



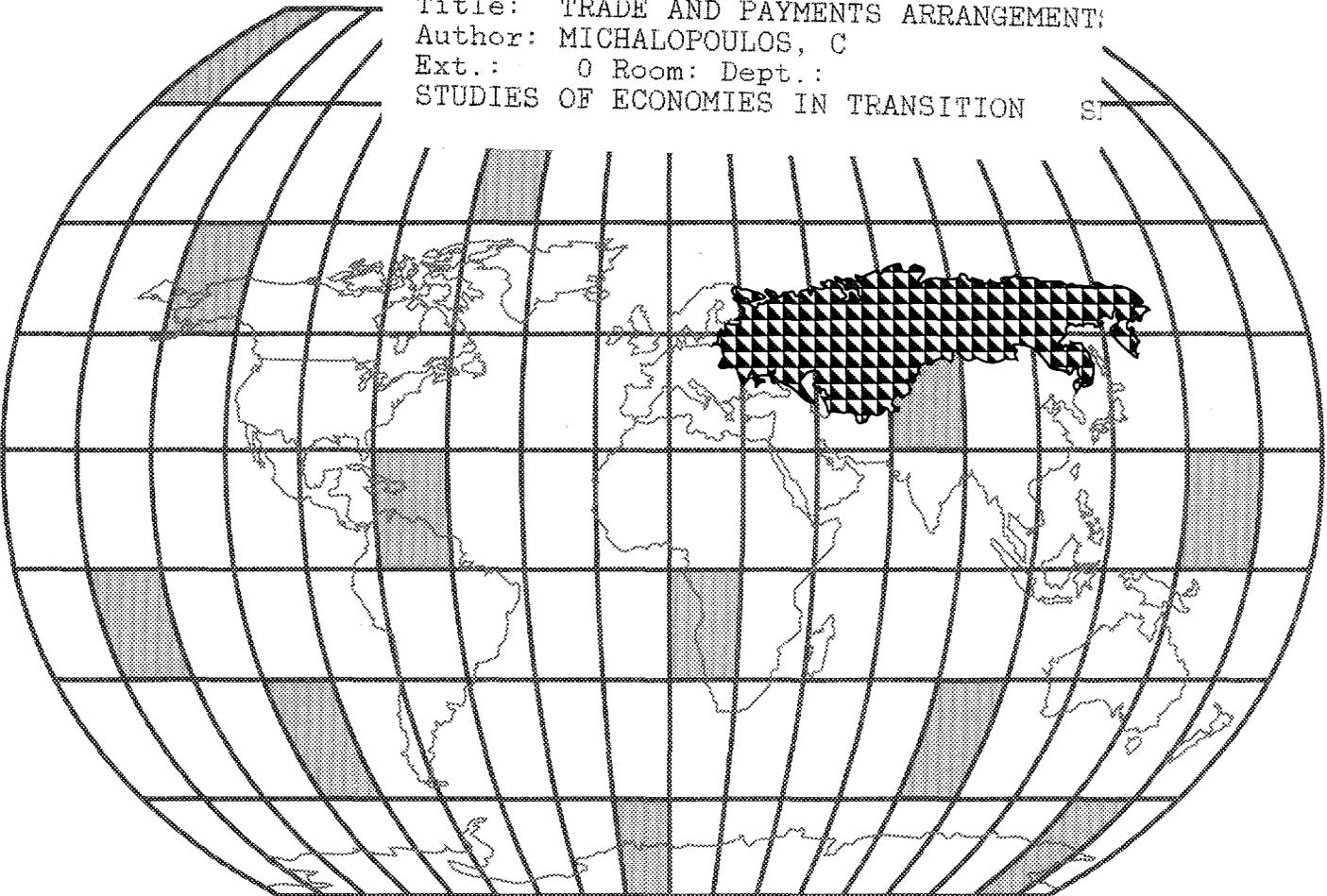
Trade and Payments Arrangements for States of the Former USSR

Constantine Michalopoulos and David Tarr

2

FILE COPY

Report No.: 11169 Type: (PUB)
 Title: TRADE AND PAYMENTS ARRANGEMENTS
 Author: MICHALOPOULOS, C
 Ext.: 0 Room: Dept.:
 STUDIES OF ECONOMIES IN TRANSITION ST



FILE COPY

RECENT STUDIES OF ECONOMIES IN TRANSFORMATION PAPERS

- No. 1 Country Department III, Europe and Central Asia Region, *Food and Agricultural Policy Reforms in the Former USSR: An Agenda for the Transition*

STUDIES OF ECONOMIES IN TRANSFORMATION
PAPER NUMBER 2

Trade and Payments Arrangements for States of the Former USSR

Constantine Michalopoulos and David Tarr

**The World Bank
Washington, D.C.**

Copyright © 1992
The International Bank for Reconstruction
and Development/THE WORLD BANK
1818 H Street, N.W.
Washington, D.C. 20433, U.S.A.

All rights reserved
Manufactured in the United States of America
First printing September 1992

Papers in the "Studies of Economies in Transformation" series present the results of policy analysis and research on the states of the former USSR. The papers have been prepared by World Bank staff and consultants and issued by the World Bank's Europe and Central Asia Country Department III. Funding for the effort has been provided in part by the Technical Cooperation Program of the World Bank for states of the former USSR. In light of the worldwide interest in the problems and prospects of these countries, dissemination of these findings is encouraged for discussion and comment.

The findings, interpretations, and conclusions expressed in this paper are entirely those of the author(s) and should not be attributed in any manner to the World Bank, to its affiliated organizations, or to members of its Board of Executive Directors or the countries they represent. The World Bank does not guarantee the accuracy of the data included in this publication and accepts no responsibility whatsoever for any consequence of their use. Any maps that accompany the text have been prepared solely for the convenience of readers; the designations and presentation of material in them do not imply the expression of any opinion whatsoever on the part of the World Bank, its affiliates, or its Board or member countries concerning the legal status of any country, territory, city, or area or of the authorities thereof or concerning the delimitation of its boundaries or its national affiliation.

The material in this publication is copyrighted. Requests for permission to reproduce portions of it should be sent to the Office of the Publisher at the address shown in the copyright notice above. The World Bank encourages dissemination of its work and will normally give permission promptly and, when the reproduction is for noncommercial purposes, without asking a fee. Permission to copy portions for classroom use is granted through the Copyright Clearance Center, 27 Congress Street, Salem, Massachusetts 01970, U.S.A.

The complete backlist of publications from the World Bank is shown in the annual *Index of Publications*, which contains an alphabetical title list (with full ordering information) and indexes of subjects, authors, and countries and regions. The latest edition is available free of charge from the Distribution Unit, Office of the Publisher, Department F, The World Bank, 1818 H Street, N.W., Washington, D.C. 20433, U.S.A., or from Publications, The World Bank, 66, avenue d'Iéna, 75116 Paris, France.

ISSN: 1014-997X

Constantine Michalopoulos is senior advisor, Europe and Central Asia Country Department III at the World Bank; David Tarr is principal economist, Country Economics Department, Trade Policy Division at the World Bank.

Library of Congress Cataloging-in-Publication Data

Michalopoulos, Constantine.

Trade and payments arrangements for states of the former USSR /
Constantine Michalopoulos and David Tarr.

p. cm. — (Studies of economies in transformation ; paper no.

2)

Includes bibliographical references.

ISBN 0-8213-2260-5

1. Former Soviet republics—Commercial policy. 2. International
clearing—Former Soviet republics. 3. Foreign exchange—Former
Soviet republics. 4. Currency convertibility—Former Soviet
republics. I. Tarr, David G. II. Title. III. Series.

HF3626.5.M52 1992

382'.3'0947—dc20

92-31863
CIP

Foreword

In early 1992, trade among the 15 states of the former USSR had declined dramatically, and trade relations were in disarray. There is evidence that the pattern of trade that had developed in the former USSR was far from optimal and insufficiently linked to the international trading community. However, it was widely feared that, given production linkages, too rapid a decline in interstate trade could aggravate unemployment and prove extremely costly for all of the states. Urgently needed was a transitional trade and payments arrangement that would encourage market-determined realignment of the trade patterns and absorption of these economies into the international trading community in the long run, while reducing the more immediate costs of the transition. This study, a joint product of the Europe and Central Asia Department III and the Country Economics Department, presents the contours of a transitional mechanism for the states of the former USSR.

The study discusses the incentives in the interstate trading environment of 1992 that have led to interstate export controls and the decline in interstate trade and proposes solutions that address the incentive problem. It explains how interstate trade can evolve from intergovernmentally determined and controlled trade to enterprise-to-enterprise trade. The impact of the free-rider problem present in the 1992 monetary system on the incentive to import on an interstate basis is analyzed. The study proposes methods for allowing enterprise-to-enterprise trade after the introduction of new, possibly inconvertible, currencies by independent states. The advantages and disadvantages of a clearing union, a payments union, and an auction market for rubles in countries with new currencies are discussed. The study explains why enterprises face little competition from imports from outside the former USSR now, but why external import competition may become a serious concern after the introduction of new currencies or convertibility. It evaluates the case for preferential trading arrangements among the 15 states as a transitional device for easing unemployment and elaborates why any differential protection provided should be moderate and transitory.

The study is intended for trade policy analysts and decisionmakers in the 15 states of the former USSR and their advisers. All those who are interested in the role that trade and payments arrangements can play in facilitating a successful transition to the market economy should find the study useful.



Russell J. Cheetham
Director
Europe and Central Asia
Country Department III



Acknowledgements

The authors wish to acknowledge helpful comments from Lawrence Summers, Jaime de Melo, Parvez Hasan, Nancy Birdsall, Arvind Panagariya, Dani Kaufmann, Sunil Gulati, Martin Schrenk, Bart Kaminski, Erik Nielsen, Ernesto Hernandez-Cato, Anne McGuirk, Takeo Shikado and participants at seminars held at the World Bank, OECD, and the UNDP Trade Expansion Conference in Kiev. They thank Nellie Artis and Maureen Colinet for logistical support.

Table of Contents

Introduction	1
The Situation Today	3
<i>The Web of Interdependence</i>	3
<i>The Terms of Trade</i>	4
<i>Trade and Payments Policies</i>	4
<i>The payments regime</i>	4
<i>The trade regimes</i>	5
Transitional Arrangements	9
<i>Policies for Export Controls</i>	9
<i>Reducing State Trading and Promoting Enterprise-to-Enterprise Trade</i>	11
<i>Import Controls</i>	12
<i>Tariffs for revenue</i>	12
<i>Tariffs for protection</i>	12
<i>Payments Arrangements</i>	14
<i>In the ruble zone</i>	14
<i>For states with new currencies</i>	15
<i>The Scope for Cooperation on Interstate Trade</i>	17
<i>The terms of trade</i>	17
<i>Trade preferences</i>	18
<i>Customs union or free trade area</i>	20
Conclusions and Policy Implications for the World Bank	21
<i>Summary of Policy Recommendations</i>	21
<i>Trade regime toward third countries</i>	21
<i>State trading</i>	22
<i>Payments arrangements</i>	22
<i>Interstate trade policy</i>	23
<i>The Role of the World Bank</i>	24
Notes	25
References	33
Annex Tables	37

1

Introduction

The establishment of 15 independent states in the economic space of the former USSR--each embarking on systemic reforms on a different scale and at a different pace--is wreaking havoc on the trade among them. There is speculation that this trade may soon collapse. In the longer term, the heavy interdependence in trade among these states would have in any case to change significantly because much of today's trade is not based on economic principles of comparative cost and locational advantage. But a large, sudden disruption in trade patterns could hurt output and incomes in all the states, undermining public support for reform, and retarding adjustment.

All 15 states would thus benefit by establishing transitional mechanisms that avoid serious disruptions of trade flows in the short term--and that support their longer term adjustment and integration into the world economy. This paper examines the causes of these disruptions and suggests trade and payments arrangements that mitigate them and encourage the transition to a market economy. Although the emphasis is on policies for interstate trade and payments, such policies are investigated in the context of the broader international trade

and payments regimes these countries are in the process of establishing with third countries. In addition, there are some essential complementary reforms which must be undertaken for a successful transition including, macroeconomic stability and the commercialization and privatization of enterprises. Without the former, enterprises will not receive better price signals from trade liberalization. Without the latter, enterprises will not respond efficiently to the improved price signals.

The Situation Today

In 1991 exports of the 15 states to the rest of the world amounted to \$70.2 billion, down 32% from 1990. The declines were especially large to former CMEA countries in Eastern Europe, with the largest drop in machinery and related products.

Trade among the 15 states accounted for between roughly 60% and 90% of their total trade. Russia was the least dependent on interstate trade (with such trade accounting for 61% of the total), while for all other states, interstate trade accounted for more than 80% of total trade (table 1). No firm estimates on the evolution of interstate trade are available for 1991, but it is widely reported that it declined even more than trade with third countries.

The Web of Interdependence

The demise of the CMEA is instructive for the future of trade among the 15 states. Several studies (Biessen 1991, Brada and Mendez 1985, Havrylyshyn and Pritchett 1991, and Collins and Rodrik 1991) have estimated that although the total external trade of the CMEA countries was not excessive, intra-CMEA trade clearly was¹--and that such trade will decline by as much as

60% when it is placed on an equal footing with other trade.²

Brada (1992) has argued that, for analyzing trade flows, the former Soviet Union can be viewed as an intranational CMEA, except that a supranational power planned trade flows and the pattern of investment and specialization. But the central planners' investment preferences reflected comparative advantage only in a very limited way, either among the states or against the rest of the world. In particular, the collapse of sales of the machinery and related sectors in Eastern Europe in 1991 suggests that these sectors lack comparative advantage. It is thus likely that a large part of trade in manufactures among the 15 states is trade diversion and will vanish in the long run without preferential treatment.³

The recession in Eastern Europe in 1991 has been attributed in large part to the sudden decline of trade among the countries of the former CMEA. The greatest output declines were in countries most heavily dependent on the Soviet market, such as Bulgaria.⁴ Since the states of the former Soviet Union depend even more on interstate trade than the countries of Eastern Europe

on CMEA trade, and since all of them except Russia depend on interstate exports for more than 20% of their GNP (table 1), the possible output decline is substantial. The key question is not whether interstate trade will decline, but how fast it will do so.

The Terms of Trade

Using international prices for products that enter interstate trade is an essential step toward improving resource allocation and integrating these economies into the world economy. But there is a problem: the wide divergence between domestic and international prices means that using international prices would result in significant terms-of-trade gains and losses for different states. Preliminary estimates indicate that raw material and energy exporters would gain and machinery exporters would lose. Russia and Turkmenistan would have big terms-of-trade gains. Belarus, Moldova, and the Baltics would have big losses (10-20% of GDP). Azerbaijan, Kyrgyzstan, and Uzbekistan would suffer little, if at all.⁵ Furthermore, if international prices are passed on to the final user, considerable economic restructuring could be required in activities that depended on underpriced inputs (both in domestic and interstate trade).

To offset the terms-of-trade deterioration, some states have tried to exploit whatever monopoly power existing linkages and the transportation network gives them. The terms-of-trade adjustment is nevertheless unavoidable, and the only question is how fast it will occur.

Trade and Payments Policies

In the first half of 1992, near chaos characterized the trade and payments in the

15 states. The collapse of the monetary and payments system had a particularly adverse impact on trade--and greatly affected the trade policies of all countries.

The payments regime. Russia alone can expand the money supply by issuing cash rubles, but the central banks of all states in the ruble zone can create credit in rubles. Since inflation in the ruble zone depends on aggregate ruble creation, there is, without monetary policy coordination, a free-rider problem. Monetary restraint by some central banks can be exploited by others able to expand their money supply independently. This impedes efforts to stabilize the ruble and poses major difficulties for trade and payments. Countries prefer not to export goods for rubles since their central banks can independently expand ruble supply. Because the ruble is inconvertible and there are no constraints to creating ruble credits, states are unwilling to incur ruble surpluses in interstate trade because of the transfers they entail. Deficit countries would also rather have goods than ruble credits in their banking system, since their central banks can independently create ruble credits. Russia, which appears to have accumulated an interstate trade surplus in early 1992, has established a monitoring mechanism for interstate transfers (correspondent accounts of the central banks) that may trigger increased trade controls. It fears that, without controls, even larger transfers may result as energy prices are liberalized.

With the dissolution of the Gosbank, there has been a dramatic decline in the efficiency of the interstate banking system--this when the Gosbank guarantee for interstate transactions has been removed, and credit has been tightened. A network of

correspondent accounts has been established among the central banks of the 15 states, and all payments orders are cleared through the central banks and their correspondent accounts. The system has become clogged at higher levels: it takes up to 2-3 months to clear an interstate payments order. In an environment of high inflation, the long delays imply greater risks and costs in using the banking system.⁶

For a variety of reasons--to allow conduct of an independent monetary policy, avoid the free-rider problem, exert claims over seignorage, introduce an exchange rate that would allow the adjustment of national relative prices with the rest of the world, and assert national identity--various states are planning to introduce their own currencies: Estonia did so in June 1992. Ukraine, Moldova, and the Baltics are planning to do so. Others might follow soon. The new currencies pose no problems to trade, if these currencies are convertible for trade transactions. But if they are not, it will be necessary to develop institutions that support interstate trade. Otherwise trade among enterprises will be severely hampered--forced into barter even more than now or channeled through bilateral state-to-state agreements, as in the past.

The trade regimes. Governments have attempted to "protect republic resources" by establishing export controls through quotas and licenses affecting the bulk of their exports both to hard currency markets and to others of the 15 states. Although it was envisaged in 1991 that interstate trade would be conducted primarily on the basis of bilateral agreements and protocols that specified the goods to be exchanged up to fixed volume limits during 1992, the imple-

mentation of the detailed protocols was delayed until March 1992, and it has been fraught with many problems.

The measures have reduced trade flows to levels significantly lower than envisaged in 1991. Problems appear to have arisen especially in trade between Russia and Ukraine and the Baltics. And Armenia, due to the conflict in the area, has suffered from reductions in oil deliveries through Azerbaijan. Most governments, in public statements, appear to be endorsing steps to maintain interstate trade. But in practice, their efforts have focused on enforcing the bilateral arrangements and not on freeing trade and creating an environment for enterprise transactions.

- **Quantitative restraints on exports:** Perhaps the most significant barrier to trade in early 1992 was the widespread use of export licenses. All 15 states are making widespread use of them, both for interstate and convertible-currency-area trade.

The motivation for export licenses comes from four considerations: First, and most important, is the problem with the payments regime: other states are afraid that any accumulated ruble balances may become worthless when they adopt new currencies.⁷ Second, the price liberalization in different republics, following the initial price liberalization by Russia in January, has varied considerably. Price differences are significant across different states, and the prices of many products, notably energy, are kept below the world level. Governments have maintained these differences by establishing quantitative export restraints for many products. Third, until recently, supply shortages led most states to try to keep goods at home.

Even today, many states are reluctant to accept rubles for goods because they fear that currency reform in other states will render any accumulated ruble balances worthless. Fourth, those directing the remaining institutions of state economic control see export licensing as one of their last available tools.

- **Import protection:** The 15 states have very low formal import restraints. Import licensing has largely been removed, and tariffs are either low or not applied. But, implicit protection is extremely high due to the impact of export restraints on the real exchange rate and to the protective effect of foreign exchange rationing. So, despite the absence of explicit restraints on imports, import competition is weak in most sectors.

- **State trading through bilateral arrangements:** By March 1992, an extensive network of bilateral trade agreements had been signed by the 15 states.⁸ These protocols divided trade into three categories: obligatory-list trade, indicative-list trade, and enterprise-to-enterprise trade.

In the first category, trade is conducted on the basis of a large intergovernmental barter of 100 to 150 of the most important products in interstate trade. This portion of trade resembles (but is not identical to) the old obligatory trade of the CMEA. Commitments carry the obligation of the state to fulfill the contract. All exports under this category are licensed and generally must be sold to designated specific enterprises in the importing state. An effort is made in the negotiations to roughly balance this portion of the trade--by assigning prices and adjust-

ing volume.⁹ In principle, world market prices are assigned, but for settlement, trade values are revalued from dollars into rubles, commodity by commodity, in a negotiation that takes the domestic price in rubles into consideration. So, notional relative prices in rubles are closer to domestic prices than relative prices in dollars.¹⁰ Finally, many products under the obligatory lists specify maximum permissible prices.

Indicative-list trade is similar to Eastern European trade in 1991 after the demise of the CMEA, but with some important differences. Enterprises in the different states may engage in contracts with each other where they define all the terms of the sales, including price and credit conditions. Depending on the state, 1,000 to 1,500 products are on the indicative lists. The state has no obligation for this part of the trade, but the products are subject to export licensing. Both states in a bilateral protocol agree to automatically provide export licenses for all enterprise-to-enterprise contracts up to the quota amounts in the protocols.

Products on neither the obligatory nor the indicative lists may be freely traded enterprise-to-enterprise, the third category of trade. This leaves many products to be traded free of restraints, but the most important products are still in the first two categories.

Two added institutional features of Russia's trade regime toward the other states, including the Baltics, are important. First, this trade is not subject to export taxes that apply to third countries. Second, many products under the lists are subject to maximum price controls.

The absence of export taxes gives enterprises an incentive to divert exports to the others of the 15 states. But there have been significant problems of fulfillment in the obligatory trade. Price controls, which reduce the incentive to export, are the main reason. In addition, the system of state orders has either broken down or become less effective. So, enterprises often do not supply the agreed quantities, because they do not find it profitable or do not have the needed inputs.

In early 1992, major questions remained for both types of list. For example, how and how frequently would trade imbalances among the states be settled. Rubles, convertible currency, and additional goods shipment have been proposed as means of payment. And proposed settlement periods have ranged from a month or less to a year. As long as trade is conducted under bilateral government agreements, the issue remains: how much are governments rather than markets imposing choices?

- Barter: Inflation accelerated in 1991, but with price controls on most products, it was repressed—that is, it was measured not in price increases but in increased quantity shortages. This resulted in extensive queuing and massive losses (in time and other resources) in an effort to obtain the goods under severe shortage. As Kornai (1980) documented, when price controls result in shortages, enterprises turn to barter to obtain both their needed inputs and consumer goods for their workers.¹¹

With the price liberalizations in early 1992, the pressure for barter in each state was significantly reduced. Some preliminary estimates indicate that the percentage of

barter sales among enterprises within Russia declined to 20% in March 1992, from 80% in January 1992 and an even higher percentage in late 1991.¹² But barter in interstate trade remains high for several reasons. First, due to the provisions in the intergovernmental protocols, price controls are much more prevalent in interstate than in domestic trade. Second, interenterprise arrears are a large and growing problem in most states. Enterprises ship goods and discover that there are no funds in the buyer's bank account. Third, added risks are involved in normal trading with-out-of state enterprises. For example, courts to resolve commercial disputes are national and are biased toward the home country enterprise, so that two national tribunals often reach opposite conclusions.

In sum, the dissolution of the USSR poses problems. Licensing and quantitative controls are linked in part to the conduct of trade through state-to-state agreements. The reduction of barter is linked to the establishment of a suitable payments mechanism and the stabilization of the ruble. And the establishment of new, possibly inconvertible currencies raises additional payments questions for the conduct of interenterprise trade. Superimposed on all these issues is the significant terms-of-trade adjustment that many states will need to make when trade moves to international prices.

3

Transitional Arrangements

In the longer term, trade among the 15 states would be facilitated by two things. One is the establishment of currencies that are convertible on current account, including perhaps a convertible ruble zone and possibly other currencies. The second is the adoption of a trade regime with low and uniform tariffs, free as much as possible of nontariff barriers on either exports or imports--to allow unregulated enterprise-to-enterprise trade.¹³ We address here the question whether tariff preferences should be extended to commodities produced in others of the 15 states and what form such preferences should take. But the situation now is so far removed from this longer term policy environment that the key questions relate primarily to transitional (often second-best) arrangements--which nonetheless would be improvements and would move policies in the direction of the longer term optimal environment.

Policies for Export Controls

Export restraints to the convertible currency area (notably licenses, taxes, and surrenders of convertible currency at below market rates) are undesirable because they

reduce foreign exchange earnings. Given the prevailing market exchange rates of more than 100 rubles to the US dollar in early 1992 in most of the 15 states, workers were earning only about \$10 a month, demonstrating the very high value of convertible currency. By restraining exports to the convertible currency area, the countries forgo convertible currency earnings which, if available, would cause the real exchange rate to appreciate and make imports less expensive. In effect, the restraints on exports impose a significant implicit tax on imports.¹⁴ Although governments have not imposed significant tariffs on imports, the export restraints limit imports and protect import-competing industries. Moreover, by reducing export earnings, the export restraints raise the amount of financing countries need from abroad to maintain imports at levels required to sustain domestic production.

For some commodities, notably oil, governments need to maintain export restrictions because the domestic price is temporarily being kept below world prices. The principal tool of export restraint that most governments prefer is export licensing. For

such commodities, however, *variable export taxes set equal to the difference between the world price and the domestic price are a preferable export restraint*--for four reasons.¹⁵

First, a tax on exports is transparent. The government and the public know how much the export tax costs in forgone foreign exchange per unit sold.¹⁶ Second, an export tax allows exporters to engage in contracts with the certainty of being able to deliver, subject to the tax. If an exporter cannot deliver the product within a specified period, either the offer is not valid or penalty clauses take effect. If there is uncertainty about receiving an export license, exporters will find it difficult to engage in contracts. Third, a licensing system wastes resources--through lobbying for the licenses and other forms of rent-seeking. Since licenses have substantial value ("rents"), the potential exporter will devote considerable resources to obtain the license and capture the rents, wasting resources for society. Fourth, an export tax generates government revenue, helping ease fiscal problems.

The only commodities needing quantitative export controls to third countries are those for which states face international agreements requiring them to limit their exports, as in the Multi-Fibre Arrangement (MFA) or for specific products in EC markets. In such circumstances, it is best to auction export licenses. Such a system would ensure that only the precise quantities agreed on are exported, and the rents from the licenses would accrue to the state, reducing the wasteful rent-seeking of enterprises. Moreover, competition among suppliers at the auction would allocate the licenses to the most efficient domestic suppliers, maximiz-

ing the rents retained in the exporting country.¹⁷

The principle of rapidly converting quantitative export restraints to export taxes and then gradually reducing export taxes to the convertible currency area has gained acceptance in many states. Reservations have nevertheless been expressed about applying these principles in interstate trade in the near term. The first and perhaps most fundamental reason for quantitative controls in interstate trade is the governments' desire to avoid surpluses or at least maintain balances in interstate ruble payments. Second is the microeconomic problem that price liberalization has not been coordinated among states in the ruble area. There is a fear that goods would flow to states where prices are not controlled. Imposing a differential export tax structure for a large number of commodities in such a setting appears far more cumbersome administratively than simply continuing the previous export control mechanism. A far superior approach would be to extend price liberalization to almost all commodities, inherently desirable in any case.¹⁸

For the few commodities that are supposed to adjust to world prices during a transition period, it may be necessary to apply export restraints in interstate trade through, say, quotas or licenses. This is to prevent reexporting by other states of products underpriced domestically in relation to world markets as well as hoarding products before the scheduled increases. But with export taxes to third countries and export controls in interstate trade (two instruments already in use for these commodities), governments should then be in a position to remove two other controls that are redun-

dant: quantitative restraints on exports to third countries, and price controls in domestic and interstate markets.

Bilateral balancing of trade through whatever means puts trading relations in a straight jacket and is inimical to the development of markets and the allocation of resources according to comparative advantage. Attempting to maintain bilateral balances in ruble trade is a short-term expedient during the current unsettled period when monetary policy is not coordinated in the ruble zone and the central banks of the states in the zone can expand credit independently.

Reducing State Trading and Promoting Enterprise-to-Enterprise Trade

Obligatory lists, incompatible with a market economy, should be eliminated at the earliest possible date. First, in a bilateral negotiation, governments are responsible for choosing which products are on the lists, so it is governments rather than market forces and comparative costs which would define and control trade. Second, experience with obligatory lists in the CMEA has shown that the process leads to losses of dynamic efficiency. It is extremely difficult to obtain the value of an improved product through the government negotiation process, resulting in little or no product innovation. Most important, obligatory lists are typically implemented through state orders or planning, which mean that the state is not making the desired transition from central planning to the market.

The main problem in moving away from such lists is that some goods--important in interstate trade--remain under price controls and are adjusting to world prices gradually.

If these products are to be supplied at less than market prices in interstate trade (as Russia has agreed with energy products on an interim basis for some countries), some kind of state commitment may be required. Otherwise, exporting firms would raise the price to the market. This again emphasizes the importance of reducing the number of goods subject to price controls.

Contrary to practice, however, a state obligation to export does not imply the need to impose a (planning) system of state orders and quantity regulations for producing enterprises. Instead, the state could use procurement agents for the purchase of goods for interstate trade that are subject to price controls. The agents would be authorized to pay a price slightly above the controlled domestic price, which should induce sales to the procurement agents. Except for these products, and possibly for a basket of goods exported in return by the oil-importing countries, there is no justification for export controls or list trading.

To control excessive inconvertible imbalances within the ruble zone, it would be best to coordinate monetary and fiscal policy. This would allow interstate trade within a framework of enterprise-to-enterprise trade without export constraints. Until such coordinating mechanisms exist and given the use of export licenses, indicative lists are superior to obligatory lists. For products on the indicative lists, there would be no state obligation for the trade, and enterprises in the respective countries would negotiate their best terms on price, credit and other aspects of the contract.

The indicative lists would be useful in three ways. They commit governments to

issue export licenses for the products in the agreements up to the amounts specified. They permit the removal of the product from intergovernmental price controls. And they reduce the planning in economic decision making.¹⁹ Over time, as domestic prices are permitted to rise to international levels, export taxes to third countries and export licensing for trade denominated in rubles would not be necessary. This would also eliminate the need for lists, and allow all trade to be conducted directly through enterprises. For trade outside the ruble zone, however, arrangements would be needed to cope with payments among countries with inconvertible currencies.

Import Controls

There are very few formal import controls in the 15 states. To the extent the states use import controls, tariffs are preferable to quantitative restraints on imports for all the reasons elaborated above on the advantages of export taxes over export licenses. Explicit tariffs, now virtually nonexistent, need to be considered for revenue and protection. While the revenue arguments and protection arguments are usually complementary, they conflict in the 15 states. A tariff for transitional protection would require a preferential trade area, which implies no tariff on intraregional trade. With between 85% and 95% of trade being intraregional for most of the 15 states, this implies relatively little revenue compared with a tariff that has only the revenue objective, one that is applied on all trade.

Tariffs for revenue. A fundamental principle of commodity taxation: neutral taxes that do not discriminate between imports and domestic sources of production are the most

efficient at generating revenue.²⁰ Thus, in theory and subject to qualifications mentioned above, a tariff (in the pure sense as a tax that discriminates against imports) should not be used for revenue alone.

This argument needs to be qualified where a country has a generally inefficient domestic tax system but collects import taxes efficiently. The relative efficiency of tax collection may dominate the neutrality principle, and import taxes could be used for revenue, as in many Sub-Saharan African countries. Given the short run difficulties generating revenue in the 15 states, it may be useful to impose import surcharges or tariffs as a temporary measure until efficient domestic tax collection systems are in place.

Trade for protection. Although explicit tariffs are virtually nonexistent, there are powerful *de facto* restraints on imports due to the extensive restraints on exports. The export restraints reduce foreign exchange earnings and depreciate the value of the ruble, imposing a high implicit tariff on all imports from the convertible currency area. In fact, where foreign exchange is obtainable only at the market exchange rate, the rate itself provides the most powerful protection, because the market rate is significantly undervalued. In addition, for most products and in most states, access to foreign exchange is limited, various retention schemes for convertible currency exporters remain, and central allocation of foreign exchange exists as a consequence, for a big part of the foreign exchange earnings. Central allocation of foreign exchange is itself a non-tariff barrier to imports, because the rationing authorities often protect the domestic import-competing industries

through their allocation decisions. Import-competing industries thus receive powerful protection from convertible currency imports from the high price of foreign exchange and from its central allocation.

The mirror image of this high protection from convertible currency imports is the strong incentive to import from within the ruble zone rather than from outside, causing export restraints within the ruble zone to proliferate. As long as enterprises trade with each other in a ruble zone when the ruble exchange rate is undervalued and foreign exchange is centrally allocated there is no need for further protection against imports from hard-currency areas.

Once the ruble is no longer undervalued--or states create new currencies, requiring settlements of balances in hard currency--the incentive structure for trade will change markedly. There will be less incentive to import from the other states, and there will be greater competition from imports from hard-currency areas. Temporary and declining protection vis-a-vis hard currency area imports may then be needed to ease the adjustment to a market economy. The most important reason is that with significant unemployment, the optimal path of tariff policy (which trades off the marginal social costs of increased unemployment from tariff reduction against the marginal social benefits of a more rapid adjustment of factors) is to adjust the tariff gradually to its long-run low level. In these circumstances, countries could use moderate and relatively uniform tariffs.²³ It is argued here that countries should consider applying such tariffs only to imports from hard-currency areas--to provide a margin of preference in interstate trade.

Based on experience of trade policy reform, transitional tariff protection should be moderate, not to exceed tariffs in the 15-30% range (Thomas, Nash, and others 1991). The tariff structure for any particular country would obviously need to be determined case by case.

There are several reasons for avoiding high tariff barriers. First, since their purpose would be to ease the adjustment and to generate revenues until more efficient methods are developed, tariffs should be temporary--and be reduced over time. But if tariffs are high, industries that benefit from them will resist liberalization. Temporary protection may become permanent and once the government slips in its liberalization schedule, expectations are altered, and the advantages of transitional protection are significantly reduced.

Second, protection is a second best means for easing the burden of adjustment. No matter what the justification for protection, another policy intervention will improve welfare more: a production subsidy or a tariff combined with a subsidy on consumption.²⁴ The problem is that fiscal constraints in the 15 states make it difficult to use subsidies in support of enterprise restructuring. The temptation would be great to keep tariffs high indefinitely or to design made-to-measure tariffs industry by industry to "ease" the transition--a very dangerous road because protection supports noncompetitive enterprises and preserves the inefficient industrial structure with little or no adjustment. Then the economy will not produce according to its comparative advantage, and the efficiency gains and higher growth rates from an outward orientation will be lost.

Third, high tariffs, even during a transition, discriminate against exports.²⁵ Tariffs and a devalued exchange rate both protect the import-competing industries, but the difference between the two is that an exchange rate that is not overvalued also encourages exports. So, for trade policy, the exchange rate is preferable to a tariff for achieving external balance.

Despite these considerations, very high tariff protection has been proposed on an interim basis for socialist economies in transition (see McKinnon 1991) to protect industries with negative value added.²⁶ This argument could be valid if the negative value-added industries will become efficient competitors on world markets and if this would not occur without government intervention because of externalities. Corden (1992) has noted that this argument is a special case of the infant-industry argument, which would also apply to positive but low value-added industries. The industries of the 15 states have, however, received protection for decades, and it is hard to visualize these old negative value-added industries being classified as infants,²⁷ ones in which externalities to investment exist that cannot be captured by the firms. Even if there were such cases, Baldwin (1969) has argued that protection will generally not address the externalities.²⁸ Moreover, protection is seldom associated with increasing efficiency, and it frequently has the opposite effect (Thomas, Nash and others 1991).

On balance, the general World Bank recommendation for moderate and relative uniform tariff protection would seem to apply to the 15 states as well. Of course, the tariff level and range would have to be set by individual states depending on their

circumstances and whether they decide to join a regional trading arrangement.

Payments Arrangements

In the ruble zone. To reduce barter, it will be necessary over time to eliminate price controls in interstate trade--and to establish monetary stability, reduce inflation, and improve the system of payments. To relieve the unreasonable delays in processing interstate payments orders, major institutional improvements are needed in the system of interbank settlements both within and among republics.²⁹ Settlement centers (or clearing houses) should be reconstituted and permitted to clear interstate payment orders. The only reporting to the central banks required of the settlement centers would be the net change of positions of the commercial banks.³⁰

Another quite important reform is that commercial banks in each state should be allowed to establish correspondent bank accounts in the commercial banks of other states. This will have immediate benefits in speeding the processing of interstate payments orders--and will possibly prove crucial as new currencies are introduced.

As a result of the lack of monetary coordination within the ruble zone, credit may be created by all the central banks in the ruble zone. There is a serious free-rider problem when overexpansionary policies in one state lead to significant negative balances that are automatically financed and result in net transfers of goods and services from the others without the receipt of convertible currency in return. For Russia, which expects to be the principal creditor in the system, this implies the continuation of

transfers to other states. Until effective monetary policy coordination is established in a possible ruble zone, imposing limits on aggregate credit offered the other states through the correspondent accounts of the central banks may be the least inefficient way for Russia to limit ruble trade surpluses and related transfers.

Any state that wishes to remain in the ruble zone must accept the need for monetary coordination and restraint. Independent monetary policy is possible only with the adoption of a new currency. Monetary coordination and restraint for states that remain in the ruble zone would address the free-rider problem. And if the ruble were to become convertible, bilateral imbalances should not be a concern for surplus countries.

For states with new currencies. If the new currencies are convertible for current account transactions, and if the ruble is convertible as well, interstate payments arrangements could be conducted enterprise to enterprise. Enterprises engaging in foreign trade could obtain foreign funds and convert them to national currency without going through an inter-central bank clearing arrangement. Clearly, moving rapidly toward current account convertibility of the ruble and any new currencies is the best guarantee against a payments-induced collapse of trade.

If convertibility is not immediate for either the ruble or for states introducing currencies, it is not necessary to retain the cumbersome system of bilateral agreements and state trading. A fairly straightforward solution to the conduct of trade and the settlement of accounts among these countries

is a simple multilateral clearing mechanism with convertible currency settlement, limited short-term credit, and short settlement periods. Such a mechanism demands relatively little convertible currency to facilitate trade, but would still permit enterprise to enterprise trade. For this, it would be desirable to establish a multilateral clearing union to permit simultaneous settlements of claims among participating central banks--claims that arise from enterprise-to-enterprise trade among the various states.³¹ In a clearing union, only the multilateral balance within the union would be settled in convertible currency, not all the bilateral balances. And transactions at the level of the enterprise would be conducted in national currencies. Settlements among the central banks would be made in convertible currency after short intervals, needed so that the credit outstanding is limited.

Such a system would economize greatly on the use of scarce hard-currency reserves required to conduct interstate trade since considerably less would be needed to settle multilateral imbalances than if all the transactions had to be denominated in hard currency and conducted through international banks. Moreover, since only the multilateral balance is important to members of a clearing union, the incentive to balance trade bilaterally would be removed. Note, however, that convertible currency settlement, even within a clearing union, will probably reduce the demand for goods from others of the 15 states. The reason is it will transform incentives among enterprises in different states, which will no longer find it cheaper to import from another state.

An alternative mechanism has also been proposed, based on a system of correspon-

dent bank accounts with ruble settlements (Sachs and Lipton 1992 and Williamson 1992). In this scheme, commercial banks in the states introducing new currencies would open correspondent ruble accounts in commercial banks of Russia, and Russian commercial banks would maintain correspondent ruble accounts in commercial banks of these countries. An essential feature of the system would be that countries introducing their own currencies would have to allow a free market between their national currency and the ruble, and trade would be predominantly denominated and settled in rubles.³³

An important condition for such a scheme is the stability of the ruble. And several other technical issues would need to be addressed—including how to obtain forward cover for ruble denominated transactions, and whether countries not receiving seignorage from ruble creation would be able to share in the benefits of using the ruble as a reserve currency. Although technical solutions to these issues can probably be developed, a key issue for such a scheme is political acceptability. Most states planning to introduce new currencies appear unwilling to continue to depend in practice or in appearance on Russian economic policies.

Despite the possibility of implementing these relatively simple payments mechanisms, proposals have also been made for the establishment of more elaborate payments union arrangements (van Brabant 1991, Dornbusch 1992, Havrylyshyn and Williamson 1991). The main difference between these arrangements and a multilateral clearing union is that while settlements would be made periodically in hard curren-

cies, large debit positions would be permitted for trade within the union. The proposals derive in part from an erroneous interpretation of the reasons for the collapse of the CMEA trade: that it was due primarily to a lack of financing to settle clearing imbalances among CMEA members. In fact, the main reasons were the reduction in trade-diverting trade and, as Brada (1992) has shown, the decline in the capacity of the USSR to supply exportables.

There also are several other, more general problems with such arrangements (discussed in detail in Michalopoulos and Tarr 1991). For example, if there are persistent debtors and creditors within the union, it is necessary to find a country willing to provide continued credit to members of the union although it may itself be facing significant overall scarcity of foreign exchange. In the present situation, Russia would likely be the persistent creditor, but it has shown no willingness to extend such credit. Indeed, it has taken steps to restrain trade even within a continuing ruble zone in order to avoid extending credit. It is highly unlikely that it would wish to extend credit to states leaving the ruble zone.

This problem could be solved by providing external credit to finance the debtor countries. But then the question is whether the external credit is optimally allocated. Are these countries having continuing deficits because of ineffective overall macroeconomic policies? Is it not more appropriate that what amounts essentially to balance-of-payments assistance be extended on condition that an appropriate adjustment program is in place and their overall balance of payments is sustainable?

A payments union of the type discussed here runs the risk that deficit countries will use their payments union credit rather than take steps to introduce convertibility and integrate with the international trade system. For a country to induce its agents to internalize the softness of payments within the union, it is necessary for the country to interfere in the trading system through tariffs, nontariff barriers, or subsidies. For some countries this may represent a retreat from a desired more liberal trading environment.³⁵ There is thus a danger that, while credit is available, the union and the associated credit offer too much inducement to focus trade within the payments area rather than diversify and compete internationally. By contrast, deficit countries might quickly exhaust their union credit, after which the payments union would offer no assistance in easing the transition. These arguments suggest the need to search for tools other than a payments union to help with the transition.

The Scope for Cooperation on Interstate Trade

A key question that remains is identifying appropriate measures for strengthening collaboration and trade among the 15 states--and promoting the long-term restructuring of their economies.

The terms of trade. One of the most important issues in interstate relations is how states would react to the expected terms-of-trade adjustment resulting from the use of international prices, notably for energy, in interstate trade. Oil-pricing by Russia is an important example. Russia has declared its intention to raise energy prices in several steps ending in early 1994 and to

introduce international prices in its interstate trade. If it were to do so in its exports of oil to others of the 15 states (it apparently has already introduced close-to-international prices in trade with the Baltics), it would move the price of crude oil from 350 rubles a ton (plus a 28% value-added tax) to about \$130 a ton. At a quasi-market exchange rate of about 110 rubles to the dollar prevailing in mid-1992, this amounts to a 32-fold increase.

The increase in prices of energy and other commodities could have severe adverse consequences for enterprises using energy and raw materials intensively in other states. Their governments could attempt to cushion this impact in the short run with temporary subsidies. But their capacity to do so would be constrained by the need to contain public sector spending and fiscal deficits. In practice, states have attempted to mitigate the terms-of-trade effect on their economy by trying to negotiate less-than-world prices with Russia in the exchange of energy and other commodities contained in bilateral agreements. They have attempted also to maintain the implicit interpublic transfers associated with the pricing system as operated in the former USSR.

As a general rule, to provide appropriate price signals for the operations of economic units, it is desirable to eliminate the provision of transfers through the price mechanism and to provide explicitly for subsidies through budgetary transfers. Given the rather large amounts that would be associated with the energy price adjustment, it is unrealistic to expect that the Russian government would undertake such a transfer. The Russian government has, however, indicated

that it would provide energy in bilateral or multilateral agreements to states of the former USSR (with no apparent distinctions) at the internal price (plus the VAT) during a transition period of almost two years.³⁶ Such a decision would, of course, require commitments to forbid reexports.

This measure would ease the adjustment costs of energy importers by mitigating the adverse terms-of-trade effect of moving to world prices. At the same time, the other states would also need to consider cooperative approaches to maintain rather than disrupt economic links with Russia. To offset the terms-of-trade deterioration, some of the energy-importing states have apparently considered countervailing action—for example, raising transit fees for Russian trade. It is unclear by how much the existing structure of transit fees, port charges, and the like would need to be changed to make them compatible with charges for similar services in international trade. But it would be unfortunate if the move to international prices by Russia precipitated monopoly pricing or controls in the provision of these services by the transit states. Such an approach is likely to lead to confrontations and trade reductions, which would hurt all. Instead, cooperative solutions need to be pursued, involving Russia's phasing in the oil price adjustment and adjusting transit fees to appropriate international levels.³⁷

Trade preferences. It has also been suggested that the 15 states are a good candidate for a preferential trade area (PTA), such as a customs union or free trade area. But given the extensive network of export controls in place within the ruble zone during early 1992, there is no need in the immediate future for a preferential trade

agreement based on tariff preferences. Such PTAs are intended to provide an incentive to the importer to purchase the product within the region of preference. But as elaborated above, the export controls to third countries impose a very high implicit tariff on all imports for convertible currency. Moreover, the relative undervaluation of the ruble and the softness of settlements within the ruble zone mean that importers have a very strong incentive to import from the ruble zone. The export controls on interstate trade have been established to counteract these incentives, and these export controls themselves pose a problem to trade. Thus, additional incentives to import from within the ruble zone are not required—and may be counterproductive. The more serious problems for limiting trade in the ruble zone come from the export controls and the monetary and payments questions already discussed.³⁸

Incentives will change considerably after new currencies are introduced and balances between states are settled on the basis of hard currency or after export controls toward third countries are eliminated and ruble convertibility is established. Once states are paying in convertible currency, they will buy from the least-cost supplier on world markets. It is appropriate to consider whether a traditional, tariff-based PTA, among the 15 states would then be appropriate to encourage interstate trade, either permanently or temporarily.

In principle, a permanent PTA could be readily justified if the scope for trade creation were considerably greater than the scope for trade diversion. As mentioned above, however, the evidence strongly indicates that there is a need in the long run

for a major reorientation of interindustry trade, with much more trade with the rest of the world and less with the other states of the former Soviet Union. So, based on traditional static trade creation diversion considerations, a permanent preferential trade area appears ill-advised for the 15 states.³⁹

By contrast, a preferential trade area appears warranted during the transition. The 15 states are simultaneously removing their nontariff barriers to imports. Given the likely unemployment, due to other causes, as the 15 states collectively remove their nontariff barriers to imports (and barring production subsidies) moderate transitional tariff protection would be warranted for positive value-added industries. The reasons are that the opportunity costs of primary factors are very low and many industries would be expected to contract significantly under open world competition. The only way that transitional tariff protection could protect the former domestic market of the former Soviet Union is through a temporary preferential trade area. If preferences are based on tariffs, interstate trade would initially not be subject to external tariffs. Third-country trade would, however, be subject to moderate tariffs initially. In the longer term, and after a suitable transition period, the preferential trade area could be terminated--through a combination of lowering tariffs to the third countries and raising them to members of the preferential area.

Without a preferential trade area, most states would likely be worse off if all try to buy their goods from the least-cost supplier, because they will then collectively suffer a decline in export demand for their uncompetitive industries before they can be expect-

ed to adjust and reorient output. But under preferential trade agreements, there would be scope for continuing preferential trade in these less than fully competitive products. Since the preferential trade area would be temporary, the production of uncompetitive products would be phased out, but would generate interstate export earnings and trade during the transition. But high tariff rates should be avoided even temporarily because they might result in the continuing operation of negative value-added industries, raising rather than reducing the adjustment costs to the economy.⁴⁰ If protection is only moderate, a temporary preferential trade area appears to accommodate the long-run reorientation and at the same time to ease the transition.⁴¹

Several general conclusions need to be drawn about the participation of the 15 states in a preferential trade area. First, the area need not overlap with an effectively functioning ruble zone that might be established in the future. On the contrary, it is precisely to facilitate trade among newly independent states with different currencies that the preferential trade area is recommended. Second, some states--especially small ones for which it is especially important to rely on an open competitive environment in the long run--may regard as excessive the trade-diversion costs of participating in a preferential trade area, even temporarily. They obviously would need to determine for themselves whether to join any preferential trade arrangement established. Third, more than one preferential arrangement could be established. For example, the Baltic countries are proposing to establish a customs union among themselves, and a group of other states has reached some preliminary understandings on the creation

of such an arrangement. These customs unions may trade with each other as free trade areas. The larger the trade among prospective members relative to total trade, the larger the expected gains from a (transitional) preferential agreement. Fourth, no country can expect preferential access to the markets of the countries within the preferential trade area if it does not afford the same in return.

Customs union or free trade area. If a PTA is to be encouraged temporarily, should it be based on a common external tariff (a customs union) or on different tariff structures for third countries in each participating state, with no internal tariffs (a free trade area)?

Implementation issues arise for both a customs union and a free trade area. A customs union requires interstate agreement on a common external tariff--possibly very difficult to negotiate for all 15 states.⁴² The fact that a free trade area does not require agreement on the external tariff may appear to offer significant advantages to such an arrangement. But some coordination on

third-country tariffs is useful even in a free trade area. If tariffs to third countries in a free trade area differ significantly, transshipment is likely from low-tariff countries to high-tariff countries, allowing the low-tariff countries to capture the tariff revenues. To counter transshipments (smuggling) in a free trade area, rules of origin would need to be introduced. Given the vastness of the frontiers that previously had no customs facilities, it is likely that if tariff differences among the states are large, significant transshipments would occur even with certificates of origin.

Another reason for coordination of third-country tariffs: even within a free trade area, the high tariff countries bear a disproportionate share of the trade-diversion costs, because the high tariffs induce more trade-diverting imports from the partner countries. These problems suggest that a free trade area with moderate tariffs may be the most suitable alternative to pursue.⁴³ A subgroup of countries may nonetheless find it possible to establish a customs union (candidates are the Baltics, and Russia, Belarus, and Kazakhstan).

4

Conclusions and Policy Implications for the World Bank

Open international competition can help allocate resources efficiently and improve the growth prospects of the 15 states. The present system continues to be hampered by significant impediments to trade and dominated by relics of the old command structures. While the future levels and patterns of trade among states will be quite different from those prevailing recently, too abrupt a disruption will compound existing supply constraints. At the same time, it would be difficult to move immediately from the present system to one characterized by fully liberalized trade. Hence the need for policies of transition.

Such policies should be pursued through cooperative efforts by the various states and to cover both trade and payments issues. Because Russia is so important for interstate economic relations, it needs to lead in the formulation of appropriate policies for trade and payments. The World Bank can support this process through the provision of consistent policy advice and technical assistance.

Summary of Policy Recommendations

Trade regime toward third countries.
Exports, as a general rule, should not be restrained through quantitative restrictions or

licensing. Where exports need to be temporarily regulated because domestic prices are controlled and thus below international prices at prevailing exchange rates, regulation should be accomplished through export taxes that decline to zero as the domestic price moves toward the world price. Where it is necessary to adhere to some specific quantitative export target because of an externally imposed trade restraint, such as the Multi-Fibre Arrangement or another voluntary export restraint, licenses or quotas will need to be used. But in such cases, the licenses or quotas should be auctioned.

Exporters should not be forced to surrender foreign exchange earnings at below-market exchange rates. In the context of establishing current account convertibility for the ruble or other currencies--which entails a single exchange rate and free access to foreign exchange for importers, without quantitative restraints on imports--exporters would need to surrender foreign exchange earnings to the banking system. Such surrenders would not be a tax on exports.

Imports could be taxed through moderate and relatively uniform tariffs, a useful tran-

sitional device to provide a modest degree of protection to positive value-added industries. If tariffs are differentiated, at most two or three tariff categories should be established. Tariffs can also generate fiscal revenue during a transition period when tax revenue collection is not fully effective.

State trading. As soon as domestic prices are allowed to adjust to world prices, there will be no reason to maintain state trading--which should then be terminated. In the interim, bilateral agreements may be maintained. But such agreements should reduce the portion subject to state obligations to the few products that are gradually adjusting to world prices--and use procurement agents rather than state orders and planning to implement trade in these products.

Compared with monetary and payments arrangements, export licenses on all other products are an inefficient method of dealing with the problem of controlling excessive ruble trade surpluses. Without such arrangements, the use of indicative lists, rather than obligatory lists, may serve as a second-best transition device. For products on the indicative lists, there would be no state obligation for the trade, and enterprises in the respective countries would negotiate their best terms on price, credit, and other aspects of the contract. The indicative lists commit governments to issue export licenses for the products in the agreements up to the amounts specified, permit the removal of the product from intergovernmental price controls, and reduce state planning in economic decisionmaking.

All states should encourage the entry of new firms in trade operations and eliminate the monopoly position of state trading orga-

nizations. The state trading organizations can diversify into other products or act as procurement agencies for the import of commodities for use by government, but they should have to compete for this procurement with private companies and be encouraged to privatize themselves. Until private firms can handle the trade in bulk commodities, such as food, state agencies may continue to be needed to ensure adequate trade flows. But in all such cases, governments must take steps (such as making trade credit available) to ensure that private traders are given equal opportunity to participate in trading activities.

Payments arrangements. Within any future ruble zone, the need is great to strengthen the system of payments among enterprises through adequate settlement mechanisms in the banking system. Settlement centers for clearing interstate payments orders should be reconstituted, and only the net positions of commercial banks within the settlement centers need be reported to the central banks. Commercial banks in each state should be permitted to establish correspondent accounts in the commercial banks of other states.

Monetary coordination is urgently needed among central banks interested in participating in a ruble zone--to avoid the current free-rider problem. This involves rules for seignorage, currency emission, and monetary and fiscal policies--as well as rules for the outstanding balances each may maintain. Independent monetary authority in the ruble zone allows overexpansionary policies in one state to lead to significant negative balances that are automatically financed and result in the transfer of goods and services from the others without the receipt of con-

vertible currency. Russia can be expected to run surpluses in the near term because it might benefit more than other states from the move to world prices. But it may find maintaining such transfers difficult. Without convertibility, if there are persistent creditors or debtors within such a system, a multilateral system of balancing should be introduced. That is, the current system of bilateral monitoring of payments through the central bank correspondent accounts should not be used to enforce bilateral balancing of trade. With monetary coordination and restraint, stabilization and convertibility of the ruble would be facilitated. If convertibility is achieved, imbalances in the ruble zone would not be a concern for surplus countries, and there would be no need to impose controls on trade among states in the zone.

It is uncertain whether there is sufficient interest in countries to undertake the kind of policy coordination required for an effective operation of a ruble zone. For payments among states that introduce new currencies, which are for a time inconvertible, a system of multilateral clearing with short settlement periods should be introduced. Such a system should generally be based on inter-enterprise transactions rather than state trading. Settlement periods should be short and outstanding balances should be settled in hard currencies. Alternative approaches using ruble settlements among correspondent banks could also help in some cases.

Interstate trade policy. At the very minimum, interstate trade relations should avoid beggar-thy-neighbor policies that reduce the total trade in goods and services among the 15 states. The movement to world prices will undoubtedly lead to the deterioration of

the terms of trade for a number of states, especially oil importers. This impact can be mitigated if Russia provides energy to other states at domestic oil and gas prices (including VAT), which are expected to be adjusted to world levels over a two-year period. In parallel, energy importing states should avoid the temptation of trying to compensate by exploiting monopolistic positions in such areas as transit.

More broadly, efforts should be undertaken to establish--temporarily--a customs union or free trade arrangement among any of the interested 15 states. Such an arrangement could provide a modest incentive for maintaining interstate trade in the near future by providing moderate tariff preferences. It should have a short life to permit the various states to adjust to their long-run comparative advantage in international trade--and reduce the trade dependence on each other. It should be open to all 15 states irrespective of whether they desire to remain in the ruble zone. In fact, the preferential trade agreement is more important for facilitating trade among states with different currencies. It should be led by Russia, because it plays such a central role in trade with all other states. If a broadly based preferential trade agreement cannot be arranged, narrower arrangements (among the Baltics, say) may be worth exploring. The nature of the arrangements concluded could vary, but the more comprehensive the arrangement, the more likely it will assist in reducing transition costs in the medium term. Some states, especially small ones, may appropriately choose not to join the preferential trade area because they regard the trade-diversion costs as excessive. But they also need to consider the implications of not having preferential access to the area.

The Role of the World Bank

The World Bank can support this process through two basic mechanisms:

Consistent policy advice to the 15 states on systemic reform aimed at greater reliance on market systems.

Technical assistance in the elaboration of particular studies in support of the policy reforms. In particular there is a need to undertake three sets of studies. One would assist individual governments in the design of overall trade policies, such as those undertaken by the Bank under the UNDP Trade Expansion Program.⁴⁴ A second set

would develop approaches for the phasing-out of state trading and the transformation of state trade agencies into government procurement entities that compete in the market. The third would assist in the design of regional trade arrangements. In addition to this support, states will need assistance in the design of effective payments arrangements critical for trade. In particular, they will need assistance in establishing an effective monetary policy for the ruble area as a whole--and in possibly designing clearing arrangements for trade between states in the ruble zone and others with new (possibly inconvertible) currencies. Assistance in these two areas should be provided by the International Monetary Fund.



Notes

1. Collins and Rodrik used historical measures of trade patterns, while all the other studies used gravity models: that is, predicted trade was based on a regression of actual trade against such explanatory variables as distance, income of the home and partner country, and participation in a region of trade preference.
2. Work reported by Oxford Analytica reached a similar conclusion (March 20, 1992).
3. See Annex tables 5, 6, and 7 for the commodity composition of trade by state in 1990. Because these data are in domestic rather than world prices, raw materials tend to be undervalued relative to final products, especially machinery. The long-term decline in interstate trade in manufactures may be offset in part by increases in intraindustry trade, because of the high degree of product specialization in each state and the considerable human capital in certain technological areas.
4. See, for example, UN Economic Commission for Europe (1992) and Bruno (1992). As these studies note, however, there are several explanations for the output decline in Eastern Europe, and it is difficult to assess the relative importance of the various factors.
5. Goskomstat provides estimates of how the conversion of interstate trade from domestic to world prices would affect the trade balance with fixed quantities (table 2). Goskomstat used an exchange rate of 0.6 rubles to the U.S. dollar in the valuation of the "foreign" prices. So, the relative rather than the absolute rankings are of interest. But see Brown and Belkindas (1992) for many qualifications to these relative rankings.
6. Prior to the dissolution of the Union, Gosbank operated a fully integrated, albeit inefficient, payments system. There was a network of settlement centers which cleared payments between the republics and trade related payments were ultimately guaranteed by Gosbank. See International Monetary Fund (1992) and Sachs and Lipton (1992) for further details on interstate and Russian banking institutions, respectively.

7. For the latter states this problem may be aggravated by a possible "moral hazard" problem. Exporting enterprises may be willing to accept rubles, because they anticipate that their governments will convert these rubles to their domestic currency at the time of new money creation, but the accumulated rubles will be worthless to the state. Then the value of exporting to the ruble zone for the enterprise is greater than the value to the economy as a whole. This problem is very similar to that faced by Hungary and Poland during the latter stages of the demise of the CMEA, when their exporting enterprises were willing to accept transferable rubles of doubtful value because the governments paid their domestic enterprises in their domestic currency.
8. The Ministers of Trade and Material Resources of the 15 states agreed in May 1991 to maintain trade in 1992 at 70% of the level of 1991. After the demise of the union, however, the implementation of any trade agreements became primarily a matter of bilateral negotiation among the independent states. Although Georgia is reported not to have signed agreements, trade with Georgia is being conducted analogously.
9. Russia nonetheless estimates that it will run a significant interstate trade surplus during 1992 on the trade under the protocols.
10. It is impossible for governments to negotiate world market prices of goods that are subject to significant quality variation. The market price of such goods can only be determined by supply and demand, that is through the process of seeking the best offer from alternative buyers and sellers at the level of the enterprise and consumer. The commodity-by-commodity price negotiation process *de facto* results in differential exchange rates, and will likely result in a continuation in the pattern of interstate transfers mentioned above.
11. Under price controls, the sale of a good at the official price in rubles conveys a rent to the buyer. Thus, when enterprises sell goods they attempt to capture some of that rent by acquiring price controlled goods in return at the official price in rubles. If an enterprise were to simply sell all its output for the controlled price in rubles under the state order system, it would have little to bargain with when it attempted to acquire either its productive inputs or consumer goods for its employees (where the latter assists in attracting its employees to the workplace).
12. Barter has not been totally eliminated in intrastate trade because, for a variety of reasons, prices for many products did not yet appear to be market clearing. First, a number of products were excluded from the price decontrol program. Second, in Russia, for example, prior notification and approval of price increases was employed in the name of anti-monopoly policy for many products whose prices were ostensibly decontrolled. Third, given the extremely devalued ruble of early 1992, the domestic prices of tradeable goods appeared considerably lower than imports. This suggests certain price rigidities regarding price increases, so that prices did not very rapidly increase to their market clearing levels. Rodrik (1992) has observed similar puzzling pricing behavior in Poland after the "Big

Bang" Stabilization of January 1990. Given the possibly excessive Polish devaluation of January 1990, it was not until about October 1990 that Polish domestic prices increased to levels comparable to imports.

13. See Corden (1992) for an elaboration of the policy options in the medium term.
14. This is a consequence of the Lerner (1936) "Symmetry Theorem."
15. The export tax would therefore decline as the domestic price is liberalized toward the world price.
16. In some cases, restraining exports to the required level may call for an export tax above 100 percent. Such high and uneven incentives in the trade regime cause greater distortions than a more neutral trade tax regime and should be avoided (see Thomas, Nash, and others 1991).
17. Such an auction system is envisaged by the Ministry and Foreign Economic Relations and authorized by Directive #90 of the Russian Federation.
18. An inferior arrangement, quite cumbersome and contentious, is to try to negotiate a coordinated approach to price liberalization for the existing large number of commodities whose prices are controlled by various states.
19. The countries of Central and Eastern Europe used a system of indicative lists after the demise of the CMEA, and these lists by themselves were inadequate to prevent a significant collapse of trade between themselves and the former Soviet Union. See Tarr (1992) for an analysis of indicative lists and other transition devices employed after the demise of the CMEA.
20. To provide an example, suppose that domestic production of apparel products are taxed at 10%. Then for efficient revenue purposes, imports of apparel products should also be taxed at 10%. To tax imported apparel products at either above or below 10% would distort consumption toward the lower taxed variety of apparel, increasing the distortion costs while generating less revenue.
21. See Corden (1974, ch. 4) for an elaboration of this principle. Ease of collection, political economy, infant industry, and equity considerations can qualify the argument. Using a computable general equilibrium model of the U.S. economy, de Melo, Stanton, and Tarr (1989) found that--given the objective of generating a given amount of government revenue--an import tariff (applied only on imports) imposed more than 25 times the inefficiency costs of a sales tax (applied at the same rate to imports and domestic sources). In some cases, practical implementation of the principle of tax neutrality may require the collection of the tax by the customs authority. For example, if enterprises pay taxes on

production, the easiest way to collect an equal tax on the imported variety (and thereby avoid discrimination against the domestic product) may be to have the tax collected by customs (a system employed by a number of developing countries). In this case, despite the fact that the tax on the imported product is collected by customs, it is not a tariff per se since it does not discriminate by source. But if the domestic tax is a tax on consumption (such as a sales tax), it violates the neutrality principle to also collect a customs duty for revenue purposes.

22. The most thorough development of this argument is Mussa (1984). Under the assumption that the only instrument of intervention available to the government is the tariff, he shows that in the absence of unemployment or other distortions, the optimal time path of the tariff is immediate free trade, even when there are costs of adjustment of factors of production. He has several qualifications however. First, myopic expectations by potentially displaced workers are a justification for gradual adjustment toward free trade. Second, concern for the income of workers in shrinking industries will also justify a gradual adjustment such that the industry contracts at roughly the speed of normal attrition of factors in these industries. The most important qualification in our context is based on Mussa's tentative assumption that faster liberalization will increase unemployment. Then the optimal time path for commercial policy balances the marginal social costs of unemployment with the marginal social benefits of faster adjustment.

The results of the 19-country study by Papageorgiou, Choksi, and Michaely (1990) would challenge the assumption that trade liberalization has a significant effect on unemployment. They found that the effect of trade liberalization on unemployment has been small. Often the reallocation of labor was within sectors causing less disruption than feared. This would argue for a faster transition toward the long run low tariff were it not for the fact that in the 15 states unemployment is likely to be high from other shocks, so that the marginal unemployment cost of another displaced worker will be higher.

23. Tariff structures that depart from uniformity generally depart for reasons of political economy. Thus, some general equilibrium estimates of adopting a uniform structure have found significant benefits compared with actual nonuniform rates in place (see Harrison, Rutherford and Tarr (1992); see also Thomas, Nash, and others (1991) for an elaboration). If tariffs are not uniform, at most two or three categories should be employed, with little dispersion.
24. Bhagwati, Ramaswami, Srinivasan, and Harry Johnson have developed this proposition in a series of articles. The arguments are summarized in Bhagwati (1971).

25. Exporting industries are taxed by tariffs in a variety of ways. First, the tariff causes the real exchange rate to appreciate, and therefore reduces the return to exporting in domestic currency. Second, exporters must pay the import tariff on their imported intermediate inputs. Rebating this tax through "duty drawback" mechanisms is often attempted, but these rebate mechanisms are often cumbersome and unsuccessful. And the tariff induces import-competing industries to drive up the price of primary factors in competition with exporting industries.
26. Preliminary estimates by Senlik-Leygonie and Hughes (1992) suggest that there are a significant number of industries in the 15 states with negative value added. If an industry has negative value added at world prices, the economy would earn foreign exchange by selling the inputs on world markets and importing the output. It costs less to pay workers to do nothing than to employ them in negative value-added industries, but the primary factors of production used in the industry would be available for other uses.
27. If firms can capture all the benefits of their investment through lower costs, there is no externality, and the investment should occur without tariffs or other government intervention. McKinnon has not, however, based his argument on externalities, a well-known necessary condition for infant-industry protection.
28. Protection raises the domestic price of the firm's product. But the individual firm still faces the problem that competitors may copy any new technology at no cost, so that the firm may still be unable to recover the costs of investing in new technology. Baldwin shows that similar considerations apply to other types of externalities.
29. See Sachs and Lipton (1992) for suggestions for improving the payments system in Russia. These include permitting commercial banks to voluntarily join clearing houses which would report to the central bank only the changes in net positions of the commercial banks, not each payments order. Payments orders processed between branches of the same bank would not be reported outside the bank.
30. For details, see International Monetary Fund (1992).
31. It is important to distinguish a multilateral clearing "union" as used in this section from a clearing "arrangement" or a payments union. A clearing arrangement is the type of arrangement that characterized CMEA trade in the state trading era. Strongly criticized, it involves substantial intergovernmental bartering of goods for goods, with no mechanism for settling imbalances.
32. A simple clearing mechanism can operate as follows. Participating countries would have to agree on a clearing unit of account (CUA)--linked, say to the SDR-- and declare the parity of their exchange rates vis-a-vis the unit of account. (Note that the clearing mechanism can operate with fluctuating rates as well--but an exchange rate guarantee

would have to be determined at the point shipping documents enter the banking system -- see below.) Letters of credit (L/C) or other instruments could be denominated either in CUAs or in the trading countries' currencies.

A transaction using the clearing mechanism could operate as follows. Assume that an importer in country X sends an L/C denominated in CUAs or its own currency to an exporter in country Y. The exporter presents shipping documents, the L/C, and a sight bill to his bank and gets paid immediately in his currency with the exchange rate for the transaction fixed at that point. The exporter's bank notifies its central bank of the transaction and obtains reimbursement in domestic currency. The central bank of the exporting country notifies the clearing union and gets credited for the transaction. Simultaneously, the exporter's bank sends the shipping documents to the importer's bank. The latter would obtain payment in local currency from the importer, which it would then forward to its central bank -- which in turn will notify the clearing union. (Arrangements can also be designed where the commercial banks deal directly with the clearing union bypassing reporting transactions to their central banks, and where the central banks buy and sell the currencies of union members against the CUA on demand from their commercial banks. Such an arrangement prevailed in the Asia Clearing Union. See Madan (1986) for further details.) Settlement of the net position among all members of the clearing union would be made in hard currency at the end of each month. A variety of operational details would have to be agreed as well -- such as the transactions covered, the size of the interim credit provided, whether interest is paid on balances accumulated during the settlement period, and whether any inducements are offered to use the clearing mechanism.

33. The scheme could work as follows: Given a free market for rubles in (say) Ukraine, a Ukrainian enterprise that wished to purchase a Russian good would acquire rubles at auction in Ukraine; it would use these rubles to purchase a payments order in a Ukrainian commercial bank that had a ruble correspondent account in a Russian commercial bank. In fact, the Ukrainian importer could purchase goods in this manner from any country (say, Latvia) that accepted rubles. Thus, any of the 15 states that maintained convertibility between their national currency and the ruble could execute payments through the ruble correspondent accounts of their commercial banks. For details and other technical requirements, see Sachs and Lipton (1992).
34. It can be argued that the decline in USSR trade with the CMEA countries and with Finland in 1991 was the result of introducing convertible currency settlements. Clearly, the conversion of trade to convertible currency contributed in large measure to the collapse of that portion of trade induced by trade diversion. There is, however, evidence that the restricted Soviet supply of exports was also a very significant part of the problem, a problem caused in large part by the Soviet restrictions on exports.

In particular, Brada (1992) has shown that, relatively speaking, trade among Czechoslovakia, Hungary, and Poland held up better than might have been expected in 1991 despite a similar shift to convertible currency payment in this trade. Moreover, the sharp decline in Soviet-Eastern European trade in 1991 only continued a trend of declining Soviet exports to its partner countries in the CMEA that began as early as 1988, despite trade being based on the transferable ruble over that time.

(The annual Soviet trade balance with the aggregate of Eastern European CMEA worsened from a trade surplus of 60 million transferable rubles in 1987 to a trade deficit of 4 billion transferable rubles in 1989 (UNECE 1990), and further worsened by more than two-fold in 1990 (UNECE 1991). If this trade were revalued at world prices, however, the former Soviet Union would have had a surplus (Oblath and Tarr 1992).)

Soviet trade with India was not converted to convertible currency, and Soviet imports from India were maintained at a high level until the Soviet Union failed to meet commitments for crude oil deliveries, at which time India also restricted its exports (Brada, 1992). Since the former Soviet Union was also suffering a decline in trade in its intergovernmental barter arrangements, and other countries in the region made a relatively successful transition to convertible currency trade, these facts suggest that a significant explanation for the decline in Soviet imports from Eastern Europe was its deteriorating capacity to supply exportables. This was partly due to capacity problems in such industries as oil.

35. See Polack (1991) for an elaboration of this point and a general criticism of payments unions for Eastern Europe.
36. The first-best solution is to price oil at world market prices both domestically and in interstate trade--and to allow free exports. The same transfer of income to other states from Russia (through the terms-of-trade subsidy) could in principle be made through a direct transfer of convertible currency. This would more efficiently allocate the oil both in Russia and in interstate trade, leaving all states better off. It is doubtful, however, that this option is feasible politically, given fiscal deficits.
37. On March 28, 1992 nine of the CIS countries (Ukraine and Moldova excepted) signed an agreement on transit and customs registration of transit cargos.
38. To address the problem of export controls, some officials have suggested an unusual kind of PTA in which countries renounce export restraints against each other (especially quantitative restraints) and treat sales within the PTA as equivalent to domestic sales. Importing countries within the PTA would be prohibited from reexporting or required to impose an export tax equal to the export tax of the exporting country. If reexporting proves a problem, countries would be permitted to impose tariff-quotas (that is, an export tax for quantities of exports above a given quota). Since export restraints against the

external world will exist for certain products (such as oil) during a transition period to world market prices, arbitrage within a ruble zone (that is, a PTA with no export restraints) would encourage considerable interstate exports. For products subject to price adjustment toward world prices and the use of export taxes during the transition, having no export restraints within the PTA would imply a terms-of-trade gain for importing countries. This terms-of-trade gain will be reduced and eliminated as exporting countries allow domestic prices to rise to world levels. Such an arrangement would involve essentially the establishment of a common economic space among states that choose to participate. Such an arrangement does not appear practicable at present, given the likely introduction of new currencies and the need to reduce export controls toward the rest of the world for all but a few commodities for which price controls would be retained for an interim basis.

39. Moreover, the experience of preferential trade areas in the developing world has not been encouraging. Except for the Central American Common Market (CACM), PTAs have generated very little trade (see Robson 1987), but it would be unwise to repeat the mistakes of the CACM. Although average tariffs were about 25 percent, tariff escalation led to much higher effective rates of protection on final goods. The internal trade was mostly of the trade-diverting type in final goods, while mostly traditional exports were sold outside the CACM. When foreign exchange rationing was imposed after the debt crisis, trade in final goods collapsed. See Saborio and Michalopoulos (1992).
40. The Central American Common Market shows that average external tariff rates of 25% or more can lead to significant problems.
41. Pisani-Ferry and Sapir (1992) expressed a similar view.
42. On March 13, 1992 the heads of state of Russia, Kazakhstan, Kyrgyzstan, Tadjikistan, and Uzbekistan signed an agreement on principles of common customs policy. Shortly thereafter the agreement was also signed by Belarus, Moldova, Armenia, and Turkmenistan. The agreement envisages setting up the usual institutions of a customs union, including zero internal tariffs and the formation of an interstate commission for setting a common external tariff. The agreement will come into effect one month after the parliaments of all member states ratify it (as of early May, none had done so).
43. These problems also highlight that, if a free trade area is implemented, pressure will be applied to the high-tariff countries to lower their tariffs. The free trade area may thus result in good policies driving out bad ones.
44. In addition to studies in other parts of the world, the Trade Expansion Program has completed studies of two socialist economies in transition: Poland and the Czech and Slovak Republic.



References

- Baldwin, Robert. 1969. "The Case Against Infant-Industry Protection." *Journal of Political Economy* 77 (May/June): 295-305.
- Bhagwati, Jagdish. 1971. "The Generalized Theory of Distortions and Welfare." In J. Bhagwati and others, eds., Trade Balance of Payments and Growth: Essays in Honor of Charles Kindleberger. Amsterdam: North Holland.
- Biessen, Guido. 1991. "Is the Impact of Central Planning on the Level of Foreign Trade Really Negative?" *Journal of Comparative Economics* 15 (March): 22-44.
- Brabant, Josef van. 1991. "Convertibility in Eastern Europe through a Payments Union." In John Williamson ed., Currency Convertibility in Eastern Europe. Washington, D.C.: Institute for International Economics.
- Brada, Josef. 1992. "Regional Integration in Eastern Europe: Prospects for Integration within the Region and with the European Community." Paper presented at the conference *New Dimensions in Regional Integration*, World Bank, April 2-3. Washington, D.C.
- Brada, Josef, and Jose Mendez. 1985. "Economic Integration Among Developed, Developing and Centrally Planned Economies: A Comparative Analysis." *Review of Economics and Statistics* 67 (November): 549-56.
- Brown, Stuart, and Misha Belkindas. 1992. "Who's Feeding Whom: An Analysis of Soviet Interrepublic Trade." Department of Economics, Georgetown University, Washington, D.C.
- Bruno, Michael. 1992. "Stabilization and Reform in Eastern Europe: A Preliminary Examination." Paper presented at the World Bank/IMF conference on the fall of output in Eastern Europe, June 4-5. Washington, D.C.

- Collins, Susan, and Dani Rodrik. 1991. Eastern Europe and the Soviet Union in the World Economy. Washington, D.C.: Institute for International Economics.
- Corden, W. Max. 1974. Trade Policy and Economic Welfare. Oxford: Clarendon Press.
- _____. 1992. "Integration and Trade Policy Issues in the ex-Soviet Union." Policy Research Working Paper 915. World Bank, Washington, D.C.
- Dornbusch, Rudiger. 1992. "A Payments Mechanism for the Soviet Union and Eastern Europe." In Gros, Pisani-Ferry, and Sapir.
- Gros, Daniel, Jean Pisani-Ferry, and Andre Sapir, eds. 1992. Interstate Economic Relations in the Former Soviet Union. Centre for European Policy Studies Working Document 63. London.
- Harrison, Glenn, Thomas Rutherford, and David Tarr. 1992. "Piecemeal Trade Reform in Partially Liberalized Economies: An Evaluation for Turkey." Policy Research Working Paper 951. World Bank, Washington, D.C.
- Havrylyshyn, Oleh, and Lant Pritchett. 1991. "European Trade Patterns After the Transition." Policy Research Working Paper 748. World Bank, Washington, D.C.
- Havrylyshyn, Oleh, and John Williamson. 1991. From Soviet disUnion to Eastern Economic Community? Washington, D.C.: Institute for International Economics.
- International Monetary Fund. 1992. "Common Issues and Interrepublic Relations in the Former USSR." Economic Review (April).
- Kenen, Peter. 1990. "Transitional Arrangements for Trade and Payments Among the CMEA Countries." International Monetary Fund Discussion Paper. Washington, D.C.
- Kornai, J. 1980. The Economics of Shortage. Amsterdam: North Holland.
- Lerner, Abba. 1936. "The Symmetry Between Import and Export Taxes." Economica 3 (August): 306-13.
- Madan, B.K. 1986. Towards Monetary Cooperation in South Asia. New Delhi: Concept Publishing Company.
- Melo, Jaime de, Julie Stanton, and David Tarr. 1989. "Revenue Raising Taxes: General Equilibrium Evaluation of Alternative Taxation in U.S. Petroleum Industries." Journal of Policy Modelling 11(3), 425-49.

- McKinnon, Ronald. 1991. The Order of Economic Liberalization. Baltimore: Johns Hopkins University Press.
- Michalopoulos, Constantine, and David Tarr. 1991. "Trade and Payments Arrangements in the Post-CMEA Eastern and Central Europe." Policy Research Working Paper 644. World Bank, Washington, D.C. (Also forthcoming in A. Hillman and B. Milanovic, eds., The Transition from Socialism in Eastern Europe: Domestic Restructuring and Foreign Trade. Washington, D.C.: World Bank.)
- Mussa, Michael. 1984. "The Adjustment Process and the Timing of Trade Liberalization." Working Paper 1458. Cambridge, Mass.: National Bureau of Economic Research.
- Oblath, Gabor, and David Tarr. 1992. "The Terms-of-Trade Effects of the Elimination of State Trading in Soviet-Hungarian Trade." Journal of Comparative Economics 16(1): 75-93.
- Papageorgiou, Demetrios, Armeane Choksi, and Michael Michaely. 1990. Liberalizing Foreign Trade in Developing Countries: The Lessons of Experience. Washington, D.C.: World Bank.
- Pisani-Ferry, Jean, and Andre Sapir. 1992. "Trade and Transition to the Market: A Survey of Key Issues." In Gros, Pisani-Ferry, and Sapir.
- Polak, Jacques J. 1991. "Convertibility: An Indispensable Element in the Transition Process in Eastern Europe." In J. Williamson, ed., Currency Convertibility in Eastern Europe. Washington, D.C.: Institute of International Economics.
- Robson, Paul. 1987. The Economics of International Integration. London: Allen and Unwin.
- Rodrik, Dani. 1992. "Making Sense of the Soviet Trade Shock in Eastern Europe: A Framework and Some Estimates." Working Paper 4112. Cambridge Mass.: National Bureau of Economic Research.
- Saborio, Sylvia, and Constantine Michalopoulos. 1992. "Central America at a Crossroads." Policy Research Working Paper 922. World Bank, Washington, D.C.
- Sachs, Jeffrey, and David Lipton. 1992. "Remaining Steps to Achieve a Market-Based Monetary System." Paper presented at the conference on the Change of Economic System in Russia, Stockholm School of Economics, June 15-16. Stockholm.
- Scherer, F.M. 1980. Industrial Market Structure and Economic Performance. Chicago: Rand McNally.

Senlik-Leygonie, Claudia, and Gordon Hughes. 1992. "Industrial Profitability and Trade among the former Soviet Republics." Paper presented at the Economic Policy Panel, Lisbon, April.

Tarr, David. 1992. "Problems in the Transition from the CMEA: Implications for Eastern Europe." Communist Economies and Economic Transformation 4(1): 23-43.

Thomas, Vinod, John Nash, and others. 1991. Best Practices in Trade Policy Reform. New York: Oxford University Press.

United Nations, Economic Commission for Europe. 1990. Economic Bulletin for Europe. Vol. 42. Geneva: UN Secretariat.

_____. 1991. Economic Bulletin for Europe. Vol. 43. Geneva: UN Secretariat.

_____. 1992. Economic Survey of Europe in 1991-1992. Geneva: UN Secretariat.

Viner, Jacob. 1950. The Customs Union Issue. New York: Carnegie Endowment for International Peace.

Williamson, John. 1992. Trade and Payments After Soviet Disintegration. Washington, D.C.: Institute for International Economics.

Annex Tables

**Table 1. Total and intraregional foreign trade as a percentage of GNP
former Soviet states, Eastern Europe CMEA and EC members**

	Foreign Trade		Share of intraregional
	Total*	intraregional**	
Former USSR (1990)			
Russian federation	18.3	11.1	60.6
Ukraine	29.0	23.8	82.1
Belarus	47.3	41.0	86.8
Uzbekistan	28.5	25.5	89.4
Kazakhstan	23.5	20.8	88.7
Georgia	28.9	24.8	85.9
Azerbaijan	33.9	29.8	87.7
Lithuania	45.5	40.9	89.7
Moldova	33.0	28.9	87.7
Latvia	41.4	36.7	88.6
Kyrgyzstan	32.3	27.7	85.7
Tadjikistan	35.9	31.0	86.5
Armenia	28.4	25.6	90.1
Turkmenistan	35.6	33.0	92.5
Estonia	32.9	30.2	91.6
Eastern Europe (CMEA) (1989)			
Bulgaria	30.1	16.1	53.4
Czechoslovakia	23.0	10.9	47.2
Hungary	34.1	13.7	40.3
Poland	19.6	8.4	43.1
Romania	17.6	3.7	21.0
EC (1990)			
Belgium	74.2	44.5	60.0
Denmark	32.7	13.7	41.7
Germany	29.8	14.4	48.2
Greece	26.8	13.3	49.4
Spain	19.8	9.0	45.3
France	23.3	13.0	55.6
Ireland	59.9	38.9	64.9
Italy	20.4	9.7	47.5
Netherlands	54.4	34.2	62.9
Portugal	42.1	24.6	58.4
United Kingdom	26.0	10.7	41.2

Sources: Former USSR: Goskomstat for trade data in foreign trade prices, and unpublished World Bank estimates for GNP; Eastern Europe: UNECE (1990) for trade data, and World Bank Atlas for GNP; Pisani-Ferry and Sapir for the EC. 1990 data are used for the former USSR and the EC; 1989 data for Eastern Europe.

* Trade is measured by the average of exports and imports as percent of GNP.

** Intraregional trade refers to trade within the former USSR, the CMEA or the EC respectively.

Table 2. States commodity trade balance in domestic and foreign trade prices in 1990
(millions of current rubles)

	Interstate		External		Total	
	Domestic Prices	Foreign Prices	Domestic Prices	Foreign Prices	Domestic Prices	Foreign Prices
Russia	7427	29866	-43195	-38	-35768	29828
Ukraine	-670	-6500	-7784	-1472	-8454	-7972
Belarus	2384	-1216	-3155	-1063	-771	-2279
Uzbekistan	-3695	-4104	-1615	-483	-5310	-4587
Kazakhstan	-5871	-6120	-2610	-861	-8481	-6981
Georgia	776	-1612	-1632	-601	-856	-2213
Azerbaijan	1858	268	-1180	-403	678	-135
Lithuania	-673	-3014	-1202	-505	-1875	-3519
Moldova	861	-2243	-1147	-600	-286	-2843
Latvia	317	-934	-1361	-782	-1044	-1716
Kyrgyzstan	-733	-956	-1010	-707	-1743	-1663
Tadjikistan	-982	-1439	-459	-27	-1441	-1466
Armenia	-287	-1166	-1058	-436	-1345	-1602
Turkmenistan	-454	335	-513	-192	-967	143
Estonia	-258	-1165	-543	-230	-801	-1395

Source: Goskomstat.

Table 3. Exports and Imports in 1990
(in millions of 1990 rubles, foreign trade prices)

	<u>Interstate Trade</u>		<u>External Trade</u>		<u>Total Trade</u>	
	Exports	Imports	Exports	Imports	Exports	Imports
Russia	86449	56583	46468	46506	132917	103089
Ukraine	35968	42468	7829	9301	43797	51769
Belarus	16043	17259	2010	3073	18053	20332
Uzbekistan	6889	10993	813	1296	7702	12289
Kazakhstan	8450	14570	1039	1900	9489	16470
Georgia	2852	4464	301	902	3153	5366
Azerbaijan	4576	4308	423	826	4999	5134
Lithuania	4155	7169	397	902	4552	8071
Moldova	2704	4947	237	837	2941	5784
Latvia	3939	4873	178	960	4117	5833
Kyrghyzstan	1954	2910	52	759	2006	3669
Tadjikistan	1643	3082	356	383	1999	3465
Armenia	1989	3155	64	500	2053	3655
Turkmenistan	2773	2438	114	306	2887	2744
Estonia	1951	3116	116	346	2067	3462

Source: Goskomstat.

Table 4. Interstate and external trade, 1990, all products*
(millions of 1990 rubles in domestic prices)

	Russia	Ukraine	Belarus	Uzbekistan	Kazakhstan	Georgia	Azerbaijan	Lithuania	Moldova	Latvia	Kyrgyzstan	Tajikistan	Armenia	Turkmenistan	Estonia	Imports		Total
																Interstate	External	
Russia	#	25248.6	9938.3	4840.2	4276.3	3557.9	3705.2	2707.4	3488.8	2512.5	897.1	1167.6	1851.2	1276.4	1816.2	67283.7	75280.0	142563.7
Ukraine	28891.8	#	3126.4	833.2	730.6	596.2	660.3	739.9	1004.9	782.9	385.8	199.1	543.9	175.0	318.6	38988.6	15071.0	54059.5
Belarus	9295.3	2864.7	#	176.7	378.8	221.4	190.4	571.8	313.4	351.5	116.9	57.3	132.0	54.0	116.5	14840.7	4925.0	19765.7
Uzbekistan	5936.6	1659.3	581.9	#	1453.4	167.4	198.1	149.8	89.0	156.6	322.7	329.8	156.4	619.9	42.9	11863.8	2798.0	14661.8
Kazakhstan	9073.5	1504.8	727.8	783.9	#	366.6	283.6	180.1	155.7	238.1	267.6	317.9	234.7	78.9	100.9	14314.1	3516.0	17830.1
Georgia	2700.3	1063.4	262.2	65.0	84.8	#	281.2	60.4	90.8	109.0	29.5	17.7	123.1	29.6	31.5	4948.5	1891.0	6839.5
Azerbaijan	2241.6	861.2	264.1	66.5	295.5	137.6	#	38.5	77.7	71.9	26.4	45.1	81.5	15.6	24.0	4247.2	1505.0	5752.2
Lithuania	3688.3	689.5	617.5	47.1	81.0	87.6	55.0	#	120.2	390.6	60.1	28.6	42.2	14.1	100.5	6022.3	1616.0	7638.3
Moldova	2461.2	1569.5	387.3	110.1	75.5	45.4	44.2	93.7	#	76.5	25.4	6.7	39.8	10.7	45.6	4991.6	1470.0	6461.6
Latvia	2470.3	580.9	436.3	33.0	101.8	79.4	52.3	495.7	154.1	#	29.6	11.2	31.2	21.9	213.5	4711.2	1616.0	6327.2
Kyrgyzstan	1538.6	332.3	151.1	364.5	358.0	61.0	38.9	54.0	60.2	35.2	#	65.1	57.5	48.6	14.4	3179.4	1063.0	4242.4
Tajikistan	1497.1	428.8	154.3	502.8	268.8	85.5	79.0	28.9	35.7	32.7	123.7	#	37.6	69.7	14.7	3359.3	767.0	4126.3
Armenia	1777.0	659.9	261.9	81.5	64.5	195.4	327.7	54.8	98.3	57.0	37.6	18.9	#	31.4	49.0	3714.9	1153.0	4867.9
Turkmenistan	1275.3	423.2	110.7	215.6	217.1	99.0	156.1	40.0	53.5	37.2	112.7	88.6	78.3	#	11.5	2923.0	685.0	3608.0
Estonia	1863.4	433.0	204.7	49.0	57.2	23.8	32.7	134.4	111.0	176.5	10.8	23.8	18.4	18.9	#	3157.6	741.0	3898.6
Exports																		
Interstate	74710.3	38319.1	17224.5	8169.1	8443.3	5724.2	6104.7	5349.4	5853.3	5028.2	2445.9	2377.4	3427.8	2469.0	2899.8	188546.0	114097.0	302643.0
External	32085.0	7287.0	1770.0	1183.0	906.0	259.0	325.0	414.0	323.0	255.0	53.0	308.0	95.0	172.0	198.0	45633.0	#	#
Total exports	106795.3	45606.1	18994.5	9352.1	9349.3	5983.2	6429.7	5763.4	6176.3	5283.2	2498.9	2685.4	3522.8	2641.0	3097.8	234179.0	#	#

Source: Goskomstat.

* Entries in the matrix represent the flow of commodities from the state at the top of the column to the state in the row.

Table 5. Interstate and external trade, 1990: machinery and light industry*
(domestic prices, millions of 1990 rubles)

	Russia	Ukraine	Belarus	Uzbekistan	Kazakhstan	Georgia	Azerbaijan	Lithuania	Moldova	Latvia	Kyrgyzstan	Tajikistan	Armenia	Turkmenistan	Estonia	Imports		Total
																Interstate	External	
Russia	#	11588.4	6537.9	2865.8	1149.3	974.3	1239.4	1601.9	1103.1	1079.5	567.5	588.6	1089.9	726.6	762.0	31874.2	48852.2	112600.6
Ukraine	13069.6	#	2070.6	511.5	295.3	315.9	311.6	583.6	459.8	445.4	322.8	157.8	407.4	150.1	216.8	19318.2	9164.6	47801.0
Belarus	3785.9	1387.2	#	122.0	190.8	131.7	97.0	296.7	84.0	152.8	89.0	44.4	99.7	40.6	75.0	6596.8	3047.9	16241.5
Uzbekistan	2931.5	802.3	400.5	#	150.0	104.9	140.8	100.3	60.3	106.3	136.5	114.6	126.2	27.3	29.0	5230.5	1357.9	11818.9
Kazakhstan	3663.9	918.3	507.6	280.9	#	136.0	164.4	125.4	96.7	128.0	157.4	180.6	220.4	46.1	59.7	6685.4	2198.3	15569.1
Georgia	1198.5	371.6	177.3	42.1	25.2	#	69.8	38.5	49.8	43.8	13.1	13.9	59.4	8.3	20.8	2132.1	820.1	5084.3
Azerbaijan	1021.6	331.6	161.4	43.8	31.0	52.2	#	24.7	39.4	30.5	20.9	18.8	30.2	3.8	17.4	1827.3	752.0	4406.6
Lithuania	1713.6	385.7	225.6	19.5	51.7	54.1	26.3	#	32.9	66.3	55.3	20.4	28.2	11.9	41.7	2733.2	990.9	6457.3
Moldova	1257.1	430.3	256.8	65.9	18.9	22.3	25.3	72.4	#	42.2	16.6	3.6	22.3	9.2	30.5	2273.4	895.1	5441.9
Latvia	1148.7	341.5	192.2	24.9	65.9	45.8	20.6	178.7	38.9	#	25.3	7.3	21.9	19.8	73.5	2205.0	807.8	5217.8
Kyrgyzstan	719.1	207.7	126.3	113.4	46.3	23.3	27.6	39.1	43.5	17.7	#	42.3	51.7	14.4	8.7	1481.1	470.4	3432.6
Tajikistan	720.1	136.3	88.1	131.1	38.2	17.0	44.5	22.3	23.1	18.2	37.0	#	35.0	32.0	11.1	1354.0	411.6	3119.6
Armenia	844.2	252.2	188.0	64.3	16.5	52.8	62.2	49.3	72.1	41.4	31.3	14.8	#	9.3	40.2	1738.6	401.9	3879.1
Turkmenistan	731.2	254.5	72.9	106.3	21.4	39.5	60.3	27.3	19.5	13.2	42.6	60.5	50.6	#	9.7	1509.5	374.0	3393.0
Estonia	788.6	253.6	120.9	43.3	40.3	12.0	12.3	66.5	20.4	79.3	6.1	21.8	12.5	18.4	#	1496.0	409.5	3401.5
Interstate	33593.6	17661.2	11126.1	4434.8	2140.8	1981.8	2302.1	3226.7	2143.5	2264.6	1521.4	1289.4	2255.4	1117.8	1396.1	88455.3	70954.2	247864.8
External	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total exports	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Interstate exports, % of GDP	5.20	10.71	27.41	12.65	3.87	13.45	15.42	23.28	16.19	18.86	17.31	16.94	22.46	14.15	16.62			

Source: Goskomstat.

* Entries in the matrix represent the flow of machinery and light industry products from the state at the top of the column to the state in the row.

Table 6. Interstate and external trade: energy*
(domestic prices, millions of 1990 rubles)

	Russia	Ukraine	Belarus	Uzbekistan	Kazakhstan	Georgia	Azerbaijan	Lithuania	Moldova	Latvia	Kyrgyzstan	Tajikistan	Armenia	Turkmenistan	Estonia	Imports		Total
																Interstate	External	
Russia	#	310.0	642.1	409.3	842.5	5.6	399.4	108.6	0	3.8	8.8	0	0	146.0	70.0	2946.1	572.2	3518.3
Ukraine	3898.9	#	293.4	10.1	42.9	5.2	14.6	1.3	21.7	0.5	0	0	0	10.5	1.4	4300.5	137.7	4438.2
Belarus	1721.5	50.8	#	0.7	0.5	0	2.1	115.8	0	0.3	0	0	0	0	0.9	1892.6	19.5	1912.1
Uzbekistan	321.7	2.1	0.3	#	83.9	0	0.5	0	0	0.2	55.8	72.9	0	568.6	0.2	1106.2	2.4	1108.6
Kazakhstan	1574.0	1.1	0.4	135.1	#	0	6.0	0.1	0	0	30.2	0	0	5.4	0.5	1752.8	4.6	1757.4
Georgia	212.0	2.8	2.1	0.5	0.9	#	133.3	0	0	0	0	0	2.1	0	0	353.7	0.4	354.1
Azerbaijan	249.0	2.7	4.6	0.3	188.4	0.2	#	0	0	0	0	0	3.9	0	0	449.1	1.9	451.0
Lithuania	718.8	15.2	169.4	0.3	0	0	0.2	#	0	88.1	0	0	0	0	0	992.0	0.0	992.0
Moldova	197.8	337.8	24.3	0.8	0	0	0.1	0	#	0.1	0	0	0	0	0	560.9	1.8	562.7
Latvia	216.4	15.4	91.4	0.3	0	0	0	192.9	0	#	0	0	0	0	52.4	568.8	22.9	591.7
Kyrgyzstan	142.1	0.1	0	84.9	100.2	0	0.1	0	0	0	#	3.7	0	9.4	0	340.5	0.0	340.5
Tajikistan	100.8	0.2	0	148.6	57.4	0	16.7	0	0	0	2.5	#	0	22.9	0	349.1	0.0	349.1
Armenia	133.2	0.5	0.7	0.1	0	10.5	159.0	0	0	0	0	0	#	0	0.1	304.1	0.0	304.1
Turkmenistan	10.8	0.1	0	16.6	3.6	0	61.6	0	0	0	1.5	0.4	0	#	0	94.6	0.0	94.6
Estonia	211.0	2.5	16.9	0.1	0	0	0.1	13.7	0	0.1	0	0	0	0	#	244.4	23.8	268.2
Interstate	9708.0	741.3	1245.6	807.7	1320.3	21.5	793.7	432.4	21.7	93.1	98.8	77.0	6.0	762.8	125.5	16255.4	787.2	17042.6
External	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total exports	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Interstate exports, % of GDP	1.50	0.45	3.07	2.30	2.39	0.15	5.32	3.12	0.16	0.78	1.12	1.01	0.06	9.66	1.49			

Source: Goskomstat.

* Entries in the matrix represent the flow of energy products from the state at the top of column to the state in the row.

Table 7. Interstate and external trade, 1990: agriculture and food industry*
(domestic prices, millions of 1990 rubles)

	Russia	Ukraine	Belarus	Uzbekistan	Kazakhstan	Georgia	Azerbaijan	Lithuania	Moldova	Latvia	Kyrgyzstan	Tajikistan	Armenia	Turkmenistan	Estonia	Imports		Total
																Interstate	External	
Russia	#	4837.3	718.0	794.8	528.8	2054.8	1449.1	698.1	2085.0	673.5	202.7	302.7	368.9	297.5	594.5	15605.7	14405.5	30011.2
Ukraine	1117.5	#	30.7	62.3	111.6	135.9	162.9	40.0	361.8	163.6	35.5	7.9	4.7	3.6	32.3	2270.3	3177.2	5447.5
Belarus	301.7	440.0	#	23.1	119.4	50.1	55.7	77.0	199.8	64.8	20.1	1.9	4.6	10.5	9.0	1377.7	1144.4	2522.1
Uzbekistan	300.8	560.3	114.8	#	913.6	36.7	21.8	33.4	18.2	24.8	102.6	43.6	0.3	3.2	5.2	2179.3	594.7	2774.0
Kazakhstan	369.2	262.6	88.6	167.2	#	195.4	62.2	30.7	35.6	59.5	45.3	114.9	5.3	7.7	14.8	1459.0	812.5	2271.5
Georgia	252.6	352.9	37.1	7.9	32.6	#	20.9	4.9	29.7	42.2	15.6	2.2	1.5	0.1	3.2	803.4	868.5	1671.9
Azerbaijan	156.1	341.8	48.0	5.2	27.8	11.8	#	7.1	24.5	17.3	3.5	1.1	0.0	0.9	1.6	646.7	562.1	1208.8
Lithuania	100.7	72.7	24.7	13.3	18.2	25.0	20.9	#	79.7	18.0	3.9	3.0	4.3	2.2	1.6	388.2	401.2	789.4
Moldova	114.9	179.9	5.2	8.1	40.4	16.1	9.0	8.0	#	10.9	7.4	1.9	0.1	0.0	4.3	406.2	325.7	731.9
Latvia	66.3	67.6	23.6	4.8	18.2	29.2	25.7	9.4	80.7	#	3.4	0.7	2.7	1.9	3.0	337.2	577.2	914.4
Kyrgyzstan	102.3	48.3	5.4	55.4	139.6	33.0	5.0	2.4	8.9	9.7	#	3.6	0.3	0.0	1.1	415.0	495.0	910.0
Tajikistan	104.0	102.8	40.0	51.3	140.2	65.1	7.4	1.5	4.7	5.7	79.4	#	0.9	1.8	1.6	606.4	231.6	838.0
Armenia	146.1	222.1	39.5	9.0	31.2	21.8	7.3	1.9	16.3	6.5	5.4	1.3	#	0.0	1.4	509.8	534.5	1044.3
Turkmenistan	75.3	102.2	25.2	7.4	162.0	51.8	18.6	5.4	21.5	13.0	66.1	10.2	18.0	#	0.1	576.8	245.2	822.0
Estonia	122.0	65.1	11.0	4.7	9.8	10.3	16.2	5.8	81.2	59.3	4.3	1.8	3.9	0.1	#	395.5	215.9	611.4
Interstate	3329.5	7655.6	1211.8	1214.5	2293.4	2737.0	1882.7	925.6	3047.6	1168.8	595.2	496.8	415.5	329.5	673.7	27977.2	24591.2	52568.4
External	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total exports	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GDP	646180.0	164860.0	40590.0	35060.0	55250.0	14730.0	14990.0	13860.0	13240.0	12010.0	8790.0	7610.0	10040.0	7900.0	8400.0			
Interstate exports, % of GDP	0.52	4.64	2.99	3.46	4.15	18.58	12.61	6.68	23.02	9.73	6.77	6.53	4.14	4.17	8.02			

Source: Goskomstat.

* Entries in the matrix represent the flow of agriculture and food products from the state at the top of the column to the state in the row.

Distributors of World Bank Publications

ARGENTINA
Carlos Hirsch, SRL
Galeria Guemes
Florida 165, 4th Floor-Ofc. 453/465
1333 Buenos Aires

**AUSTRALIA, PAPUA NEW GUINEA,
FIJI, SOLOMON ISLANDS,
VANUATU, AND WESTERN SAMOA**
D.A. Books & Journals
648 Whitahorse Road
Mitcham 3132
Victoria

AUSTRIA
Gerold and Co.
Graben 31
A-1011 Wien

BANGLADESH
Micro Industries Development
Assistance Society (MIDAS)
House 5, Road 16
Dhanmondi R/Area
Dhaka 1209

Branch offices:
156, Nur Ahmed Sarak
Chittagong 4000

76, K.D.A. Avenue
Kulna 9100

BELGIUM
Jean De Lannoy
Av. du Roi 202
1060 Brussels

CANADA
Le Diffuseur
C.P. 85, 1501B rue Ampère
Boucherville, Québec
J4B 5E6

CHINA
China Financial & Economic
Publishing House
8, Da Fo Si Dong Jie
Beijing

COLOMBIA
Infoenlace Ltda.
Apartado Aereo 34270
Bogota D.E.

COTE D'IVOIRE
Centre d'Édition et de Diffusion
Africaines (CEDA)
04 B.P. 541
Abidjan 04 Plateau

CYPRUS
Cyprus College Bookstore
6, Diogenes Street, Engomi
P.O. Box 2006
Nicosia

DENMARK
Samfundslitteratur
Rosencærns Allé 11
DK-1970 Frederiksberg C

DOMINICAN REPUBLIC
Editora Taller, C. por A.
Restauración e Isabel la Católica 309
Apartado de Correos 2190 Z-1
Santo Domingo

EGYPT, ARAB REPUBLIC OF
Al Ahran
Al Galaa Street
Cairo

The Middle East Observer
41, Sherif Street
Cairo

EL SALVADOR
Fusades
Alam Dr. Manuel Enrique Araujo #3530
Edificio SISA, 1er. Piso
San Salvador 011

FINLAND
Akateeminen Kirjakauppa
P.O. Box 128
SF-00101 Helsinki 10

FRANCE
World Bank Publications
66, avenue d'Éna
75116 Paris

GERMANY
UNO-Verlag
Poppelsdorfer Allee 55
D-5300 Bonn 1

GUATEMALA
Librerías Piedra Santa
5a. Calle 7-55
Zona 1
Guatemala City

HONG KONG, MACAO
Asia 2000 Ltd.
46-48 Wyndham Street
Winning Centre
2nd Floor
Central Hong Kong

INDIA
Allied Publishers Private Ltd.
751 Mount Road
Madras - 600 002

Branch offices:
15 J.N. Heredia Marg
Ballard Estate
Bombay - 400 038

13/14 Asaf Ali Road
New Delhi - 110 002

17 Chittaranjan Avenue
Calcutta - 700 072

Jayadeva Hostel Building
5th Main Road Gandhinagar
Bangalore - 560 009

3-5-1129 Kachiguda Cross Road
Hyderabad - 500 027

Prarthana Flats, 2nd Floor
Near Thakore Baug, Navrangpura
Ahmedabad - 380 009

Patiala House
16-A Ashok Marg
Lucknow - 226 001

Central Bazaar Road
60 Bajaj Nagar
Nagpur 440010

INDONESIA
Pt. Indira Limited
Jl. Sam Ratulangi 37
P.O. Box 181
Jakarta Pusat

ISRAEL
Yozmot Literature Ltd.
P.O. Box 56055
Tel Aviv 61560
Israel

ITALY
Licosa Commissionaria Sansoni SPA
Via Duca Di Calabria, 1/1
Casella Postale 552
50125 Firenze

JAPAN
Eastern Book Service
Hongo 3-Chome, Bunkyo-ku 113
Tokyo

KENYA
Africa Book Service (E.A.) Ltd.
Quaran House, Mfangano Street
P.O. Box 45245
Nairobi

KOREA, REPUBLIC OF
Pan Korea Book Corporation
P.O. Box 101, Kwangwhamun
Seoul

MALAYSIA
University of Malaya Cooperative
Bookshop, Limited
P.O. Box 1127, Jalan Pantai Baru
59700 Kuala Lumpur

MEXICO
INPOTEC
Apartado Postal 22-860
14060 Tlalpan, Mexico D.F.

NETHERLANDS
De Lindeboom/InOr-Publikaties
P.O. Box 202
7480 AE Haaksbergen

NEW ZEALAND
EBSCO NZ Ltd.
Private Mail Bag 99914
New Market
Auckland

NIGERIA
University Press Limited
Three Crowns Building Jericho
Private Mail Bag 5095
Ibadan

NORWAY
Narvesen Information Center
Book Department
P.O. Box 6125 Etterstad
N-0602 Oslo 6

PAKISTAN
Mirza Book Agency
65, Shahr-e-Quaid-e-Azam
P.O. Box No. 729
Lahore 54000

PERU
Editorial Desarrollo SA
Apartado 3824
Lima 1

PHILIPPINES
International Book Center
Fifth Floor, Filipinas Life Building
Ayala Avenue, Makati
Metro Manila

POLAND
ORPAN
Palac Kultury i Nauki
00-901 Warszawa

PORTUGAL
Livraria Portugal
Rua Do Carmo 70-74
1200 Lisbon

SAUDI ARABIA, QATAR
Jarir Book Store
P.O. Box 3196
Riyadh 11471

**SINGAPORE, TAIWAN,
MYANMAR, BRUNEI**
Information Publications
Private, Ltd.
02-06 1st Fl., Pei-Fu Industrial
Bldg.
24 New Industrial Road
Singapore 1953

SOUTH AFRICA, BOTSWANA
For single titles:
Oxford University Press
Southern Africa
P.O. Box 1141
Cape Town 8000

For subscription orders:
International Subscription Service
P.O. Box 41095
Craighall
Johannesburg 2024

SPAIN
Mundi-Pressa Libros, S.A.
Castello 37
28001 Madrid

Librería Internacional AEDOS
Consell de Cent 391
08009 Barcelona

SRI LANKA AND THE MALDIVES
Lake House Bookshop
P.O. Box 244
100, Sir Chittampalam A.
Gardiner Mawatha
Colombo 2

SWEDEN
For single titles:
Fritzes Fackboksforetaget
Regeringsgatan 12, Box 16356
S-103 27 Stockholm

For subscription orders:
Wennergren-Williams AB
Box 30004
S-104 25 Stockholm

SWITZERLAND
For single titles:
Librairie Payot
1, rue de Bourg
CH 1002 Lausanne

For subscription orders:
Librairie Payot
Service des Abonnements
Case postale 3312
CH 1002 Lausanne

TANZANIA
Oxford University Press
P.O. Box 5299
Maktaba Road
Dar es Salaam

THAILAND
Central Department Store
306 Silom Road
Bangkok

**TRINIDAD & TOBAGO, ANTIGUA
BARBUDA, BARBADOS,
DOMINICA, GRENADA, GUYANA,
JAMAICA, MONTserrat, ST.
KITTS & NEVIS, ST. LUCIA,
ST. VINCENT & GRENADINES**
Systematics Studies Unit
#9 Watts Street
Curepe
Trinidad, West Indies

UNITED KINGDOM
Microinfo Ltd.
P.O. Box 3
Alton, Hampshire GU34 2PG
England

VENEZUELA
Librería del Este
Apto. 60.337
Caracas 1060-A

The World Bank

Headquarters

1818 H Street, N.W.
Washington, D.C. 20433, U.S.A.

Telephone: (202) 477-1234
Facsimile: (202) 477-6391
Telex: WUI 64145 WORLDBANK
RCA 248423 WORLDBK
Cable Address: INTBAFRAD
WASHINGTONDC

European Office

66, avenue d'Iéna
75116 Paris, France

Telephone: (1) 40.69.30.00
Facsimile: (1) 40.69.30.66
Telex: 640651

Tokyo Office

Kokusai Building
1-1 Marunouchi 3-chome
Chiyoda-ku, Tokyo 100, Japan

Telephone: (3) 3214-5001
Facsimile: (3) 3214-3657
Telex: 26838



0077-3

Internal Documents Unit,
H B1-151