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Russian Grain Trading
and Marketing:
Evolution and Struggles

by

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RUSSIAN GRAIN TRADING AND MARKETING: EVOLUTION AND STRUGGLES

BY

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**This paper is a summary of the authors' work on the evolution of the Russian grain marketing system. Previous versions of this paper were presented at: the International Agribusiness Management Association Annual Meeting in San Francisco, May 22, 1993; and at a conference titled "New Dimension in North American-European Agricultural Trade Relations" Italy, June 20-23, 1993.

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RUSSIAN GRAIN TRADING AND MARKETING: EVOLUTION AND STRUGGLES

Executive Summary The Russian grain marketing system is going through a remarkably traumatic evolutionary change, the dimensions of which are potentially unprecedented in the world grain industry. A highly centralized command system, absent of any concept of a market, has been the mechanism for allocating resources within the grain system. Functions were performed exclusively through state-owned facilities. Product distribution was also on a command basis.

Concurrent with many other developments over the past three years have been numerous institutional changes in the grain system. Of particular importance is the simultaneous development of "Exchanges" and numerous joint stock companies within the grain system. Most notable, however, is that market functions that Ministry of Procurement traditionally provided were replaced in October 1992 by essentially another monopoly with as extensive powers as the previous regime.

Exchanges have flourished in Russia during the past two years. Using some definitions of exchanges yields estimates of up to 700. However, far fewer active exchanges are trading grain. The number of exchanges is sizeable, resulting in intense inter-exchange competition. Trade is primarily in nearby positions of grain. Many other agricultural products and inputs are traded, but futures (as known in the West) are not traded yet.

Two agencies of particular importance in the Russian grain system are Roskhleboprodukt and ExportKhleb. The former is a joint stock company responsible for providing grain products to retail outlets. Producers continue to have obligatory deliveries to the Federal (and potentially Regional) Reserves, and prices are controlled at the retail level. Most important is that this firm owns all of the handling system facilities throughout Russia. However, those in other CIS countries are autonomous. Consequently, at least within Russia, a near monopoly in grain handling has replaced fundamentally ministerial functions and procurement. ExportKhleb has also been transformed into a joint stock company. Besides being the agent for Roskhleboprodukt on credit imports, ExportKhleb has pursued other trading opportunities, primarily in the former CIS countries, acting fundamentally as a trading company.

Despite the rapid changes, numerous obstacles must be overcome as this industry makes the transition toward a market system as known in the West. This paper describes changes occurring in the Russian grain market system. Specific sections describe and analyze 1) economic conditions confronting the industry; 2) traditional grain marketing organization 3) the current and evolving marketing system, including detailed

discussions of the principal agencies, ExportKhleb and Roskhleboprodukt; 4) grain exchanges in Russia, their current function, and obstacles inhibiting their evolution; and 5) a discussion of the future of this market and likely progression toward a more competitive system, which would be integrated with the rest of the world.

RUSSIAN GRAIN TRADING AND MARKETING: EVOLUTION AND STRUGGLES

Drs. William W. Wilson and Alexander Belozertsev

The Russian grain marketing system is going through a remarkably traumatic evolutionary change, the dimensions of which will be potentially unprecedented in the world grain industry. A highly centralized command system, absent of any concept of a market, has been the mechanism for allocating resources within the grain system. Functions were performed exclusively through state-owned facilities, and product distribution was also on a command basis.

Concurrent with many other developments over the past three years have been numerous institutional changes in the grain system. Of particular importance is the simultaneous development of "Exchanges" and numerous joint stock companies within the grain system. Most notable, however, is that market functions (handling, processing) that the Ministry of Procurement traditionally provided were replaced in October 1992 by essentially another monopoly with as extensive powers as the previous regime.

Important features of the grain marketing system in Russia today are two agencies, Roskhleboprodukt and ExportKhleb, and commodity exchanges. The former agency is a newly formed joint stock company responsible for providing grain products to retail outlets. ExportKhleb also has been transformed into a joint stock company. Besides being the agent for Roskhleboprodukt on credit imports, ExportKhleb has pursued other trading opportunities, primarily in the former Commonwealth of Independent States (CIS) countries, acting fundamentally as a trading company.

Commodity exchanges have flourished in Russia during the past two years. Broadly defined, there are estimates of up to 700 exchanges. However, far fewer active exchanges trade grain. Many other agricultural products and inputs are traded, but futures (as known in the west) are not traded yet.

The purpose of this paper is to describe changes occurring in the Russian grain market system with a particular focus on factors impacting the evolution of commodity exchanges. Specific sections describe 1) economic conditions confronting the industry; 2) traditional organization of grain marketing; 3) the current and evolving marketing system, including detailed discussions of the principal agencies, ExportKhleb and Roskhleboprodukt; 4) grain exchanges in Russia, their current function, and obstacles inhibiting their evolution; and 5) a discussion of the future of this market and likely progression toward a more competitive system, which would be integrated with the rest of the world.

1. Economic Conditions Confronting the Grain Marketing Sector

A number of observations about the relative importance of the grain sector in Russia and the macroeconomic environment confronting this sector are discussed first. Agribusiness accounts for 30 percent of Russia's GNP and comprises about 70 percent of the consumer market. Russia is the largest grain-producing country among the CIS countries and one of the largest grain-producing countries in the world. Tremendous challenges would confront any grain marketing system of this geographical size and volume.

During the 1980s, area planted to cereals in Russia decreased from 75.5 million hectares in 1980 to 63.0 million hectares in 1991 and 63.5 million hectares in 1992. Average grain production in Russia in 1986 through 1990 was 104.3 million metric tons (mmt); in 1991, 91 mmt; and in 1992, 106.8 mmt. The main grain producers in the country are still big state and collective farms, kholkoz. Private farming has not been important in Russian grain production.

As this market system emerges, at least three macroeconomic conditions should be recognized. First, inflation (however measured) has been in the area of 30 to 50% per month for the past several years and is converging toward "hyper-inflation." Second, the ruble has been severely devalued, from 15 per U.S. dollar before 1990 to about 900+ in 1993. Third, commercial interest rates are about 110% or more per year. These are important because grain marketing activity in most countries involves stockholding and typically requires relatively easy access to capital.

Price liberalization in Russia in early 1992 and tight government monetary measures worsened the agribusiness financial position, especially the grain sector. The discrepancy between grain prices and those for manufactured goods increased considerably in favor of industry. In addition, the flow of finances to Russia's state and collective farms decreased considerably, making it practically impossible to maintain soil fertility and to adapt new technologies. Distribution problems and a decrease in raw material imports from other CIS republics have created additional problems in the Russian grain sector. Concurrently, many suppliers to state and collective farms are still monopolists and add to price hikes for machinery, supplies, and handling.

2. Grain Marketing Organization

Grain distribution in Russia was highly monopolized for many years and regulated by the state. Specifically, the Grain Procurement Agency ("Khleboproduct" Ministry, which has changed

its name many times) governed grain distribution. Khleboproduct operated under strict supervision of the central government and Gosplan, the State Committee on Planning, based on rigid orders and fixed procurement prices. Today, this monopoly still exists as 100% state-owned, shareholding Federal Contract Corporation "Roskhleboprodukt."

Investments in the grain sector in Russia were also monopolized. Central credits were invested to build large elevators and storage, harvesting, and transportation equipment plants and factories. Despite these investments, Russia continued to have an inefficient grain distribution system. At present, most of these facilities use from 50 to 60% of their capacity. However, for many years, obtaining accurate figures on storage capacities (both on-the-farm and regional levels) and means of transportation (barges, railway hoppers, and trucks) has been difficult, if not impossible.

Prices were specified in 5-year annual plans in the grain sector and were fixed. Regional price differentiations were used to account for production conditions (weather and soil conditions, costs of production, and so on). Prices did not reflect supply-demand balances at the regional level but generally covered production costs and some profits for most grain producing units.

3. Evolutionary Change in Russian Grain Marketing

Numerous changes are occurring in the Russian grain marketing system. This section describes roles of two of the primary agencies and describes the functions of the grain marketing system in the context of these agencies. Finally, pricing functions are described, along with recent changes in government policies affecting pricing.

Roskhleboprodukt The Russian grain marketing system has always been controlled through centralized organizations. The principal organization in the Russian grain marketing system is Roskhleboprodukt.¹ Roskhleboprodukt performs functions that the Ministries of Procurement and Agriculture formerly assumed including procurement and distribution.

¹No insinuation is made that these are equivalent, but similar organizations regarding their impact on the organization of grain marketing exist in the United States (the Commodity Credit Corporation), Canada and Australia (the Canadian and Australian Wheat Boards), and France (ONIC).

Roskhleboprodukt was formed in 1992 and has a number of crucial functions, including 1) procures grains from domestic production; 2) allocates inputs in conjunction with ministries; 3) distributes grains to mills and bakeries; 4) owns and manages the vast majority of handling and storage facilities; 5) controls imports; and 6) is one of the principle shareholders of ExportKhleb.

Initially organized to export grains, ExportKhleb was founded in the former Soviet Union in 1923. This was its exclusive function until 1963, when the Soviet Union imported large amounts (about 7 million tons) of grain for the first time. Since then, it has been responsible for state grain sales and procurement abroad. These were made on behalf of the Council of Ministers of the USSR on food purchases. For most of its existence, it worked strictly on the basis of state orders.

ExportKhleb was originally a state shareholding company, which evolved later to the permanent division of the All-Union Ministry of Foreign Trade (in the 1930s). In the late 1980s, several pressures emerged: 1) There were criticisms about the functioning of the grain import agency; 2) An effort was made to demonopolize trade in the internal market; and 3) Some republics were beginning to become decentralized. For these reasons, the agency was formally reorganized.

Reorganization of ExportKhleb began in 1988 and changes were adopted by the end of 1990. The change involved two important dimensions. First, ExportKhleb was structured as a joint-stock shareholding company. Today, ExportKhleb has more than 2,000 shareholders, including state, corporate, and private companies, as well as organizations, associations, and agricultural firms from at least 11 former Soviet Republics. Major shareholders include Menatep (a consortium of banks), Intergrain, Khlebrossii (Ministry of Procurement, now Roskhleboprodukt), and Agriprombank (Domestic Bank in Charge of Agricultural Trade). The biggest are Roskhleboprodukt and the export-import state agencies of the main CIS states. Some shareholders are private individuals.

Second, a number of subsidiaries were created to provide services on the domestic and world markets for what was anticipated to be a broader customer base. These generally included firms and organizations that were trying to promote their own grain operations outside the state distribution system. All of them were organized in the last couple of years and are trying to operate independently on the basis of loose control on ExportKhleb's behalf. Examples of these subsidiaries (or "divisions") include "Bartinvest" (a barter agency), "Zerno" (grain division, which imports on government credit), "Prodsyrje" (imports oilseed, rice, and compound feed), Prodex (specialty grain exports), and an Exchange Department in charge of overseas futures operation. In addition, they have purchased seats on a

number of the major Russian grain exchanges. Similarly, ExportKhleb functions have changed. Originally, ExportKhleb was the sole agency responsible for the export and import of grains on behalf of the Council of Ministers and was also involved in international finance and transportation.

In its current role, ExportKhleb has expanded its functions in numerous dimensions. First, it is the recognized monopoly for grains imported under foreign government credit guarantees. These purchases are made on behalf of Roskhleboprodukt at fixed margins. Other changes that have expanded the scope of ExportKhleb's operations include an increase in the number of commodities traded, its involvement in barter (through "Bartinvest"), its imports and exports on the behalf of individual CIS states on the world grain market, and its increased responsibilities for internal logistics. All of these functions are performed with profit objectives, are typically on a commission basis, and are subject to competitive pressures from emerging companies and organizations.

Market Organization Obligatory sales (or state purchases), more recently referred to as sales to the Federal or Regional Reserves, have always been an important component of Russian grain marketing. These are obligated sales and are made at somewhat rigid procurement prices established through a political process and administered by Roskhleboprodukt. These purchases have been decreasing for a number of years. State procurements were 33% of production in 1986-90, 31% in 1991, and 24% in 1992. In 1993, state procurement will be an expected 11.8 mmt.

Figure 1 shows the current organization of the Russian grain marketing system. Of particular importance in this figure is the role and function of Roskhleboprodukt, which exerts tremendous control on this system, including 1) administration of a relatively rigid pricing scheme for obligatory sales (30%); 2) distribution of some inputs at favorable terms, partially to induce deliveries to the Federal and Regional Reserves; and 3) control of many components of the physical marketing system.

Traditionally, alternatives for distribution outside the state organizations have been limited in the grain sector. Surplus grains could be used on farm in various ways or potentially bartered. During the later 1980s, a system was established to pay incentives for above average production. These, at least in concept, could be sold to ExportKhleb for hard currency. However, this program was largely unsuccessful.²

²Reasons for this include "...the procedure of receiving and spending currency, the complexity of this procedure, difficulties in receiving and spending the money...." that led to this program's not being used (Ivashchenko and Klimov, p. 142).

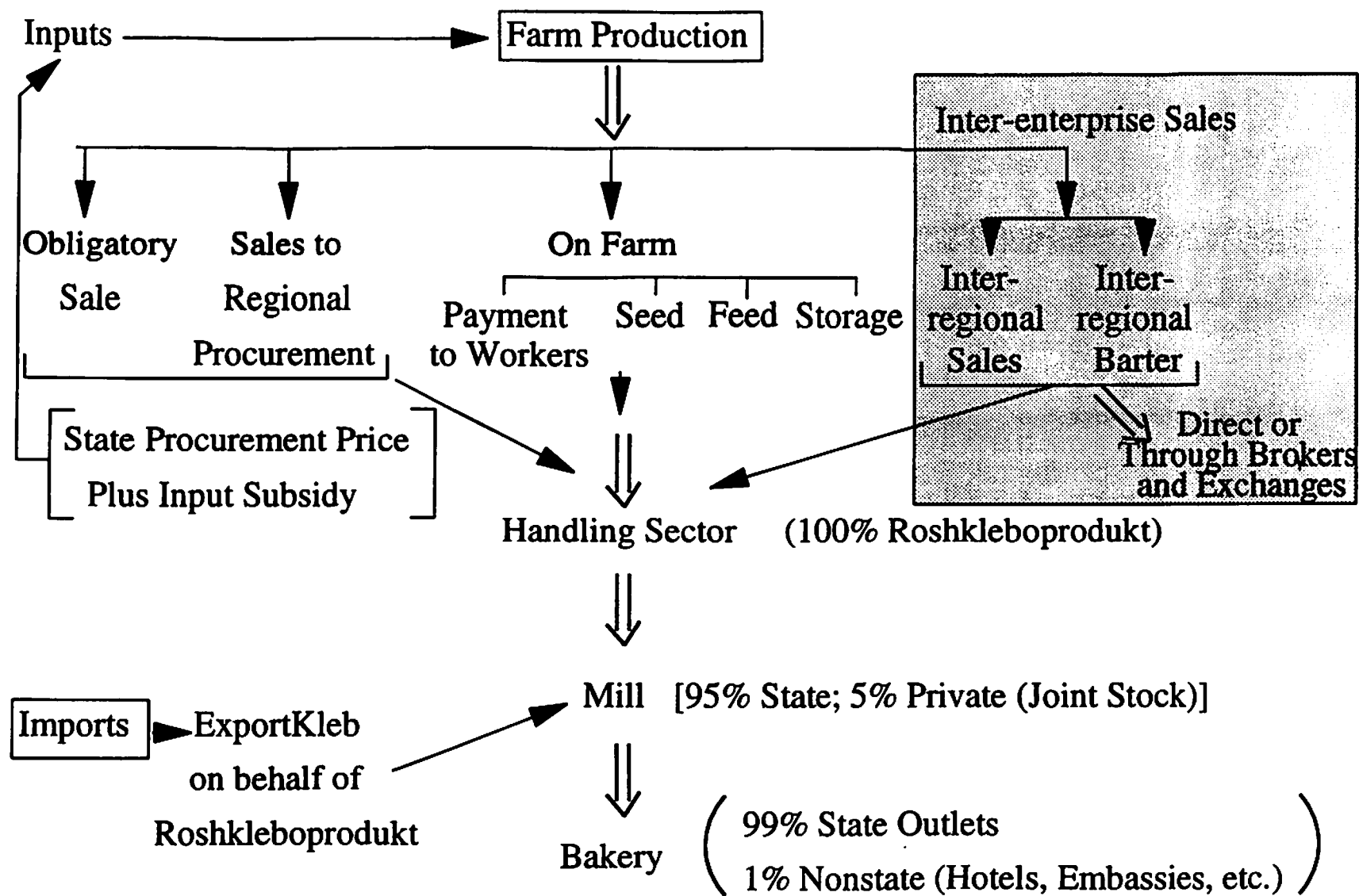


Figure 1. RUSSIAN GRAIN MARKETING, 1993

Due to the institutional relationships between Roskhleboprodukt and other components of the system, transactions conducted through grain exchanges and among brokers are generally limited to "Inter-enterprise Sales," which are shown in Figure 1. Generally, these transactions comprise a smaller percentage of trade, and, consequently, grain trading activity on grain exchanges has been constrained.

Changes have been occurring in the distribution system in the past year. Some groups of Russian entrepreneurs are starting their own grain trade.³ This process will lead to creation of regional private grain companies (or cooperatives) which will compete with current state procurement agencies. In addition, newly formed private firms and companies are trying to enter the grain trade, not by handling physical grain, but by providing only brokerage services between sellers and buyers of grain. Regional agencies are also trying to adjust to the current situation through creation of state-owned commercial subsidiaries. However, they will operate in the free market sector.

Grain flows within the former Soviet Union states will provide opportunities to develop alternative distribution channels. For example, Kazakhstan (the only CIS state that is self-sufficient in grain) will supply CIS states with 3 million tons of grain in 1993 from the 1992 harvest. This grain will be shipped "at free prices with payment in advance" (a ton of Kazakhstan grain costs 45,000 to 55,000 ruble per ton).⁴

Grain Policies and Pricing Traditionally, the central government established state purchase prices. Differentials were included for location and quality and, to some extent, for individual state or collective farms. Of particular importance was that these were the only alternatives for producers and in fact, were the maximum prices that producers would be paid for obligatory sales. In 1990, a pricing system was initiated to stimulate production and state purchases of grains. This essentially involved premiums for sales above a pre-established goal, and a limited amount was payable in hard currency (by ExportKhleb as a credit against its import program).

³The first few grain elevators have already been privatized by a group in the Northern Caucasuses Region and Volga-River Valley.

⁴Shipments will be controlled by the state agency Kazkhleboprodukt and regional administrations. The grain may only be exported after being issued quality certificates from the state grain inspection agency Kazkhleboprodukt. The republic's Ministry of Transport will provide necessary freight cars.

The Russian grain market currently has three sets of related prices.

State procurement prices - These are fixed, but state agencies, following the inflationary environment, can change them according to price trends on the commodity markets. In 1992, these ranged from 6,000 to 8,000 rubles per mt up to 12,000 to 15,000; in 1993, they are close to the free market prices--40,000 to 50,000 rubles per mt.

Commodity exchanges' prices - These are discovered at commodity exchanges and vary through time. Last year, there was a wide spread between state procurement and commodity exchange prices but it has narrowed this year.

"Free market" (or local) prices - These prices are formed outside the state distribution system and commodity exchanges. These are from 30,000 up to 55,000 rubles per mt, depending on regional supply and demand conditions.

A comparison of these prices and price relationships during 1992 is shown in Figure 2, and those which existed during the spring of 1993 are shown in Table 1. Of particular interest is the relationship between state procurement prices and those established on commodity exchanges.

Table 1: RUSSIAN GRAIN PRICES FOR THE 1992 AND 1993 HARVEST SUPPLIED TO FEDERAL AND REGIONAL FOOD RESERVES AND COMPARISON TO COMMODITY EXCHANGE PRICES

Wheat Class	1992 ¹	1993 ²	Commodity Exchange Prices ³
(Thousand rubles per ton)			
Durum wheat:			
Class 1	24	51	
Class 4 (18%)	12	26	30
Soft wheat:			
Top class (36%)	20	43	
Class (up to 25%)	15	34	34
Class (up to 18%)	10	26	31-32
Class (below 18%)	8	20	28
Brewer's barley		26	15
Common barley	8	20	30

1. Procurement prices for grain in 1992 (set 11/02/92).
2. Starting price for grain from 1993 harvest (not including 20% VAT).
3. Moscow Commodity Exchange prices for select grains in April trading (including VAT).

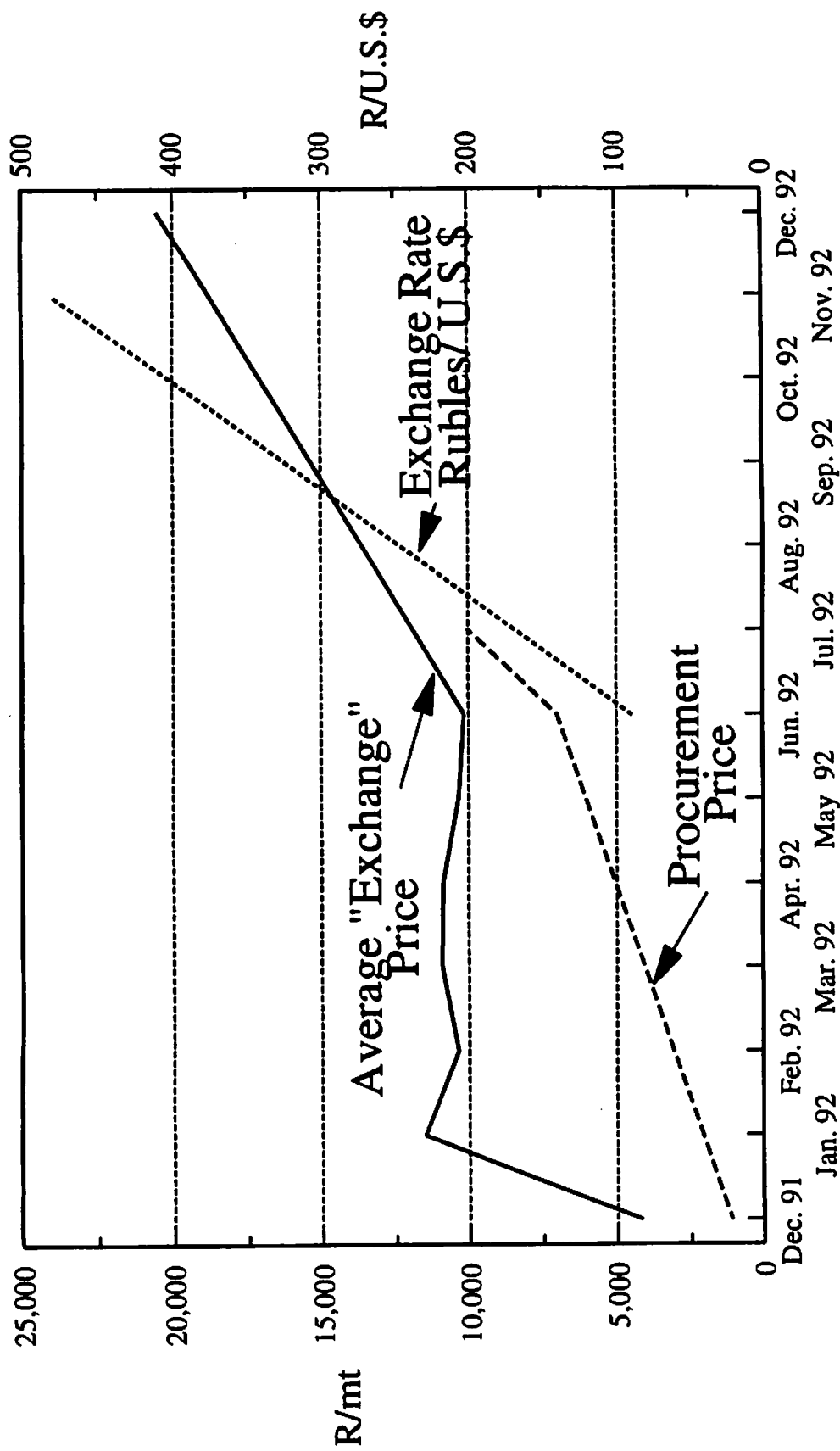


Figure 2. EVOLUTION OF RUSSIAN WHEAT PRICES, 1992

A crucial relationship exists among procurement prices and those established on the market. Ultimately, these must be competitive. However, since Roskhleboprodukt controls some inputs (including seeds and credit)⁵ and the handling sector (95%), distortions occur between the procurement price and those discovered on the exchanges (see Figure 2). Exchange prices normally have to be a premium relative to state prices due to the contingent benefits associated with sales under the state regime. A large premium existed during March 1992. Even during April 1993, a premium existed for new crop prices relative to the state procurement prices.

Three important changes were introduced for the 1993 crop. These are largely in response to the financial crisis and the need for longer term reform in the agriculture sector. First, prepayments would be made to producers to cover a portion of production costs and crop insurance on volumes that would be delivered at harvest. Credit would also be provided at favorable interest rates of 25 to 30% compared to commercial rates of 80 to 120% per year.

Second, in a revolutionary move in transforming the current grain sector to market conditions, mandatory sale of grain to government reserves would be eliminated. Federal (central) and regional grain reserves will be created on a voluntary basis under contracts with producers. In particular, 50% of the grain purchased for the Federal fund will be paid in advance. After completion of the harvest campaign, those producers who fulfill the contracts will receive a 50% subsidy on equipment, parts, and fuel purchased this year.⁶ The Federal Grain Reserve will be used only to supply deficit regions. The size of the regional grain reserves will be determined in each specific region; the head of the local governments is responsible for forming these reserves.

Third, bread prices will be controlled. Specifically, the bread prices will be tied to the commodity prices with a fixed differential. These will be based on an average price of 12,000 Rubles a ton - the difference between fixed and actual prices (about 31,000 Rb) is compensated from the state budget. Later in

⁵Fertilizer, machinery, and fuel are controlled by the Ministry of Agriculture.

⁶In March 1993, an agreement was made between agricultural producers (represented by AKKOR) and the Ministry of Agriculture and Roskhleboprodukt as follows: 1) average grain prices would increase to 30,000 R/mt (versus 12,000 last year) to be increased through the summer with inflation; and 2) a 50% advance would be provided.

1993, the government hopes to switch from subsidizing producers to subsidizing goods by guaranteeing prices for basic products.⁷

In late 1992 and early 1993, a new set of laws were being negotiated that would potentially alter the long-term structure of the grain marketing industry. These were referred to as "the Grain Laws" or laws "On Grain." Important features of these include 1) The state would guarantee at least one-third of expenditures made to plant grains, 2) The government would make 50% of the expenditures on storage and harvesting, 3) A minimum guaranteed price would be established for grain procurement, based on world prices, and 4) A 40% advance would be made for grains contracted at the beginning of the year, and contracts not fulfilled would be penalized 50% of the original contract. Grain traders would have to be licensed, exports would be licensed, and regional authorities could import their own grain, using their own foreign currency resources.

Although these new decrees would encourage a free market, problems persist. The government would still set domestic prices. Licensing and quota restrictions on exports (from the local region and, also, from outside of Russia) mean farmers would still have to sell on the internal market at ruble prices, which are lower than world market prices.

4. Russian Grain Exchanges

Emergence of commodity exchanges in Russian grain marketing has provided an alternative mechanism for price discovery and transactions. As in other countries, Russian grain exchanges serve two critical roles and functions: price discovery, both spot and forward, and dissemination of price information. Russian commodity exchanges also serve the important role of allocating commodities among buyers and sellers, a point normally omitted in discussing roles of commodity exchanges in the West.

History Commodity exchanges are not new in Russia. Exchanges existed and functioned before 1930, when they all were closed.⁸ In 1991, the centrally planned distribution system collapsed, but a functioning market system and discipline were not yet established. Hence, the pressure to develop efficient means of exchange was immense. Contemporary exchanges began to emerge in 1990.

⁷Prime Minister V. Chernomyrdin moved in this direction by approving a resolution to subsidize bread prices during the first quarter of 1993.

⁸Several contemporary exchanges have located in the facilities that were exchanges in the early 1900s.

Most exchanges were founded as "closed type joint stock companies" as opposed to being public organizations. In many cases, large state-owned enterprises, state distribution agencies, or associations of producers started these exchanges. As such, the exchange provided a vehicle to buy or sell its own products.

One of the first exchange auctions for grain occurred in February 1991. At that time the State Commission on Food and Procurement organized 3 auctions in Moscow, attended by managers of state and collective farms. These managers participated partly because they realized they could no longer rely exclusively upon the procurement agencies to purchase their products at guaranteed prices for deferred delivery. These auctions were in terms of the rights to purchase automobiles at the official state price. Of greater importance to farm managers was access to inputs that were proposed to be included in subsequent auctions.

Estimates of the number of exchanges that exist in the CIS vary from 300 to 700 (Klebnikov) to 1200 exchanges. Two reasons account for this variability. First is the definition. In Russia, a commodity exchange could simply be an organization that calls itself an exchange and periodically functions as an exchange. Most exchanges in Russia are simply bazaars (Belozertsev, October 1991), sometimes referred to as "flea markets" (Barkema et al.). An exchange in its purest form is truly a place (physical) where buyers and sellers meet to transact business. Ulrich distinguishes among three formats which are all loosely referred to as exchanges: true exchanges (including bazaars and auction centers), broker firms, and holding companies.

The second reason is timing. Exchanges flourished rapidly in late 1990 through mid 1992. At that time, 270 exchanges were registered with the State Committee on Anti-Monopoly Policy, the authority over these enterprises. Since then, the number of exchanges likely has fallen.

Reasons for the large number of exchanges in Russia are communication technology and competitive forces. The vastness of the country and the primitive communication technology created the necessity for a large number of exchanges--simply in response to the demand for price discovery. Many organizations rushed to establish exchange mechanisms to take advantage of the early growth in this industry. However, growth has slowed, and some exchanges have become more efficient (at handling orders, matching buyers and sellers, disseminating information, and centralizing activities). Still others have linked up as networks (a system permitting trading, margin calculating, clearing, and settling) of trading houses. As a result, 30

principal exchanges, serving a network of subsidiaries likely will dominate the industry.

The largest exchange is the Russian Raw Material and Commodity Exchange (RRMCE)⁹ and began in October 1990. The second largest is the Moscow Commodity Exchange (MCE) which began in May 1990. In fall 1991, volume on the MCE was about 10 to 30% of the commodity turnover of the RRMCE. However, by spring 1992, volume at the MCE increased to 50 to 70% of the turnover of the RRMCE. The MCE does about 60% of the grain business, and its average transaction is 300 to 400 mt. In addition to these, numerous others have been active in grain trading, including Russian Grain Exchange, International Food Exchange, AKKOR, and the Saratov Grain Exchange. Founders of the Saratov Grain Exchange include several agencies related to Roshkleboprodukt and ExportKhleb.

Numerous other commodities are traded on Russian grain exchanges. The RCRME and MCE trades up to 2000 different items, although others trade a smaller number. These range from automobiles, vehicles, equipment, and petrol; paper, timber; wooden goods; metals; office automation facilities; agricultural products; construction materials; and consumer goods. Most notable is oil--a sector in which commodity exchange activity is perhaps more pervasive. Oil producers can freely sell up to 30% of production, and numerous geographic markets (commodity exchanges) flourished to serve this function.

Grain is traded as cash contracts--no futures as known in the west are traded on grain. However, futures have recently begun trading in U.S. dollars and "privatization vouchers." U.S. dollar futures began in October 1992 in \$10 and \$1,000 denominations. During December, trading averaged \$200,000 per week. Privatization vouchers (a document issued to each citizen in late 1992 to be used to purchase shares of companies being privatized) also are traded as futures. As a result, these exchanges have developed a margining and clearing system, as well as delivery procedures.

Trading Practices In the case of grain and other agricultural commodities, these exchanges are fundamentally spot or forward cash markets as opposed to futures in the western countries.

Trading occurs daily on some exchanges; but, on others, it occurs with less frequency (e.g., weekly). Trading procedures differ from those in western exchanges. First, offers to sell, including price, quantity, quality, and shipment period (a

⁹Interestingly, the RRMCE is housed in a prerevolutionary exchange building which under socialism became a post office.

process which is not standardized) are published and circulated among brokers. The next day, these offers are read, and the first buyer to indicate acceptance receives the item. In case two buyers want it at the offer price, a separate auction between those buyers is held to determine the price and buyer. This exchange mechanism is fundamentally a "matching" process, as distinguished from a "double auction" in western exchanges. For example, the RRMCE publishes and distributes up to 20,000 offers daily. If an offer is not sold after 8 days, the offerer must reduce the price or remove it from the list. Complete sales are cleared through the exchange's bank.

Exchanges earn profits by charging a margin, typically 0.2% to 1% of the value. Trading companies are charged an income tax of 45%, in addition to a 28% VAT applied to every transaction.¹⁰ As a result of these relatively excessive taxes, only an estimated 1 to 5% of the offers are consummated on the exchange. Many transactions are consummated outside of the exchange due, in part, to this "middleman" tax. This is a principal problem inhibiting commodity exchanges.¹¹

As a result, exchanges serve the function of price discovery for a small portion of the offers, and incentives exist to conduct transactions outside of the exchange process. Recent estimates are that about 1 to 1.5% of the grain produced in Russia is traded on exchanges. The principal implication of this is that observed prices display abnormally wide spreads between bids and asking prices.

In the early stages, prices were thought to be proprietary and were not disseminated. However, prices are now disseminated broadly and related commodity marketing functions (e.g., price reporting services, price forecasting and analysis, sales of pricing information) have emerged.

Cash Contracts A principal inhibitor to broad scale development of the grain exchanges was that *bona fide* contract mechanisms were not in place. The number of defaults have been large, and difficulty exists in filling some orders. As a

¹⁰In contrast, the corporate income tax is 32% and the personal income tax is up to 60%.

¹¹To reinforce a major point is that middleman activities, or, for that matter, speculative activities are still not looked upon as providing positive utility in the Soviet system. Ulrich indicated that "In true Soviet fashion exchange activities were not quite legal-resale at a profit was technically illegal for some time..."

result, a Model Cash Contract was developed and has been adopted in principal at many exchanges.¹²

Features of this contract are similar to some contracts used in U.S. cash grain trade, including specifications for quality, quantity, and a specific procedures for arbitration. However, because of the high frequency of default, in part, from inflation, special provisions were included for performance guarantees (See Wilson, Laserson, and Wright for greater detail). These are:

Within 3 business days both buyer and seller shall provide to the exchange cash or bond or any other acceptable security equal to the amount of the contract quantity multiplied by the price per ton in the following schedule:

If shipment within 10 days	--none
If shipment within 11 to 30 days	--5 percent
If shipment within 31 to 60 days	--15 percent
If shipment within 61 to 90 days	--25 percent
If shipment within 91 to 120 days	--40 percent

The purpose of this clause is to provide incentives for both parties to perform upon their contract, thereby providing integrity to the exchange mechanism. This is critical, given the inflationary environment and rapidly changing state procurement prices. However, an important problem exists in providing a mechanism to finance these prepayments.

Cooperation and Coordination Among Exchanges In June 1991, the Soviet exchanges created several national organizations. One was the Congress of Exchanges,¹³ an association of about 40 exchanges. The purpose of this organization was to create a single innovation fund; clearing systems; research and development; progressive uniformity of circulating documents; auditing of brokers' offices and certifying exchanges and their members; and creation of an inter-exchange arbitration commission.

¹²This was developed in conjunction with a USDA AMS project, titled "Moscow Cash Grain Trading Project" (Wilson et al.).

¹³Others include the Inter-Regional Exchange Union and the Brokers' Guild.

The longer term concept of these organizations in part is to facilitate joint trading and clearing among members.¹⁴ Some exchanges already perform a simultaneous weekly auction on grains over the radio. A similar but more sophisticated model has emerged with some oil exchanges.¹⁵

5. The Future of Russian Grain Trading

The Russian grain marketing system is in a state of transition from a command system to the emergence of commercial mechanisms which could supplant previous regimes. Given the size of the Russian market, and the potential for grain production, changes occurring in the market system have important implications for the world grain trading system.

While there are many subtle changes, there are three of particular importance. First, two new firms or agencies have emerged, each with very broad functions. The privatization process in the case of grains in some sense essentially involves transforming a government bureaucratic organization to a private monopoly under the auspices of a "joint-stock" company. Roskhleboprodukt controls the domestic market system and many of the functions, and is a principal shareholder and client of ExportKhleb. The latter has expanded its sphere of enterprises substantially and will, no doubt, evolve to become a dominant trader of numerous world grains and commodities.

Second, trade restrictions (i.e., export licenses) and exploitations of market power by former republics in transport functions preclude full integration of Russian markets with other world markets. Until and unless these are removed, signals throughout the market system will continue to be distorted. Third, is emergence of commodity exchanges as alternatives to the state distribution system. At this point, a dual marketing system is operating in Russia. However, it should be emphasized

¹⁴Another example of cooperation among exchanges is the distribution procedures of a recent sale of 800,000 tons of American grain donated to the Russian Humanitarian Agency. Specifically, that was intended to be sold on a consortium of exchanges. Proceeds from the sales will be used for specified humanitarian aid programs. However, apparently 90-95% was sold on a "closed auction" and only state procurement agencies participated.

¹⁵A group of 4 exchanges jointly developed the Siberian Exchange in September, 1991, to serve as an interchange between energy producing regions and areas of demand (Belozertsev 1992).

that for many reasons listed below, the state distribution system will continue to dominate and inhibit development of commodity exchanges.

Further Development of Exchange Mechanisms Markets are simply the cumulation of transactions between buyers and sellers of similar grains and evolve in response to the economic needs of participants to determine the value of grain. The mere fact that there has been a rapid escalation of grain exchanges in the FSU is illustrative of the demand for price discovery and efficient mechanisms to conduct transactions as alternatives to the state distribution system. A normal transition would be for several types of markets to eventually emerge, to include spot, forward, and futures markets. However, a prerequisite to any form of forward or future market would be existence of some form of nearer term spot transaction mechanisms.

A number of important requirements are necessary for orderly market exchanges. These include standardization of terms of trade and contract language, and development of mechanisms to enforce contracts. Each of these are in the process of being adopted in the Russian grain industry. Prerequisites of particular importance to further development of exchanges in Russia include:

1. Adoption of trading instruments encompassing standardized contracts and terms of trade, and arbitration procedures,
2. A mechanism to finance pre-payment (performance bonds) on forward contracts,
3. Changes in laws to eliminate or reduce middleman profits to encourage trading on exchanges,
4. A reduction of powers of Roskhleboprodukt, facilitating greater competition in marketing functions,¹⁶
5. Reduction of trade restrictions between republics of the FSU which create distortions in market determined prices, thereby distorting signals and precluding arbitrage.

¹⁶It is important to recognize that in other countries with restrictive government intervention (e.g., Canada and Australia), exchanges do not function. Exchange activity is also severely stifled in the United States in years that loan values exceed market values.

Items 1-3 are focused specifically on the exchange process and are necessary to be adopted for further development of cash exchanges in the Russian grain marketing system.

The momentum and enthusiasm for development of futures contracts are tremendous. However, it must to be emphasized that viable and properly functioning cash markets (encompassing the items listed above) are a prerequisite to any futures. In addition, there are four additional requirements for futures in Russia. First, a banking system with an efficient mechanisms for funds transfer must be developed. Currently, it sometimes takes weeks to transfer funds even for a cash transaction. Efficient funds transfer are required for a properly functioning clearing system which is the hallmark of any futures exchange. Second, a regulatory structure compatible with facilitating futures trading is needed. Third, is development of speculative traders capable of absorbing risk that hedgers seek to reduce. Fourth, is the adoption of a competitive marketing system in the functions performed. Delivery and convergence of cash and futures prices can be achieved only with unrestrained access to a competitive marketing system. Currently, one buyer, Roskhleboproduct, dominates the market and their decisions can influence prices through the procurement process, and control of the handling and transport sectors. Such dominance by a single agency in a market system is incompatible with development of futures markets and, for that matter, an efficient market system.

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