Industrial Employment, State								
67A.SZS...AAD19	Agricultural Employment, State								
67A..ZS...AAD19	Total Kolkhoz Employment	762	716	700	684	663	656	616	
	INTERNATIONAL TRADE								
	(In Millions of Rubles								
	At Domestic Prices)								
70...ZS...AFD22	Exports				18864.1	19917.2	20301.0		
70A..ZS...AFD22	Exports, Inter-Republic				17227.8	18221.7	18310.4		
70B..ZS...AFD22	Exports, Rest of World				1636.3	1695.5	1991.1		
71...ZS...AFD22	Imports				17707.1	17843.8	19347.0		
71A..ZS...AFD22	Imports, Inter-Republic				14082.9	14171.4	14834.4		
71B..ZS...AFD22	Imports, Rest of World				3624.2	3672.4	4513.3		
	(In Millions of Rubles								
	At World Prices)								
70..WZS...AAD22	Exports				16469.0	16400.0	18749.0		
70A.WZS...AAD22	Exports, Inter-Republic				14489.0		16546.6		
70B.WZS...AAD22	Exports, Rest of World				1980.0		2203.1		
71..WZS...AAD22	Imports				18961.0	18500.0	20230.0		
71A.WZS...AAD22	Imports, Inter-Republic				16735.0		17359.0		
71B.WZS...AAD22	Imports, Rest of World				2226.0		2871.3		

I. Main Real Sector Indicators: Kazakhstan

90R		1980	1985	1986	1987	1988	1989	1990

	NATIONAL ACCOUNTS (SNA) (At current prices, million rubles)							
99B..ZN...AFD14	Gross Domestic Product (GDP)	21268	27947		37700	39200	40900	40600
	NATIONAL ACCOUNTS (MPS) (At current prices, million rubles)							
99M..ZN...AFD14	National Income Produced (NMP)	20572	23938	24994	24993	26896	28458	28088
97MA.ZN...AFD14	Industry	6672	7627	6680	6915	6762	5659	5278
97MB.ZN...AFD14	Agriculture	5327	6797	8262	8044	9189	10435	10926
97MC.ZN...AFD14	Construction	3087	3727	4192	4345	4843	5618	5186
97MD.ZN...AFD14	Transport & Communications	1775	2315	2349	2436	2605	2634	2516
97ME.ZN...AFD14	Trade, Supply and Other	3711	3472	3511	3253	3497	4112	4182
99ME.ZN...AFD14	National Income Expended	23692	31463	30916	30787	32344	34561	34842.8
92M..ZN...AFD14	Consumption	17490	21548	21804	22480	23880	25833	26786.9
96MF.ZN...AFD14	Private Consumption	15100	18500	18700	19100	20400	22200	
91MA.ZN...AFD14	Public Institution Expenses	1800	2300	2400	2600	2700	2800	
91MB.ZN...AFD14	Science & Management Expenses	600	800	700	800	800	900	
93M..ZN...AFD14	Accumulation	6202	9915	9112	8307	8464	8728	8055.9
93ME.ZN...AFD14	Accumulation of Fixed Assets	4200	5300	5700	6000	5100	5300	
93MI.ZN...AFD14	Stockbuilding	2000	4600	3400	2300	3300	3400	
90MN.ZN...AFD14	Net exports and losses	-3120	-7525	-5922	-5794	-5448	-6103	-6754.8
	NATIONAL ACCOUNTS (MPS) (Constant price indices, 1980=100)							
99M.PZN...AFD14	National Income Produced (NMP)	100.0	104.0	106.0	106.0	112.0	112.0	136.5
97MAPZN...AFD14	Industry	100.0	112.0	102.0	102.0	103.0	104.5	79.1
97MBPZN...AFD14	Agriculture	100.0	68.0	79.0	75.0	81.0	72.0	205.1
97MCPZN...AFD14	Construction	100.0	105.0	105.0	117.0	134.0	142.0	168.0
97MDPZN...AFD14	Transport & Communications	100.0	117.0	119.0	123.0	132.0	132.0	141.7
97MEPZN...AFD14	Trade, Supply and Other	100.0	128.0	126.0	125.0	122.0	132.0	112.7
99MEPZN...AFD14	National Income Expended							
92M.PZN...AFD14	Consumption							
96MFPZN...AFD14	Private Consumption							
91MAPZN...AFD14	Public Institution Expenses							
91MBPZN...AFD14	Science & Management Expenses							
93M.PZN...AFD14	Accumulation							
93MEPZN...AFD14	Accumulation of Fixed Assets							
93MIPZN...AFD14	Stockbuilding							
90MNPZN...AFD14	Net exports and losses							

II. Main Real Sector Indicators: Kazakhstan

60R		1980	1985	1986	1987	1988	1989	1990	1991

	POPULATION								
99Z..ZN...AAD19	Population (thousands)	14858	15842	16028	16244		16465	16700	16800
	PRICES (1985=100)								
64...ZS...AAD16	Retail Price Index	94.9	100.0	101.9	103.7	103.7	104.1	108.3	
6415.ZS...AAD16	Food products	90.7	100.0	105.6	111.5	111.6	112.2	114.6	
6415NZS...AAD16	Non-food products	98.7	100.0	99.1	98.0	98.0	98.3	103.5	
64C..ZS...AAD16	Kolkhoz Market Price Index	72.9	100.0	98.4	96.5	117.1	113.0	132.7	
	EARNINGS								
	Average Monthly Wages (in rubles)								
65..SZS...AAD10	Average Wage: State Sector Overall	167.1	186.5	192.7	199.3	214.6	233.6	265.0	
65EYSZS...AAD10	Average Wage: State Industry	187.6	212.4	218.0	223.5	244.6	266.6	296.1	
6501SZS...AAD10	Average Wage: State Agriculture	167.0	197.5	210.9	217.2	225.3	243.8	292.9	
	PRODUCTION								
	(Constant price indices, 1985=100)								
66...ZS...AAD16	Overall Industrial Production	85.0	100.0	105.0	110.0	114.0	117.0	116.0	
6640.ZS...AAD16	Fuel and electricity	81.0	100.0	106.0	111.0	115.0	117.0	114.0	
6627.ZS...AAD16	Metallurgy	93.0	100.0	104.0	106.0	111.0	112.0	108.0	
6629.ZS...AAD16	Machinery and metal-working	76.0	100.0	106.0	109.0	111.0	114.0	111.0	
66..LZS...AAD16	Light industry	91.0	100.0	102.0	105.0	110.0	115.0	116.0	
6615.ZS...AAD16	Food products	91.0	100.0	107.0	114.0	117.0	123.0	123.0	
6601.ZS...AAD16	Overall Agricultural Production	102.2	100.0	112.6	109.7	114.5	106.1	113.3	
	EMPLOYMENT								
	(In thousands of persons)								
67...ZS...AAD19	Total Employment, State & Kolkhoz	6320	6779	6838	6860	6829	6755	6701	
67..SZS...AAD19	Total State Employment	6043	6500	6562	6586	6565	6501	6434	
67EYSZS...AAD19	Industrial Employment, State	1304	1403	1413	1419	1417	1393	1359	
6701SZS...AAD19	Agricultural Employment, State	1187	1290	1285	1288	1274	1208	1196	
67A..ZS...AAD19	Total Kolkhoz Employment	277	279	276	274	264	254	267	
	INTERNATIONAL TRADE								
	(In Millions of Rubles								
	At Domestic Prices)								
70...ZS...AFD22	Exports				8811.1	9164.8	9094.0		
70A..ZS...AFD22	Exports, Inter-Republic				8337.3	8337.1	8201.2		
70B..ZS...AFD22	Exports, Rest of World				473.8	827.7	892.8		
71...ZS...AFD22	Imports				16352.0	16420.1	17569.0		
71A..ZS...AFD22	Imports, Inter-Republic				13768.3	13686.4	14570.7		
71B..ZS...AFD22	Imports, Rest of World				2583.7	2733.7	2998.3		
	(In Millions of Rubles								
	At World Prices)								
70..WZS...AAD22	Exports				8494.0	9000.0	9405.0		
70A.WZS...AAD22	Exports, Inter-Republic				8014.0		8409.8		
70B.WZS...AAD22	Exports, Rest of World				480.0		996.1		
71..WZS...AAD22	Imports				16147.0	15600.0	16631.0		
71A.WZS...AAD22	Imports, Inter-Republic				14599.0		15075.5		
71B.WZS...AAD22	Imports, Rest of World				1548.0		1555.8		

I. Main Real Sector Indicators: Latvia

90R		1980	1985	1986	1987	1988	1989	1990	1991
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	National Accounts (SNA)								
	At current prices								
	(In Millions of Rubles)								
94199B...ZN...AFD12	Gross Domestic Product	7904	9030	9325	9463	9956	10928	11921	22305
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	National Accounts (MPS)								
	At current prices								
	(In Millions of Rubles)								
94199M..ZN...AFD12	National Income Produced (NMP)	5790	6350	6545	6543	7021	7630	8854	
94197MA.ZN...AFD12	Industry	3254	2855	3109	3241	3099	3436	4534	
94197MB.ZN...AFD12	Agriculture	697	1629	1559	1372	1802	1805	1931	
94197MC.ZN...AFD12	Construction	412	548	513	559	640	744	717	
94197MD.ZN...AFD12	Transport & Communications	321	459	466	475	526	551	668	
94197ME.ZN...AFD12	Trade, and Others	1106	859	898	896	954	1094	1004	
94199ME.ZN...AFD12	National Income Expended	5272	6743	7015	7162	7453	7936	9120	
94192M..ZN...AFD12	Consumption	4540	5222	5367	5511	5803	6109	7215	
94196MF.ZN...AFD12	Personal Consumption	4045	4572	4684	4779	5044	5323	6369	
94191MA.ZN...AFD12	Social Consumption	495	650	683	732	759	786	846	
94193M..ZN...AFD12	Accumulation	732	1521	1648	1651	1650	1827	1905	
94193ME.ZN...AFD12	Accumulation of Fixed Assets	492	864	933	1007	800	803	799	
94193MI.ZN...AFD12	Others	240	657	715	644	850	1024	1106	
94190MN.ZN...AFD12	Net exports and losses	518	-393	-470	-619	-432	-306	-266	
94190MA.ZN...AFD12	Foreign Balance	480	-462	-532	-689	-498	-379	-415	
94190MB.ZN...AFD12	Losses on Fixed Capital and Stock	38	69	62	70	66	73	149	
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	National Accounts (MPS)								
	At constant 1987 Prices								
	(In Millions of Rubles)								
94199M.PZN...AFD12	National Income Produced (NMP)	5229	6163	6446	6543	6949	7463	7314	
94197MAPZN...AFD12	Industry	2569	2863	3055	3241	3458	3652	3922	
94197MBPZN...AFD12	Agriculture	1126	1388	1474	1372	1369	1440	1193	
94197MCPZN...AFD12	Construction	471	561	560	559	647	723	738	
94197MDPZN...AFD12	Transport & Communications	359	455	463	475	524	537	473	
94197MEPZN...AFD12	Trade and Others	667	893	897	896	947	1113	1063	
94199MEPZN...AFD12	National Income Expended	5707	6816	7050	7162	7331	7367	7463	
94192M.PZN...AFD12	Consumption	4860	5355	5414	5511	5776	5914	6257	
94196MFPZN...AFD12	Personal Consumption	4364	4708	4732	4779	5018	5143	5478	
94191MAPZN...AFD12	Social Consumption	506	649	682	732	757	773	781	
94193M.PZN...AFD12	Accumulation	847	1461	1636	1651	1555	1453	1206	
94193MEPZN...AFD12	Accumulation of Fixed Assets	657	911	974	1007	775	616	564	
94193MIPZN...AFD12	Others	225	552	661	644	767	816	622	
94190MNPZN...AFD12	Net exports and losses	-478	-653	-604	-619	-382	96	-149	
94190MAPZN...AFD12	Foreign Balance	-527	-718	-665	-689	-442	43	-243	
94190MBPZN...AFD12	Losses on Fixed Capital and Stock	49	65	61	70	60	53	94	

II. Main Real Sector Indicators: Latvia

60R		1980	1981	1982	1983	1984	1985	1986

	POPULATION							
99Z..ZN...AAD19	Population (thousands)	2514.6	2524.2	2538.0	2554.0	2570.0	2587.7	2612.1
	PRICES (1985=100)							
64...ZS...AAD16	Retail Price Index						100.0	105.4
6415.ZS...AAD16	Food Products						100.0	108.9
6415NZS...AAD16	Non-food Products						100.0	102.5
64...ZS...AAD16	Retail Price Index: List Prices	95.0	96.1	99.7	100.2	99.5	100.0	102.6
64LA.ZS...AAD16	Food Products	91.4	92.9	97.4	97.9	97.8	100.0	106.9
64LB.ZS...AAD16	Non-food Products	98.1	99.1	101.8	102.2	101.0	100.0	99.2
64C..ZS...AAD16	Kolkhoz Market Price Index	86.0					100.0	
6301.ZS...AAD16	Agriculture Procurement Price Index						100.0	90.0
	EARNINGS							
	Average Monthly Wages (in rubles)							
65..SZS...AAD10	Average Wage: State Sector Overall	171.4	175.0	180.4	183.6	190.3	195.9	201.4
65EYSZS...AAD10	Average Wage: State Industry	186.3	189.8	195.7	198.2	205.6	212.1	217.5
6501SZS...AAD10	Average Wage: State Agriculture	157.0	166.8	174.1	185.7	203.6	214.2	224.4
	PRODUCTION							
	At Constant Prices (Millions of Rubles)							
66...YS...AAD12	Industrial Production (1982 Prices)	7905.7	8182.3	8410.1	8642.3	9025.8	9334.8	9664.9
6624.ZS...AFD12	Chemical and Petrochemical	490.0	530.2	573.0	586.5	629.3	674.5	711.4
6628.ZS...AFD12	Mechanical Engineering and Metal Working	1852.0	1992.8	2100.2	2193.7	2348.3	2481.8	2628.6
66269ZS...AFD12	Building Materials	278.2	281.6	279.5	289.0	305.0	301.4	318.4
6620.ZS...AFD12	Forest, Timber, Cellulose and Paper	430.2	460.7	493.1	521.2	540.2	548.1	572.4
6617.ZS...AFD12	Textile	1335.2	1351.2	1361.7	1358.3	1349.3	1345.5	1365.9
6615.ZS...AFD12	Food Industry	2112.5	2118.8	2149.7	2217.2	2311.6	2365.8	2414.4
6601.ZS...AFD12	Agricult. Production (1983 Prices)	2398.5	2514.3	2547.5	2776.5	2971.9	2878.0	3035.3
	EMPLOYMENT							
	(In Thousands of Persons)							
67...ZS...AAD10	Total Employment, State & Kolkhoz	1335	1340	1347	1356	1364	1369	1376
67..SZS...AAD10	Total State Employment	1202	1207	1214	1221	1227	1231	1237
67EYSZS...AFD10	Industrial Employment, State	414	414	416	417	417	416	414
67A.SZS...AAD19	Agricultural Employment, State	110	112	113	114	116	118	119
67A..ZS...AFD10	Total Kolkhoz Employment	133	133	133	135	137	138	139
	INTERNATIONAL TRADE							
	(In Millions of Rubles At Domestic Prices)							
70...ZS...AFD22	Exports							
70A..ZS...AFD22	Exports, Inter-Republic							
70B..ZS...AFD22	Exports, Rest of World							
71...ZS...AFD22	Imports							
71A..ZS...AFD22	Imports, Inter-Republic							
71B..ZS...AFD22	Imports, Rest of World							
	(In Millions of Rubles At World Prices)							
70..WZS...AFD22	Exports							
70A.WZS...AFD22	Exports, Inter-Republic							
70B.WZS...AFD22	Exports, Rest of World							
71..WZS...AFD22	Imports							
71A.WZS...AFD22	Imports, Inter-Republic							
71B.WZS...AFD22	Imports, Rest of World							

1. Main Real Sector Indicators: Russian Federation

90R		1980	1985	1986	1987	1988	1989	1990

	NATIONAL ACCOUNTS (SNA)							
	(At current prices, million rubles)							
99B.ZN...AFD14	Gross Domestic Product (GDP)	367200	473400					
	NATIONAL ACCOUNTS (MPS)							
	(At current prices, million rubles)							
99M.ZN...AFD14	National Income Produced (NMP)	274100	352700	359000	364700	385400	412700	425200
97MA.ZN...AFD14	Industry	153500	171300	167600	172200	171600	183600	183400
97MB.ZN...AFD14	Agriculture	26600	49700	55500	56000	72000	77500	78000
97MC.ZN...AFD14	Construction	28700	36900	43200	46600	50400	53500	52400
97MD.ZN...AFD14	Transport & Communications	17800	22800	24100	24300	25400	24100	32200
97ME.ZN...AFD14	Trade, Supply and Other	47500	72000	68600	65600	66000	74000	79200
99ME.ZN...AFD14	National Income Expended	271100	337100	341100	347000	374900	397800	415200
92M.ZN...AFD14	Consumption	201700	243500	248900	258100	272600	296300	324800
96MF.ZN...AFD14	Private Consumption	170400	203100	206800	212900	223900	244200	269100
91MA.ZN...AFD14	Public Institution Expenses	20400	25300	26300	27700	29600	31800	34100
91MB.ZN...AFD14	Science & Management Expenses	10900	15100	15800	17500	19100	20300	21600
93M.ZN...AFD14	Accumulation	69400	93600	92200	88900	102300	101500	90400
93ME.ZN...AFD14	Accumulation of Fixed Assets	45300	50400	55300	58300	58000	53800	46100
93MI.ZN...AFD14	Stockbuilding	24100	43200	36900	30600	44300	47700	44300
90MN.ZN...AFD14	Net exports and losses	3000	15600	17900	17700	10500	14900	10000
	NATIONAL ACCOUNTS (MPS)							
	(Constant price indices, 1985=100)							
99M.PZN...AFD14	National Income Produced (NMP)		100.0	102.0	103.0	108.0	110.0	104.0
97MAPZN...AFD14	Industry		100.0	100.0	102.0	108.0	110.0	106.0
97MBPZN...AFD14	Agriculture		100.0	110.0	107.0	111.0	114.0	102.0
97MCPZN...AFD14	Construction		100.0	117.0	125.0	135.0	136.0	128.0
97MDPZN...AFD14	Transport & Communications		100.0	106.0	107.0	112.0	102.0	98.0
97MEPZN...AFD14	Trade, Supply and Other		100.0	100.0	99.0	104.0	112.0	119.0
99MEPZN...AFD14	National Income Expended		100.0	101.7	102.2	109.2	111.7	107.3
92M.PZN...AFD14	Consumption		100.0	101.1	103.8	108.0	113.8	116.3
96MFPZN...AFD14	Private Consumption							
91MAPZN...AFD14	Public Institution Expenses							
91MBPZN...AFD14	Science & Management Expenses							
93M.PZN...AFD14	Accumulation		100.0	103.6	98.1	112.8	105.9	83.0
93MEPZN...AFD14	Accumulation of Fixed Assets							
93MIPZN...AFD14	Stockbuilding							
90MNPZN...AFD14	Net exports and losses							

11. Main Real Sector Indicators: Russian Federation

60R		1980	1985	1986	1987	1988	1989	1990	1991
POPULATION									
99Z..ZN...AAD10	Population (thousands)	138365	143090	144080	145311		147400	148041	148543
PRICES (1985=100)									
64...ZS...AAD16	Retail Price Index	95.2	100.0	102.0	104.0	104.0	110.2	116.4	
6415.ZS...AAD16	Food products	91.7	100.0	106.0	111.0	111.0			
6415NZS...AAD16	Non-food products	98.6	100.0	99.0	98.0	98.0			
64C...ZS...AAD16	Kolkhoz Market Price Index	91.1	100.0	101.1	105.0	109.5	116.9	157.0	
6301.ZS...AAD16	Agriculture Procurement Price Index		100.0	102.0	105.0	126.0	130.0	140.0	
63EY.ZS...AAD16	Wholesale Indust. Prices (1989=100)						100.0	103.9	
EARNINGS									
Average Monthly Wages (in rubles)									
65..SZS...AAD10	Average Wage: State Sector Overall	177.7	201.4	207.8	216.1	235.2	258.6	296.8	
65EYSZS...AAD10	Average Wage: State Industry	191.3	217.9	223.5	230.3	250.3	275.2	310.9	
6501SZS...AAD10	Average Wage: State Agriculture	156.8	198.4	211.0	219.8	232.7	258.9	307.2	
PRODUCTION									
(Constant price indices, 1985=100)									
66...ZS...AAD16	Overall Industrial Production	85.0	100.0	104.0	108.0	112.0	114.0	114.0	
6640EZS...AAD16	Electric power	83.0	100.0	104.0	109.0	110.0	112.0	114.0	
6640FZS...AAD16	Fuel	94.0	100.0	104.0	106.0	108.0	107.0	103.0	
6627.ZS...AAD16	Metallurgy	89.0	100.0	104.0	106.0	109.0	110.0	108.0	
6629.ZS...AAD16	Machinery and metal-working	75.0	100.0	107.0	112.0	118.0	120.0	121.0	
6624.ZS...AAD16	Chemicals and Petrochemicals	79.0	100.0	105.0	109.0	114.0	115.0	112.0	
66..LZS...AAD16	Light industry	98.0	100.0	101.0	102.0	106.0	108.0	108.0	
6615.ZS...AAD16	Food products	86.0	100.0	105.0	109.0	113.0	118.0	119.0	
6601.ZS...AAD16	Overall Agricultural Production	90.0	100.0	107.0	105.0	109.0	111.0	107.0	
EMPLOYMENT									
(In Thousands of Persons)									
67...ZS...AAD10	Total Employment, State & Kolkhoz	70444	72133	72395	72069	70858	69684	67856	
67..SZS...AAD10	Total State Employment	65612	67641	67950	67767	66755	65634	63878	
67EYSZS...AAD10	Industrial Employment, State	22745	23095	23109	22967	22387	21731	20998	
6701.ZS...AAD10	Agricultural Employment, State	5697	5819	5744	5744	5578	5409	5308	
67A..ZS...AAD10	Total Kolkhoz Employment	4832	4492	4445	4302	4103	4050	3978	
INTERNATIONAL TRADE									
(In Millions of Rubles At Domestic Prices)									
70...ZS...AFD22	Exports				102709.9	102537.7	109606.0		
70A..ZS...AFD22	Exports, Inter-Republic				70854.0	69224.2	75066.9		
70B..ZS...AFD22	Exports, Rest of World				31855.9	33313.5	34540.0		
71...ZS...AFD22	Imports				131470.0	135865.1	144266.0		
71A..ZS...AFD22	Imports, Inter-Republic				67205.7	68963.9	70668.1		
71B..ZS...AFD22	Imports, Rest of World				64264.3	66901.2	73598.5		
(In Millions of Rubles At World Prices)									
70..WZS...AAD22	Exports				140543.0	132700.0	141019.2		
70A.WZS...AAD22	Exports, Inter-Republic				85149.0		88450.2		
70B.WZS...AAD22	Exports, Rest of World				55394.0		52569.0		
71..WZS...AAD22	Imports				99259.0	101900.0	108917.7		
71A.WZS...AAD22	Imports, Inter-Republic				56682.0		60193.5		
71B.WZS...AAD22	Imports, Rest of World				42577.0		48724.2		

1. Main Real Sector Indicators: Ukraine

90R		1980	1985	1986	1987	1988	1989	1990

	NATIONAL ACCOUNTS (SNA)							
	(At current prices, million rubles)							
99B..ZN...AFD12	Gross Domestic Product (GDP)	105684	128270	130600	136300	142200	154100	164800
	NATIONAL ACCOUNTS (MPS)							
	(At current prices, million rubles)							
99M..ZN...AFD12	National Income Produced (NMP)	77000	94000	95000	99000	102000	109000	118000
97MA.ZN...AFD12	Industry	39000	42000	41000	44000	46000	46000	50000
97MB.ZN...AFD12	Agriculture	14000	23000	24000	25000	26000	31000	33000
97MC.ZN...AFD12	Construction	7000	9000	10000	10000	11000	11000	11000
97MD.ZN...AFD12	Transport & Communications	4000	5000	5000	5000	5000	6000	7000
97ME.ZN...AFD12	Trade, Supply and Other	13000	15000	15000	15000	14000	15000	17000
	National Income Expended		92000	94000	96000	97000	108000	117000
92M..ZN...AFD12	Consumption		72000	74000	76000	79000	86000	96000
96MF.ZN...AFD12	Private Consumption							
91MA.ZN...AFD12	Public Institution Expenses							
91MB.ZN...AFD12	Science & Management Expenses							
93M..ZN...AFD12	Accumulation		20000	20000	20000	18000	22000	21000
93ME.ZN...AFD12	Accumulation of Fixed Assets							
93MI.ZN...AFD12	Stockbuilding							
90MN.ZN...AFD12	Net exports and losses		2000	1000	3000	5000	1000	1000
	NATIONAL ACCOUNTS (MPS)							
	(Constant price indices, 1985=100)							
99M.PZN...AFD16	National Income Produced (NMP)		100	102	107	110	114	112
97MAPZN...AFD16	Industry		100	102	113	118	122	124
97MBPZN...AFD16	Agriculture		100	103	107	107	114	110
97MCPZN...AFD16	Construction		100	105	105	112	111	103
97MDPZN...AFD16	Transport & Communications		100	100	96	99	99	92
97MEPZN...AFD16	Trade, Supply and Other		100	102	102	106	111	116
	National Income Expended		100	102	104	104	110	110
92M.PZN...AFD16	Consumption		100	102	103	107	112	117
96MFPZN...AFD16	Private Consumption							
91MAPZN...AFD16	Public Institution Expenses							
91MBPZN...AFD16	Science & Management Expenses							
93M.PZN...AFD16	Accumulation		100	104	109	92	101	84
93MEPZN...AFD16	Accumulation of Fixed Assets							
93MIPZN...AFD16	Stockbuilding							
90MNPZN...AFD16	Net exports and losses							

II. Main Real Sector Indicators: Ukraine

60R		1980	1985	1986	1987	1988	1989	1990	1991
POPULATION									
99Z..ZN...AAD10	Population (thousands)	49953	50840	50994	51201		51707	51800	51944
PRICES (1985=100)									
64...ZS...AAD16	Retail Price Index	96.0	100.0	102.0	103.0	103.0	105.0	109.0	
6415.ZS...AAD16	Food products	93.0	100.0	105.0	110.0	109.0	109.0	111.0	
6415NZS...AAD16	Non-food products	98.0	100.0	99.1	98.0	98.0	102.0	108.0	
64C..ZS...AAD16	Kolkhoz Market Price Index								
6301.ZS...AAD16	Agriculture Procurement Price Index		100.0	103.0	107.0	109.0	119.0	115.0	
EARNINGS									
Average Monthly Wages (in rubles)									
65..SZS...AAD10	Average Wage: State Sector Overall	155.1	173.9	179.0	185.0	199.8	217.7	247.3	
65EYSZS...AAD10	Average Wage: State Industry	176.9	201.5	206.2	211.0	228.2	249.1	277.7	
6501SZS...AAD10	Average Wage: State Agriculture	136.3	162.8	172.8	180.0	193.5	214.5	260.3	
PRODUCTION									
(Constant Price Indexes, 1985=100)									
66...ZS...AAD16	Overall Industrial Production	85.0	100.0	104.0	108.0	113.0	116.0	116.0	
6640.ZS...AAD16	Fuel and electric power	92.0	100.0	101.0	103.0	105.0	104.0	100.4	
6627.ZS...AAD16	Metallurgy	93.0	100.0	104.0	105.0	108.0	107.0	103.0	
6629.ZS...AAD16	Machinery and metal-working	74.0	100.0	108.0	114.0	121.0	126.0	128.0	
6624.ZS...AAD16	Chemicals and petrochemicals	81.0	100.0	105.0	111.0	115.0	117.0	116.0	
6645.ZS...AAD16	Construction materials	90.0	100.0	104.0	105.0	111.0	113.0	112.0	
66..LZS...AAD16	Light industry	92.0	100.0	101.0	103.0	107.0	110.0	110.0	
6615.ZS...AAD16	Food products	88.0	100.0	102.0	108.0	109.0	115.0	116.0	
6601.ZS...AAD16	Overall Agricultural Production	88.1	100.0	102.2	104.4	102.7	107.9	104.0	
EMPLOYMENT									
(In Thousands of Persons)									
67...ZS...AAD10	Total Employment, State & Kolkhoz	24321	24615	24591	24445	24109	23786	22951	
67..SZS...AAD10	Total State Employment	20042	20679	20747	20718	20523	20249	19470	
67EYSZS...AAD10	Industrial Employment, State	7308	7534	7554	7532	7424	7288	6872	
6701SZS...AAD10	Agricultural Employment, State	1537	1576	1549	1537	1503	1436	1388	
67A..ZS...AAD10	Total Kolkhoz Employment	4279	3936	3844	3727	3586	3537	3481	
INTERNATIONAL TRADE									
(In Millions of Rubles At Domestic Prices)									
70...ZS...AFD22	Exports				43997.7	46953.3	48061.7		
70A..ZS...AFD22	Exports, Inter-Republic				37728.5	40055.2	40466.7		
70B..ZS...AFD22	Exports, Rest of World				6269.2	6880.1	7595.0		
71...ZS...AFD22	Imports				50180.2	49862.3	54539.6		
71A..ZS...AFD22	Imports, Inter-Republic				36168.7	36431.6	39970.9		
71B..ZS...AFD22	Imports, Rest of World				14011.5	13430.7	14568.7		
(In Millions of Rubles At World Prices)									
70..WZS...AAD22	Exports				43956.0	44500.0	47816.8		
70A.WZS...AAD22	Exports, Inter-Republic				36409.0		39129.3		
70B.WZS...AAD22	Exports, Rest of World				7547.0		8687.5		
71..WZS...AAD22	Imports				49374.0	47400.0	53432.0		
71A.WZS...AAD22	Imports, Inter-Republic				40296.0		44196.1		
71B.WZS...AAD22	Imports, Rest of World				9078.0		9235.9		

IV. Data Sources

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AZERBAIJAN, General Economic Data: Sources

<u>Categories of Indicators</u>	<u>Sources (see below)</u>
Population	A. p. 5; D. p. 11
Prices	B. p. 182
Earnings	A. p. 75; B. p. 157
Industrial Production Indices	A. pp. 183-184; B. pp. 44, 46-47
Agricultural Production Index	A. p. 218; B. pp. 78-80
Employment	A. pp. 51-52; B. p. 152
External Trade	E. pp. 6-7; F. pp. 39-53; G. p. 49; H
National Accounts (SNA)	A. pp. 286, 289-290; C
National Accounts (MPS)	A. pp. 286-291;

- Sources:
- A. State Committee of Azerbaijan for Statistics, Azerbaijan in Figures, 1990 (Baku: 1991).
 - B. State Committee of Azerbaijan for Statistics, People's Economy of Azerbaijan SSR, 1987 (Baku: 1988).
 - C. Data provided by Azerbaijani authorities to the European Department II, January 1992.
 - D. State Committee of the USSR for Statistics, Population of the USSR, 1987 (Moscow: 1988).
 - E. Argumenty i Fakty, No. 50, 1989.
 - F. Vestnik Statistiki, No. 3, 1990.
 - G. Vestnik Statistiki, No. 4, 1990.
 - H. Data for 1989 trade flows provided to the Fund in October 1991 by Goskomstat USSR.

BELARUS, General Economic Data: Sources

Categories of Indicators	Sources (see below)
Population	A. p. 19; E. p. 9
Prices	A. p. 70; B. pp. 55, 59; C. pp. 52, 56; D. pp. 189-90, 193
Earnings	A. p. 47; C. p. 37
Industrial Production Indices	A. p. 182; B. p. 154; C. p. 149; D. p. 62
Agricultural Production Index	A. p. 211; C. p. 180
Employment	A. pp. 36-37; C. p. 26
External Trade	F. pp. 6-7; G. pp. 39-53; H. p. 49; I
National Accounts (SNA)	J
National Accounts (MPS)	A. pp. 5, 7, 45, 46

- Sources:
- A. State Committee of Belarus SSR for Statistics and Analysis, People's Economy of Belarus, 1990 (Minsk: 1991).
 - B. State Committee of Belarus SSR for Statistics, People's Economy of Belarus, 1989 (Minsk: 1990).
 - C. State Committee of Belarus SSR for Statistics, People's Economy of Belarus, 1988 (Minsk: 1989).
 - D. State Committee of Belarus SSR for Statistics, People's Economy of Belarus, 1987 (Minsk: 1988).
 - E. State Committee of the USSR on Statistics, Population of the USSR, 1987 (Moscow: 1988).
 - F. Argumenty i Fakty, No. 50, 1989.
 - G. Vestnik Statistiki, No. 3, 1990.
 - H. Vestnik Statistiki, No. 4, 1990.
 - I. Data for 1989 trade flows provided to the Fund in October 1991 by Goskomstat USSR.
 - J. GDP figures for 1980 and 1985 are drawn from data supplied to the Treasurer's Department of the Fund by Belarus for quota calculation purposes. (IMF EB/CW/QMethodology/92/1, Supplement 1).

KAZAKHSTAN, General Economic Data: Sources

<u>Categories of Indicators</u>	<u>Sources (see below)</u>
Population	C. p. 10
Prices	A. pp. 126-127; B. p. 56
Earnings	A. p. 85
Industrial Production Indices	A. pp.265-266; B. p. 165
Agricultural Production Index	A. p. 310
Employment	A. p. 55-56; B. p. 17
External Trade	D. pp. 6-7; E. pp. 39-53 F. p. 49; G
National Accounts (SNA)	A. p. 9; H
National Accounts (MPS)	A. pp. 15-20; B. p. 7

- Sources:
- A. State Committee of Kazakhstan SSR for Statistics and Analysis, Statistical Yearbook of Kazakhstan, 1990, (Alma Ata: 1990).
 - B. State Committee of Kazakhstan SSR for Statistics, Peoples Economy of Kazakhstan: 70 Years (Alma Ata: 1990).
 - C. State Committee of the USSR for Statistics, Population of the USSR, 1987 (Moscow: 1988)
 - D. Argumenty i Fakty, No. 50, 1989
 - E. Vestnik Statistiki, No. 3, 1990
 - F. Vestnik Statistiki, No. 4. 1990
 - G. Data for 1989 trade flows provided to the Fund in October 1991 by Goskomstat USSR.
 - H. GDP figures for 1980 and 1985 are drawn from data supplied to the Treasurer's Department of the Fund by Kazakhstan for quota calculation purposes. (IMF Report EB/CW/QMethodology/92/1, Supplement 1).

LATVIA, General Economic Data: Sources

<u>Categories of Indicators</u>	<u>Sources (see below)</u>
Population	A; B. p. 39
Prices	A; B. pp. 99, 103, 230
Earnings	B. p. 77
Industrial Production	A
Agricultural Production	A
Employment	B. pp. 67-68
External Trade	A
National Accounts (SNA)	A
National Accounts (MPS)	A; B. pp.34,37-38

Sources: A. Tables supplied by Latvian State Committee on Statistics in response to IMF questionnaire. No page numbers.

B. State Committee on Statistics, Latvia, People's Economy of Latvia, 1990 (Riga, 1991).

RUSSIAN FEDERATION, General Economic Data: Sources

<u>Categories of Indicators</u>	<u>Sources (see below)</u>
Population	A. pp. 76-77; C. p. 8
Prices	A. pp. 177, 180, 182, 352, 415; H. pp. 201, 204; I. pp. 107, 113; J. p. 411; K. p. 320
Earnings	A. p. 129
Industrial Production Indices	A. p. 346; H. p. 327
Agricultural Production Index	A. p. 401; H. p. 431
Employment	A. pp. 109-110; B. pp. 61-62
External Trade	A. p. 34; D. pp.6-7; E. pp. 39-53; F. p. 49; G
National Accounts (SNA)	L
National Accounts (MPS)	A. pp. 11, 14, 18-19;

- Sources:
- A. State Committee of the Russian Federation on Statistics, People's Economy of the Russian Federation (Moscow: 1991).
 - B. State Committee of the Russian Federation on Statistics, Socio-Economic Development in the Russian Federation, 1990 (Moscow: 1991).
 - C. State Committee of the USSR on Statistics, Population of the USSR, 1987 (Moscow: 1988).
 - D. Argumenty i Fakty, No. 50, 1989.
 - E. Vestnik Statistiki, No. 3, 1990.
 - F. Vestnik Statistiki, No. 4. 1990.
 - G. Data for 1989 trade flows provided to the Fund in October 1991 by Goskomstat USSR.
 - H. State Committee of the Russian Federation on Statistics, People's Economy of the Russian Federation, 1989, (Moscow: 1990).
 - I. State Committee of the Russian Federation on Statistics, People's Economy of the Russian Federation, 1988, (Moscow, 1989).

- J. State Committee of the Russian Federation on Statistics, People's Economy of the Russian Federation, 1987, (Moscow, 1988).
- K. State Committee of the Russian Federation on Statistics, People's Economy of the Russian Federation, 1986, (Moscow, 1987).
- L. GDP figures for 1980 and 1985 are drawn from data supplied to the Treasurer's Department of the Fund by the Russian Federation for quota calculation purposes (IMF Report EB/CWQMethodology/92/1, Supplement 1).

UKRAINE, General Economic Data: Sources

<u>Categories of Indicators</u>	<u>Sources (see below)</u>
Population	A. p. 20; B. p. 9
Prices	A. pp. 109, 371; H. p. 284
Earnings	A. p. 71; H. p. 257
Industrial Production Indices	A. pp. 270; I. pp. 65-66
Agricultural Production Indices	A. p. 329; I. p. 116
Employment	A. pp. 52-53; I. p. 116
External Trade	C. pp. 6-7; D. pp. 39-53; E. p. 49; F;
National Accounts (SNA)	G; J
National Accounts (MPS)	A. pp. 11-13

- Sources:
- A. Ministry of Statistics of Ukraine RSR, People's Economy of Ukraine SSR, 1990 (Kiev: 1991).
 - B. State Committee of the USSR on Statistics, Population of the USSR, 1987 (Moscow: 1988).
 - C. Argumenty i Fakty, No. 50, 1989.
 - D. Vestnik Statistiki, No. 3, 1990.
 - E. Vestnik Statistiki, No. 4, 1990.
 - F. Data for 1989 trade flows provided to the Fund in October 1991 by Goskomstat USSR.
 - G. GDP figures for 1980 and 1985 are drawn from data supplied to the Treasurer's Department of the Fund by Ukraine for quota calculation purposes (IMF Report EB/CW/QMethodology/92/1, Supplement 1).
 - H. State Committee of Ukraine RSR on Statistics, People's Economy of Ukraine RSR, 1987 (Kiev: 1988).
 - I. State Committee of Ukraine RSR on Statistics, People's Economy of Ukraine RSR, 1986 (Kiev: 1987).
 - J. Ministry of Statistics of Ukraine RSR, "Gross National Product of Ukraine," monograph provided to the IMF in February 1992 which contains GDP estimates for 1985-1990.

