The Exercise of Rights to Resources in the Russian Far East

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The Russian Far East Then and Now

In 1989, on the eve of economic reform, the city of Khabarovsk was a backward, colonial outpost, one of the most distant points in the Moscow-centered allocation networks controlling access to resources in the former Soviet Union. A Western visitor, strolling wide, tree-lined Karl Marx Street, could imagine that he or she had been time-warped back to the 1940s. There were a few autos on the streets, most of them military jeeps. Shelves in the government gastronome were empty except for Bulgarian pickles and stale bread. The local bookstore stocked rows of handbooks on repair of diesel engines and railcar maintenance. In the local market, ethnic Korean farmers sold sunflower seeds, cabbage, and small, pock-marked pears.

Eight years later, in the fall of 1997, when participants in a Gore-Chernomyrdin Working Group meeting converged in the same city, what was now Muraviev-Amurskiy Street had changed. The avenue was crowded with Japanese cars. Shoppers wore Korean coats. Their shopping bags were heavy with local fruits and vegetables, Finnish cheese, and American chicken. In the freshly-painted private shops, the shoppers could buy cameras from Japan, plumbing supplies from Taiwan, and umbrellas from Hong Kong. Although the territory had suffered a drastic fall in official employment--industrial employment had dropped from 178,169 in 1992 to 124,187 in 1996--shoppers appeared prosperous.[1]

Just as the city's appearance had changed, similarly, the institutional framework for using the region's natural resources had changed as well. Most firms had been privatized or at least commercialized into joint stock companies with mixed public and private ownership. Even collective farms had been commercialized, albeit into large units that were still under the control of the former collective farm directors and regional authorities.

The exercise of ownership in natural resources was still under government control. Except for timber, which was managed by the territorial governments, control rights were nominally in federal government hands. However, the centralized, hierarchical chain of command of the pre-reform Soviet Ministry was gone. Now, in a world where any agency could block and none could implement, the roles of various governmental authorities were uncertain. The environment seemed chaotic.

Today, in September, 1998, the optimistic mood in Khabasrovsk has sobered in the wake of a Russian financial crisis. The harvest and export of timber have fallen drastically this year. Wages are unpaid.

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[1] Goskomstat rossiiskoi federatsii, Khabarovskoe kraevoe upravlenie statistiki. Statisticheskii biulletenn' itogi raboty gorodov i raionov Khabarovskogo kraia za Ianvar'-dekabr' 1992 goda. Khabarovsk, 1993, Goskomstat rossiiskoi federatsii, Khabarovskoe kraevoe komitet gosudarstvennoi statistiki. Statisticheskii biulletenn' No 14. Chislennost' i zarabotnaia plata rabotaiushchikh ha krupnykh e srednykh predpriiatiiakh Khabarovskogo kraia za 1996 god. Khabarovsk, 1997.

Many banks are closed. Those that are open require depositors to withdraw their dollar deposits in badly depreciated rubles. Families have spent their available rubles on the purchase of necessities, and they look ahead to winter with anxiety. Few families can hope to feed themselves with the potatoes, tomatoes, and cucumbers from their small private plots in the country-side. Yet, with international payments blocked, few trading companies can import food. Without shipments, Western shipping firms are re-routing their ships away from the Russian Far East (RFE) to Hong Kong.

During these years of reform, residents of Khabarovsk have lived through a hyperinflation that destroyed their savings, the collapse of federal demand for the region's military products, and a recent decline in the demand for their raw materials in the wake of the Asian financial crisis. Still, only now have people succumbed to a mood of panic and hopelessness.

The long anticipated inflow of foreign investment that was to turn the RFE into a bustling transport node and exporter to the Pacific never appeared, as investors confronted an uncertain economic and political environment and obstructive regulation.

The start-up of energy projects Sakhalin-1 and 2 has had only modest spillover to equipment producers in the region. For example, Amur Shipyard in Komsomolsk-na-Amure received a contract from Sakhalin Energy Company, managed by Marathon Oil, for the $45 million mobile drilling and production unit for the Piltun-Astokhskoe field, but Russian affiliates of Rosneft--Rosneft-Sakhalin and Sakhalinmorneftegas-Shelf--were placing their equipment orders outside the region.

What are the economic prospects of Russia's Pacific region in the wake of a financial crisis and a new leadership? Russia's reform has fallen victim to "crony" capitalism, the bizarre and corrupted institutions that Russia's political leaders and oligarch put in place to assure themselves control of Russian assets and resource wealth. This framework of financial industrial groups, hybrid state-private ownership, influence seeking, and closed capital markets leaves decision-makers caught in a partial and incomplete reform without benefit of legal infrastructure or rule of law. The uncertainty created by a system in flux and the short time horizon of Russia's new managers has led to capital flight of unprecedented size. Yet, the alternative to capital flight and brain drain seems to be administrative control of the economy by a weak and fragmented government that has already demonstrated its lack of accountability.

What lies ahead for the RFE region? Without the centralized subsidies and military demand of the Soviet era, the RFE will continue to decline. However, economic decline faces Moscow with political risk. Contraction of the regional economy, out-migration of its population, and a reduction of Russian military presence all raise fears in Moscow of an influx of foreign population and eventual loss of control of the region. Yet, a fragmented central government is unlikely to be able to assure regional stability either through direct subsidy or by providing the infrastructure for investment.

The most likely scenario for a Russia in turmoil appears to be the continuation of a more state-centered form of crony capitalism, with different cronies, high inflation, and increasing amounts of regulatory control. The institutions of crony capitalism are ideally suited to generate corruption, so issues of government credibility and economic governance are likely to persist.

Crony capitalism offers Russia two unattractive outcomes. If the political interests of Russia's manufacturers dominate, then Russia's resources may be used to subsidize the large, inefficient, polluting heavy industries, possibly with an infusion of foreign technology to upgrade Russia's military capacity. Alternatively, if Russia's exporters influence policy, then Russia's raw materials will continue to be shipped abroad, funding capital flight, but generating little income for the government budget or the domestic economy. In either case, Russia will have difficulty using her resource wealth to fund market-oriented economic growth, based on rising productivity and competition.

In this paper, we look at the way in which control of access to resources has contributed to the emergence of crony capitalism in Russia and in the Russian Far East. We look, first, at the legal foundations of access to resources and the role that privatization played in defining these rights of newly-privatized firms. Then we turn to case studies of the exercise of rights to resources in fishing and forestry and in one of Russia's northern territories, Chukotka. The third and final section considers the differences in resource use

that result from ownership and political access. Ownership means institutions that provide incentives to maximize the economic rents from resource ownership, subject to the transactions costs of contracting and enforcing agreement. We argue that current arrangements for political control of access generate signifaicant agency problems, allowing allocators to divert benefits to themselves or to politically-favored constituencies. Other features of the political arrangements, including competition between the center and the regions for control of rents, lead to poor information about the costs of producers and the structure of government taxes and subsidies, short-term overharvest of resource stocks, decapitalization of assets, and capital flight.

The Legal Framework for Access to Natural Resources

What accounts for the apparent gulf between the legal framework for access to resources and the *de facto* arrangements that have emerged? In fact, the Russian framework for management of resources provides a very limited role for private property rights. Moreover, there are contradictions in the existing legislation in defining the relative roles of various levels of government. The ambiguities reflect the unresolved struggle for control of resources between local, territorial, and central government agencies. Control of local resources and access to the profits from their use were contentious issues between the republics and the center when the Soviet Union dissolved.

The control of resources remains a source of conflict between Moscow and the regions in the Russian Federation. The fundamental framework defining the rights of the federal and territorial levels is the Russian Federation Treaty.

The Federation Treaty

The Federation Treaty, signed on 13 March 1992, delimited powers between the Russian Federation and the republics.[2] This treaty reflected the competing claims for control over resources by assigning many of the powers over land and natural resources to the joint jurisdiction of federal and republican authorities.

The Russian Federation is assigned exclusive jurisdiction over the federal energy system, territorial waters, and the continental shelf. Utilization of natural resources and protection of the environment are subject to joint jurisdiction as is protection of original areas of habitation and traditional ways of life of small ethnic communities. Article III says, "Questions of the possession, use and disposal of land, its mineral, water and other natural resources, are settled on the basis of the legislation of the Russian Federation and the legislation of the republics in the Russian Federation. The status of federal natural resources is defined by mutual accord between the federal bodies of the Russian Federation and the bodies of state power of the republics." The republics have all remaining state power on their territory, other than those powers under the jurisdiction of the federal bodies.

The Law on Mineral Rights

[2] Signatories were the Russian Federation, the Soviet Socialist Republic of Adygeya,the Republic of Bashkortostan, the Buryat Soviet Socialist Republic, the Republic of Gornyy Altay, the Republic of Dagestan, the Kabardin-Balkar Republic, the Republic of Kalmykia-Khalmg Tangch, the Republic of Karachay-Cherkessia, the Republic of Karelia, the Komi Soviet Socialist Republic, the Republic of Mari El, the Mordova Soviet Socialist Republic, the North Osetian Soviet Socialist Republic, the Republic of Sakha (Yakutia), the Republic of Tuva, the Udmurt Republic, the Republic of Khakassia and the Chuvash Republic.

The Russian mineral rights law, *Zakon O Nedrax*, (literally, "Law on Subsoil") adopted by the Russian Parliament, 21 February 1992 established a State Minerals Fund, *Gosudarstvennyi Fond Nedr*, and delineated procedures for licensing mining activities, surveying mineral resources, and paying for access to mineral rights. Administration of the State Minerals Fund is under dual control of the central government and territorial officials. But, in fact, the procedures described in the legislation assign most of the rights to regulate resource use to the central authorities. All mineral stocks that were under the control of separate industrial ministries in the former Soviet Union are to be administered by the Committee on Geology and Use of Minerals. The Committee on Geology will then license rights to exploit mineral deposits to firms and organizations.

The rights of separate levels of government are spelled out in considerable detail, with virtually all important property rights assigned to the central government.

Central Government Rights

- develop and update legislation;
- develop procedures for payment, together with other entities;
- develop a strategy for exploitation of mineral stocks;
- develop an integrated information data base;
- enforce legislation regarding mineral resources;
- undertake exploration and valuation of mineral resources.

Territorial and Autonomous Republics Rights

- develop and use the territorial geological data base;

• value local resources;

• articulate the interests of national minority groups.

Municipal and Local Rights

• participate in the process of licensing in so far as it involves rights to lease land;

• develop a raw materials base for local firms in the building materials industry;

• license and monitor the mining of scattered resources.

Under the legislation all enterprises, including those currently engaged in resource extraction, receive licenses, issued jointly by the Russian Committee on Geology and Use of Minerals and by the authorities of the republic or territory of the Russian Federation.

Licenses may be issued by auction or competitive bidding. A license grants exclusive rights to the mineral wealth of a land parcel together with the right to manage the leased territory for a specified time period, generally five years for exploration or twenty years for extraction.

In the original legislation, contracts could take the form of a concession, a production sharing agreement, or a service contract. Subsequently, enabling regulations have not supported genuine resource concessions. The high share of the lease specified for local governments set a unique precedent in Russian practice. Payment may be set in money or as a share of output, with the revenues shared among levels of government according to the following scale:[3]

[3] In addition, there are several taxes, discussed later.

1) Hydrocarbons: federal 40 percent, territory 30 percent, municipal or local 30 percent;

2) Minerals: federal 25 percent, territory 25 percent, municipal or local 50 percent.

In practice, the contracts negotiated by foreign investors in Russia's regions show wide variation in the manner in which the legislation was applied.

Federation Treaty	• Delineates powers between the Russian Federation and the Republics, initialled on 13 March 1992 by all the republics of the Russian Federation except Tatarstan and the Cechen-Ingushetia. • Assigns many of the powers over land and natural resources to the joint jurisdiction of federal and republic authorities. • Questions of utilization of natural resources and protection of the environment are subject to joint jurisdiction. • Article III gives the republics power on their territory, other than those powers under federal authority which are formidable.

Law on Mineral Rights	• Adopted by the Russian Parliament, 21 February 1992; establishes a State Minerals Fund and describes procedures for licensing mining activities, surveying mineral resources, and paying for access to mineral rights. • Fund administration is under dual control of the central government and territorial officials, however most rights to regulate resource use remain in the hands of central authorities. • Licensed organizations receive exclusive rights to the mineral wealth of a land parcel together with the right to manage the leased territory for a specified time period.

The Policy of Reasonable Protection

The preference for domestic over foreign firms reflects the emergence of a Russian policy of "reasonable protection." The term implies an explicit preference for resource development proposals that 1) involve domestic majority control, 2) commit to substantial purchase of domestically produced equipment, and 3) guarantee high levels of domestic employment. Although each of these constraints is understandable in the current Russian environment, each makes it harder for both foreign and domestic partners to introduce Western technology and know-how and to operate efficiently in Russia.

For example, strict domestic content rules are being applied to the RFE oil and gas projects, Sakhalin -1 and -2, two of the seven projects approved for production-sharing legislation by the Duma in 1996. In response to the demand that foreign oil companies contribute to Sakhalin's infrastructure, both projects will make annual contributions to a Sakhalin Development Fund, which will be used to provide infrastructure investment for the island. Each project is to pay $20 million for each of the first five years after commencement of production.[4]

Sakhalin-1, begun in the Soviet era, brings together Exxon Neftegas, the Japanese company Sodeco, and two Russian affiliates of Rosneft--Rosneft-Sakhalin and Sakhalinmorneftegas-Shelf. However, development of the Lunskoe and Piltun-Astokhskoe fields under Sakhalin-2 was initially entrusted to a Western consortium, the MMSM group (Marathon, Mitsui, Mitsubishi, and Royal Dutch/Shell), which is managed by the Sakhalin Energy Investment Company. In 1998, the Russian government ordered the Ministry of Fuel and Energy to negotiate a stake in the Sakhalin-2 project for Rosneft and its subsidiary, Rosneft-Sakhalinmorneftegas, creating joint Russian-Western ownership in that project as well.

Production Sharing Legislation

Many Western energy projects have been delayed awaiting production-sharing legislation that could reduce the uncertainty associated with changing tax and regulatory regimes. Initial production-

[4] Michael Bradshaw, "Sakhalin: the Right Place at the Right Time," Russian and Euro-Asian Bulletin (forthcoming.)

sharing legislation, adopted in 1995, falls short of investor's expectations in many respects.

The Russian Federation Law on Production Sharing Agreements, allows the federal government to enter into an agreement with an investor granting the investor exclusive rights to prospect for and extract mineral raw materials in the mineral resource site.[5] A license is to be issued by the appropriate regional administration and by the federal organization for state mineral site resource management or its territorial subdivision. However, international contracts are subject to parliamentary approval, a requirement that will hold projects hostage to the vagaries of domestic politics. Moreover, the Russian side reserves the right to make unilateral changes in arrangements in response to changes in world markets. There are demanding domestic content conditions and few safeguards for the foreign investor in the event of a dispute.

The Legal Status of Ownership of Land

The legalization of ownership of land is the single most essential step that Russia needs in order to allow businesses to borrow against collateral and to allow the construction of new housing that will be required before a true inter-regional labor market and flexible labor migration will be possible.

During the past several years, President Yeltsin has issued many decrees to expand the exercise of property rights in land and permit its purchase and sale. There have also been decrees providing for

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[5] Russian Federation Federal Law No 225-FL on Production Sharing Agreements, Moscow, 30 Dec 95; Passed by the State Duma on 6 Dec 95 and Approved by the Federation Council on19 Dec 95 (Cited in Rossiiskiaya Gazeta, 11 January 1996, pp. 3-4.

government valuation of land and the imposition of land-use taxes, or leasehold fees, on land. However, in response, the Duma has passed subsequent legislation restricting the property rights implied in the Presidential Decrees.

In June, 1997, the Duma passed a draft law on the state registration of rights to real estate which covers buildings and structures, the parcels of land associated with them as well as land sections which are unoccupied by structures. This legislation provides, besides the ownership right, the right to life-time inherited ownership and the right to permanent (indefinite) use of land sections, and the right to economic management of property.[6] Nevertheless, in the fall of 1998, full ownership rights to agricultural and urban land have yet to pass both houses of parliament.

Immediately after economic reform, regional governments expanded the sale to households of personal auxiliary smallholdings (household private plots, dacha plots, and other garden plots), usually less than one hectare in size.[7]

More extensive land privatization has taken the form of issuance of "land shares." Today, approximately 60 percent of all agricultural land has been privatized, mainly through the issuance of land shares. Land shares represent an undemarcated share of land on the territory of an agricultural enterprise where the holder works. The size of land share is usually set by norms established in the relevant region.

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[6] "On the State Registration of Rights to Real Estate and Transactions with It" has been proposed by State Duma deputies. The committee responsible is the State Duma's Committee on Property, Privatization and Economic Activity. The draft, reworked by the conciliatory commission, was passed by the parliament's lower chamber at third reading on June 17, 1997. (Cited in Moscow Interfax, Business Law Review, July, 1997.)

[7] Presidential Decree No. 337, "On Citizens' Constitutional Rights to Land" (7 March, 1996), section 2 increases the maximum size of land plots above this limit.

Beginning in 1996, the territorial Committees for Land Resources and Land Tenure in Amur oblast and Khabarovskiy krai issued and distributed land shares to most farm residents. Primorskii krai distributed land shares to about one-third of those entitled to them.[8]

A detailed study of land rights and land use in the RFE by the Rural Development Institute found significant shortcomings in this "privatization" program. Peasants or farmers who remained in large collective farms enjoyed little or no ability to influence the decisions of farm managers. Often they were subject to intense pressure to give their land shares to farm managers in exchange for a promise of guaranteed subsistence. When legal specialists, Bradley Rorem and Renee Giovarelli visited the RFE in 1997, the found that many households had already turned their land shares over to farm managers.

A portion of all the regional farm land was placed in a regional (raion) land redistribution fund. A portion of this land is distributed to citizens who want to establish peasant farms. Families who wanted to set up separate small farms were allowed to purchase land from the redistribution fund. However, after the fact, their ownership rights were relatively insecure. Property taxes charged by the raion frequently exceeded farm value added. Further, local officials in Russia have the power to fine landholders for "irrational" use of land or for non-use. So, in years of poor weather or low food prices when households failed to use the land for production, local officials withdrew the land from the household without compensation.[9] Thus, households preferred to farm

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[8] Bradley Rorem and Renee Giovarelli. Agrarian Reform in the Russian Far East. Report on Fieldwork Condicted in the Russian Far East. RDI Report, October, 1997. The subsequent discussion makes use of this valuable report.

[9] Ibid., p. 23.

on leased land, escaping the most burdensome of the government regulations.

In sum, then, the legal framework for access to resources leaves most of the control rights and many of the cash flow rights to resources in the hands of government administrators at various levels of government. There are many regulatory restrictions, in addition to environmental safeguards, and few safeguards placed on terms of access of a leaseholder. Thus, there is little or no limit to the discretion afforded a governmental allocator. The emergence of corruption as the primary allocation mechanism follows from the failure of the Russian government to establish genuine private property rights and its inability to enforce even minimal accountability over the performance of government administrators who are exercising public ownership rights.

Privatization

Economists consider property rights an essential part of the institutional infrastructure of an economy. If we mean by property rights the rules of the game defining the forms that competition for resources may take in a society, then property rights are defined by formal laws, administrative practices, taxes, and informal custom. In Western practice, private ownership of an asset is associated with two types of rights, called control rights and cash flow rights by Maxim Boycko, Andrei Shleifer, and Robert Vishny in the book, Privatizing Russia.[10]

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[10] Maxim Boycko, Andrei Shleifer, and Robert Vishny. Privatizing Russia. Cambridge: The MIT Press, 1995.

Control rights are the rights to allocate property among uses, to exclude others from its use, and to transfer it to another. Cash flow rights are the rights to enjoy income or benefit from its use.

Private property rights provide incentives to create wealth and to use it efficiently because they internalize the benefits and costs of the owner's actions on to the owner.

To the economist, it is not the formal, legal ownership rights that determine people's behavior. Rather, it is the *de facto* rights that people face that provide incentives. The de facto rights to resources take into account the transactions costs of exercising ownership--costs of gaining information and enforcing agreement--as well as legal rules.

When the protection of property is costly, then individual incentives to produce and hold assets are reduced. Therefore, a society's wealth will be higher when property rights and clearly defined and enforced. If property rights are lacking, then individuals will have an incentive to spend real resources to capture ownership. With fuzzy property rights, individuals must divide their resources between producing wealth, capturing wealth, and protecting wealth, so lack of clear property rights will divert effort away from production toward the capture of wealth.

Private owners who expect to receive the gains from moving resources to higher value uses will have incentives to create institutional arrangements supporting such transactions. So resource owners have incentives to create market institutions. Moreover, if individuals have differences in their initial endowments and tastes for risk, then they will have incentives to establish institutional arrangements that allow them to partition property rights in a variety of different ways. So, if there are institutions to enforce contracts, then individuals will select among a wide variety of contractual arrangements in order to reduce the sum of production and transactions costs within the existing rules of the game. In a market system, there is competition between individual producers and also competition among contractual forms people use to enforce agreement.

The demand for privatization of assets in Russia reflected the widespread recognition that political control of economic activity provided perverse incentives and distorted information. The absence of markets impeded the movement of resources to higher value uses. Political decision makers who bore none of the financial consequences for their decisions could pursue private agendas without accountability for costs. If their goal was maximization of political power, then this goal might be served by establishing bureaucratic regulations controlling all rights of access--access to entry, access to foreign markets, access to scarce, underpriced supplies, and, ultimately, access to positions in a regulatory hierarchy that allowed the decision-maker to give benefits to some constituencies and to hold other groups hostage.

Privatization in the Russian Far East

Privatization in the RFE, as elsewhere, was carried out in accordance with the established program of the Russian Federation. The federal privatization agency, *Gosudarstvennyi komitet Rossiiskoi Federatsii po upravleniiu gosudarstvennym imushchestvom--or Goskomimushchestvo RF,* operated through a network of agencies in each territory and municipality. Privatization committees at each level prepared and submitted privatization projects for approval by their higher-level agency, by territorial officials, and by the legislature. When approval was given, they carried out the formal privatization.

In practice, there was intense political pressure for control of valuable assets and, not surprisingly, there were many violations of the formal rules.[11] The determination of whether individual production units would be privatized as separate enterprises or as subsidiaries in a larger structure was also negotiated on political, not economic, grounds. Managers of a plant could sometimes buy their independence by agreeing to assign a share of the commercialized firm's stock to a holding company controlled by higher level officials.

Small scale privatization of firms in retail trade, public food services, consumer services, and light industry proceeded rapidly. By 1995, the services sectors comprised a mixture of units--privatized state enterprises, new private firms, and municipal firms. About three-quarters of these small service firms had been privatized by commercial bidding, a process in which bidders agreed to meet a set of formal requirements. Bidders agreed to continue the same profile of services after privatization, to guarantee jobs for existing workers, commit to improvements and repairs, and agree to acquire new machinery and equipment. In the case of small-scale services privatization provided a basis for genuine competition.

[Insert Table: Privatization of Firms in Trade and Services]

[11] An official who was responsible for privatization of municipal assets in Vladivostok argued that the most valuable city property was withdrawn from privatization when it emerged that the local committee could not be influenced. (Inverview, October, 1995, Seattle.)

Voucher privatization of large-scale firms proceeded more slowly in the Far East than in other regions because of the large share of firms providing infrastructure services and producing military products. Nevertheless, by 1994, in two-thirds of the firms, employees had opted for the so-called second variant of privatization which allowed employees to acquire 51 percent of the voting stock of their firms, bidding with vouchers.

The relative roles of the federal and territorial levels of governments may be inferred from a 1995 report of the process in Khabarovsk:

> Large blocks of stock (15 - 51% of authorized capital) were assigned to state ownership during the privatization of 259 enterprises. This stock is being managed by:
>
> - The Russian Federation State Property Management Committee (3,443,910 shares valued at 1,783 million rubles and 1 "golden" share),
> - The Khabarovskiy Kray State Property Management Committee (1,528,744 shares at 916 million rubles and 10 "golden" shares),
> - The Khabarovskiy Kray Property Fund (later subordinate to the Property Management Committee)
>   (1,457,180 shares worth 754 million rubles.)[12]

Although enterprise ownership was widely dispersed at the end of the first stage of privatization, it became more concentrated at the second stage when large blocks of the remaining shares were sold for rubles. By 1995, most of the large firms in the region were under hybrid ownership with shares of stocks held by employees, managers, members of the territorial elite, outside owners, and the state. In most cases,

[12] Economic Life in the Russian Far East, "Privatization in Khabarovskiy Kray: Statistics for 1992-94 and plans for 1995," 4 June 1995.

ownership was initially exercised by inside owners, consisting of enterprise managers and territorial elite, but, gradually, outside investors began to acquire shares of stock in firms with valuable export products from employees who were selling their shares in the secondary market.

One local observer, Pavel Minakir, of the Institute for Economic Research of the Academy of Sciences in Khabarovsk is critical of the resulting concentration of ownership. He writes:[13]

> The initial redistribution of property for privatization checks has been virtually completed...In reality, for the majority of the population, the stocks acquired in exchange for vouchers have little value, amounting only to a few shares of stock. The real goal, which was achieved, was to create the formal conditions whereby citizens could independently, without later accusing the government of squandering public property, redistribute ownership of the means of production to the "new Russians," who for some reason came to be called the "new" owners. In fact, these are the old owners. But now there is a process (far more simplified and accelerated than the voucher privatization) of transforming the property of the political elite (nomenklatura) into juridical property.

In sum, then, privatization succeeded in creating conditions for competitive markets in small-scale retail and service industries, but in large-scale industry, privatization created hybrid firms which were nominally owned by several groups of stockholders, but which, in reality, were controlled by insiders.

Since the end of formal privatization, outside strategic investors have attempted to acquire control of the most valuable firms through purchase of shares, through investment, and through various administrative arrangements. Control of state-owned enterprises remains in contention as well. For example, the Khabarovsk

[13] Pavel Minakir and Gregory Freeze. The Russian Far East: An Econoomic Survey. Khab arovsk, "RIOTIP" 1996.

administration protested when federal authorities attempted to make the Gagarin aircraft factory in Komsomolsk-na-Amure a subsidiary of the Sukhoi Design Bureau in Moscow. In the case of firms in raw materials industries, the ultimate structure of industry ownership probably will be shaped by politically-defined rules for access to resources and by administrative control of access to the foreign market and availability of subsidized government investment.

The Creation of a Tax-Based State

Providing the legal infrastructure to support private ownership of enterprises and assets means a changed role for the state as well. Within the command framework of the former Soviet Union, the state--or, specifically, the industrial Ministry--exercised the control rights to enterprises and assets, while the cash flow rights were supposed to be centralized in the treasury and spent for the benefit of the population.

In the reform economy, a separation of government revenue from ownership of capital provides greater transparency in both the capital market and the public sector. Government taxes and subsidies become explicit in the government budget rather than implicit in government prices and allocations. While the central function of the Soviet state was control of economic activity, then the central functions of a market-oriented state are the provision of institutional infrastructure for civil society and markets, social insurance, and public goods.

The importance of publicly-owned natural resources and land in the stock of wealth of Russia impedes attempts to change the role of the state from control of wealth to provision of institutions. However, the privatization of firms in the resource extraction industries which receive control of resource stocks from government authorities creates the opportunity for private producers to transfer the income from resources away from the nominal owner, the state, to the private producers. Since access to resources is valuable, there are incentives for state allocators to create arrangements which are opaque and provide incentives for corruption. Although more than half of Russia's export revenue originates from energy and raw materials, natural resource changes provided about 2.6 percent of government budgetary revenue, or 4.9 percent of tax revenue in 1995. In the Russian Far East, natural resources charges provided 5.6 of total budget income, or 8.8 percent of tax revenue.

[Insert Table: Tax Revenues from Resources]

A 1998 IMF working paper by Dale F. Gray evaluates potential and actual tax revenues from oil and gas in Russia and the other countries of the former Soviet Union. Gray finds that government oil and gas revenues are about half the level prevailing in other energy producers in the world. Gray attributes low oil revenues to constraints on export policy, inappropriate tax structures, and weak tax administration. Law gas revenues are due to low statutory tax rates, a tax structure that fails to capture resource rents, and weak tax administration.[14]

In 1996, total tax revenue from the oil sector equaled 2.32 percent of total GDP. Taxation of oil relied on several production-based levies. There is a differentiated wellhead excise tax payable on each ton of

[14] Dale Gray, "Evaluation of Taxes and Revenues from the Energy Sector in the Baltics, Russia, and Other Former Soviet Union Countries," IMF Working Paper WP/98/34 (March 1998).

production, averaging 70,000 old rubles per ton ($14) in 1996. Royalties of 6 to 16 percent and a Geology Fund tax of 10 percent are placed on the value of wellhead production. There are several other extra-budget fees in addition to profits tax and VAT.

Tax revenues from the gas sector are collected mainly in the form of an excise tax of 30 percent on the wholesale value of delivered gas. In addition, there is a royalty of 6 to 16 percent, a Geology Fund levy of 10 percent (based on the wellhead value of gas). Export duties were eliminated in 1996. There are also property taxes with a maximum of 2 percent on net book value of assets and several smaller taxes. Profits tax and VAT tax are also collected. In 1996, the sum of these taxes provided government revenue equal to 2.05 percent of GDP.[15]

Actual tax revenues collected on energy are about 50 to 66 percent of statutory levels because of exemptions, noncompliance, and arrears. Compared with other countries, a large share of the natural resource rents accrue to the transport monopolies, Gasprom and Transneft, relatively little of which is passed on to the government budget.

Thus, in the resource industries, although notional ownership is public, much of the potential rent is transferred to producers who gain control rights to resources. Access rights are acquired in a relationship system linking industrial leaders and political authorities. To see how the relationship system works, we now turn to three case studies: the Chukotka region, the forest products industry, and the fishing industry.

Rights to Timber Resources

[15] Ibid., p. 48.

In the Russian Far East, the management of forest resources differs from other resources in that, with economic reform, management of the forest was assigned to the territorial governments. Yet, in spite of an initial decentralization, the competition for control of assets has been no less fierce. By 1998, there has been a considerable recentralization of authority in the industry based on control of regulations, of exports, and of access to investment. Behind the appearance of a decentralized privatization, there has actually been the re-establishment of the old elite of the Ministry of Forestry in a quasi-privatized industry. This group of former officials appears to have enjoyed a considerable share of the rents that accrued to the nominally state-owned forests. For example, in Khabarovskiy krai, out of total consolidated taxes paid into the government budget of 4483.1 billion (old) rubles in 1996, only 87.3 million, less than 2 percent, came from resource payments.[16]

During the Soviet era, activity in the forest sector was coordinated by the Ministry of Forestry. The Ministry, itself, was divided into two branches, the Forest Service, or Minleskhoz, which was responsible for forest protection, and the Forest Products Industry, or Minlesprom, which harvested and processed timber. With cutting and replanting under two separate organizations, Minlesprom had no incentives to alter harvest technique in order to foster re-growth. The Forest Service was also dependent on a portion of Minlesprom's profits for its budget, so it was unlikely to oppose Minlesprom's access to a site. Moreover, the Forest Service was allowed to conduct "sanitary" harvest of over-mature

[16] Goskomstat Rossii. Khabarovskii kraevoi komitet Gosudarstvennoi statistiki. Sotsial'noekonomicheskoe polozhenie khabarovskogo kraia 1966, p. 92.

wood in protected areas to supplement it's own budget, so it undertook logging precisely in protected areas.

Despite the problems, Russian Far East timber exports were a fungible commodity used to pay for imports of equipment in the region's trade with Japan. The exchange of wood for machinery was carried out under bilateral general agreements b et ween the Soviet Union and Japan. In the Soviet era, there were five agreements: four on forest products, and one on the construction of the first phase of the port of Vostochnyi. In these agreements, the Soviet government received credits from the Export-Import Bank of Japan for the purchase of Japanese equipment. Payment was made in kind with raw materials. Three agreements were still in force at the end of 1991: an agreement on wood chips, one on the development of the Sakha coal fields, and a joint feasibility study of Sakhalin oil and gas. Today, long-term agreements for forest products have lapsed because of continuing problems with quality and delivery, but the RFE continues to send more than 80 percent of its reported timber export to Japan.

With the start of reform, a new law, the Fundamental Forestry Law of the Russian Federation, was passed in March, 1993.[17] The new law appeared to give territorial and district officials unprecedented authority over forest management.[18] Districts were to have rights to sell timber, allocate rights to log, and monitor compliance, authority which had been in the hands of federal and territorial officials earlier. A new procedure

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[17] Osnovy lesnogo zakonodatel'stva Rossiiskoi Federatsii. Vedomosti c'ezda nar. deputatov RF i Verkhov. Soveta RF. 1993, No. 15, pp 851-881. Another provincial legal document, the Regulations for Timber Harvesting in Forests of the Far East (1993) was passed as well but was never fully enforced.

[18] William Turner, "Focus on the Russian Far East's Timber Industry," Russian Far East Update, Vol 4, No. 7 (July 1994), pp. 7-10.

was introduced. There was to be a license guaranteeing long term leasing rights, although this right would not relieve the user of the requirement to obtain an annual permit as well. Access to forest sites was to be distributed by bidding, by competition (a non-monetary form of bidding), or through direct negotiations. In practice, territorial governors were able to assert authority to control resource stocks and an enlarged, multi-level bureaucracy emerged to allocate timber land assignments.

In December, 1992, the Property Committee of the Russian Federation created a hybrid joint stock company, Roslesprom, which was partly state and partly privately owned. It was to allocate federal investment funding among regions, to fund research, and to manage access of firms to the export market. "In reality," write scientists, Vladimir Karakin, Alexander Sheingauz, and Vladimir Tyukalov, "Roslesprom [was] attempting to gain control over the Russian Federation forest industry, including those in the RFE."[19]

Roslesprom received authority to exercise state-owned shares in all joint stock companies in the forest industry and the right to manage all state-owned assets. The federal government gave Roslesprom the right to distribute 150 billion rubles in government credit at 10 percent interest (when inflation was almost 1000 percent). Credits were, in fact, distributed exclusively to Roslesprom holdings.

In 1994-95, Roslesprom established fifty local holding companies, based on the former territorial associations of the Ministry of Forest

[19] Alexander Sheingauz, Vladimir Karakin, and Vladimir Tyukalov, "Forest Sector of the Russian Far East: A Status Report. Khabarovsk-Vladivostok: Economic Research Institute RAN, 1996, p. 14. The following section relies on information in the Sheingauz, et. al. report and in Mark Wishnie, "The Centrally Planned Timber Sector in the Russian Market Economy: the Development of the Roskomlesprom Government Timber Monopoly," working paper, University of Washington (March 1997).

Industry. It named its own appointees to head these companies, to supervise production, and to collect data on all export contracts.[20] The entire foreign network of the former forest products exporting organization, Exportles, was transferred to Roslesprom. In addition, it established a separate exporting organization, Rosexportles, holding 96 percent of its stock. It also became co-owner of the National Forest Bank and the Russian Forest Investment Company, incorporated in Boston.[21] Export licenses and access to export were managed through a few large former Ministry units.

During this period when the former ministerial units were attempting to re-establish control of the industry from above, a decentralized private sector was emerging in the regions, in the form of privatized firms, production cooperatives, and other small businesses. However, many of the small businesses that were set up by territorial and district elites, served to transfer revenues away from existing state-owned or newly privatized firms, leaving the established firms burdened with the production cots.

In Khabarovskiy krai, privatization of the 82 timber harvesters, 14 saw mills, 12 furniture factories, 10 pulp and paper plants, and various repair shops created a population of about 150 private or partly private forest sector firms controlling over 90 percent of output. However, state shares, and, thus, control rights over these nominally private firms remained in government hands.

After the first phase of privatization, controlling interests in firms were divided between the territorial administration and a Financial

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[20] Sheingauz, op. cit., p. 14.

[21] Business Moskovskie Novosti, 1995, No. 33, p. 10 (cited in Sheingauz, p. 14.)

Industrial Group (FIG) led by a regional association and marketing organization, Dallesprom. In an exchange of shares in 1995, Dallesprom gas the territorial administration shares representing a 51 percent controlling interest in its capital. in turn, Dallesprom received a controlling interest in forest harvesting companies managed by the state.[22] Similar territorial FIGs formed in other regions of the RFE.

In 1995, state shares in privatized firms were to be sold on the stock market for rubles. However, fearing loss of control to outside owners, territorial administrators devised a number of administrative strategies to retain local control. The number of firms was increased and rights to harvest were redistributed to them. In 1996, Dallesprom established a joint venture with US Caterpillar Company to sell and service Caterpillar equipment to the region's firms.[23]

Meanwhile, in Moscow, control of export was weakened when the federal system of export quotas and strategic exporters was abolished in 1994, although government approval of export contracts was still required.[24] But, in 1996, Roslesprom's position was bolstered with the signing of a Memorandum of Understanding with the US Ex-Im Bank at the sixth session of the Gore-Chernomyrdin Commission. According to that document, the Ex-Im Bank provides credit guarantees for loans issued by US commercial banks to Russian forest industry firms. 1996 credit guarantees of up to $1 billion were agreed. Russian loan

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[22] Sheingauz, op. cit., p. 18.

[23] Visit to Dallesprom-Caterpillar Sales Center, Khabarovskiu krai, September, 1996.

[24] In an authoritative discussion of changing foreign trade regimes, Pavel Minakir writes: "With respect to the export contracts that replaced the former licenses, the Ministry of Foreign Economic Relations not only retained the main levels of control over the export of strategically important goods, but even reinforced its position." Pavel Minakir and Gregory Freeze. The Russian Far East: An Economic Survey. Khabarovsk: RIOTIP, 1996, p. 106.

recipients are required to sell timber to foreign firms which must deposit revenues directly into an offshore escrow account.

The latest chapter in this administrative shell game is recounted in the Moscow Interfax Foreign Trade Report and in Russian Far East Update.[25] After President Yeltsin ordered the privatization of Roslesprom in August, 1997, the two Moscow banks which financed timber exports, Mezhkombank and Imperial Bank, split the export contracts and operations of Roslesprom's export subsidiary, Rosexportles. They created two new companies with similar names, leaving Roslesprom with few assets and multibillion-ruble debts. Presumably, there is little left to privatize today.

In sum, then, in spite of its nominal privatization, the Russian forest products industry remains in the hands of insider elites who control access to stands of timber, to investment and credit, and access to the export market. Potential foreign partners, such as US Weyerhauser, which explored a joint venture with a timber producer in Khabarovskiy krai, backed off when they discovered that basic parameters, such as the rights to a forest site and the right to export could evaporate at the whim of the authorities.

Neither the Soviet Ministry of Forestry nor its quasi-privatized progeny had incentives to re-forest accessible areas or to develop sustainable yield practices. Timber stocks are treated like a free good, for much of the downed timber never reaches a final market. Regional production of timber has been falling steadily, particularly after reform as the price of fuel and transport have risen toward market levels.

[25] Moscow Interfax Foreign Trade Report, No. 1 (6 January 1998) and Russian Far East Update, March, 1998, p. 5.

The Russian Federal Forestry Service, nominally responsible for reforestation, has a miniscule budget, now in arrears. As in the Soviet era, it still has the right to conduct "sanitary" harvests in protected areas.

Unable to serve the European market because of high transport costs, local producers have turned to the Pacific. Here, Dallesprom attempts to regulate, not the amount of timber that is brought to market, but the selling price, by establishing minimum allowable prices. However, the quality of timber, and, thus, its market price, is so variable that effective regulation is next to impossible. In the recent past, the Russian timber industry has flooded the Pacific market with wood, depressing prices. Thus, the RFE forest resource is likely to provide little long-run support for the region's recovery.

[Insert: RFE Timber Production]

Rights to Fishery Resources

The long-run prospects of the Pacific fishery are somewhat better. Administration of the Soviet fishery was always centralized. The administrative structure was the familiar ministerial hierarchy of the Soviet Ministry of Fisheries. At the top were the Minister and his deputies. At the bottom were the production associations, firms, and collectives in each coastal territory. In between were two levels of administration. Below the top were the regional maritime basin administrative organs, such as Dal'ryba, in the Russian Far East; then, below Dal'ryba were the regional fishing councils of each territory (oblast, krai, okrug) within the region. Thus, the Ministry of Fisheries in Moscow controlled the harvest and processing of marine products.

At the same time, the Ministry controlled another, scientific hierarchy which was responsible for overseeing the conservation and sustainable development of resources, the policies that were supposed to preserve the value of Russia's marine resources. This hierarchy was headed by the All Soviet Fisheries Oceanographic Research Institute (VNIRO) in Moscow and included territorial research centers, such as TINRO, in most of the RFE territories. Investment and renewal of the fishing fleet and other capital facilities was managed by still another vertical chain of command in the Ministry.

With the collapse of the former Soviet Union, a much smaller Russian Ministry of Fisheries was, initially, transferred to the Ministry of Agriculture and, then, re-established as an independent agency until 1997 when it, again, was placed under the jurisdiction of the Agriculture Ministry.

A law passed by the Russian Supreme Soviet on December 27, 1991, reaffirmed that "natural resources within the territorial waters, exclusive economic zones, and continental shelf of the Russian Federation" remained the exclusive property of the Russian Federation government.[26] However, in 1990, many of Dal'ryba's management functions were decentralized to short-lived Basin Production Organizations. Beginning in mid-1991, as central authority collapsed, territorial governments took charge of quotas for harvesting marine resources, selling the rights to domestic and foreign harvesters. In 1992, the export of fish reached unprecedented levels, accounting for 50 percent of the catch, leading to a drastic reduction in domestic supply.

[26] Nobuo Arai, "Fishery Development in the Russian Far East," Conference paper, Monterey Institute of International Studies, October, 1993.

In response, in 1992, a system of scientific-industrial councils was established to oversee management of the fishery resource and to make recommendations to the Federal Fisheries Committee. The Far East Scientific-Fishing Industry Council includes representatives of the Federal Fisheries Committee, Ministry of Environment and Natural Resources, scientific research organization, fish enforcement agencies (Glavryb), territorial councils, the fishing industry, and the territorial administrations. Within each territory, there is a territorial fishing industry council, appointed by the territorial government as a joint organization of the Federal Fisheries Committee and the regional government. This local organization was to "develop recommendations to the territorial administration" on allocation of regional fishing quotas, fisheries regulations, territorial funding of fishing industry interests, licensing of fishing, etc.[27] (It, however, does not have authority to assign allocations.) The accompanying diagram depicts the several administrative, scientific, and enforcement agencies involved in regulating the RFE fishery during the 90s. The outline is based on a diagram in Clarence Pautzke, North Pacific Fishery Management Council Report to Congress, September 30, 1997 (with the addition of the Border Guard, which acquired a larger enforcement role from Glavrybvod (Moscow) at the beginning of 1998.

[Insert Diagram]

[27] Clarence Pautzke, North Pacific Fishery Management Council Report to Congress, September 30, 1997, p. 7.

Far East fishing organizations were enormous in size. For example, BAMR, Marine Fisheries Base in Nakhodka controlled a huge fishing port, a ship repair yard, construction organizations, apartment buildings, and social overhead facilities. It employed more that 13,000 people. Despite (or, perhaps, because of) their size, fishing associations were inefficient. Fleets faced bureaucratic regulations and excessive time in port. Fuel supply was uncertain. Fleets, ports, and repair yards had insufficient, aging technology.

As a result of privatization, the state organization, Dal'ryba and its sub-units became joint stock companies and most of the territorial production associations became independent commercial fishing enterprises. Some of these became joint stock companies and others remained state enterprises. However, the independent firms continued to participate as members of territorial associations in lobbying for access to quotas. Similarly, fishing cooperatives formed regional unions to represent their interests. The functions of Dal'ryba itself were redefined, allowing it to conclude contracts with producers, to oversee implementation of state orders and research, to set quotas, search out new stocks, and represent the interests of producers vis a vis the state.[28]

After privatization, the new Dal'ryba included 54 organizations--some 40 state and private joint stock companies, four territorial unions of collectives, three limited liability partnerships, three joint ventures, and four state firms.[29] These organizations managed a large, but aging fleet of almost 1000 fishing ships, many of them big (3,500-6,000 ton)

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[28] Pavel Minakir and Gregory Freeze, The Russian Far East: An Economic Survey. Khabarovsk: Riotip, 1996, pp. 112-113.

[29] Ibid., p. 113. (By comparison, the pre-form industry included 60 associations and approximately 45 collectives, according to SOTOBO, Chosa gepppo, 4(1990), pp. 54-55.)

trawlers which engaged in open-sea expeditions using large fish-processing "mother ships" supplied by a fleet of smaller seiners or trawlers. However, most vessels in the Russian fleet had poor fuel efficiency, outmoded instrumentation, and were expensive to operate under market conditions.

Since privatization, access to fish in the Russian 200-mile zone has been based on contracts, or quotas. Access of Japanese ships is negotiated annually in a government-to-government agreement. Domestic allocations are determined in an administrative process. Rights are supposed to reflect the size of a firm or region's past catch, but lobbying and side-payments are reported to play a role as well. The Russian Federal Committee on Fisheries gives itself an allocation. Territorial governments receive separate quotas. Some, like Chukotka, have established commercial firms to exercise their quotas. Others re-sell their fishing rights to domestic or foreign bidders.

Today, joint ventures give Russian partners access to Western technology and capital markets, giving Western partners access to deep-sea processors, initially, and, later, access to the Russian fishery.
The earliest Soviet-US joint venture, Marine Resources, was incorporated in the US in 1978, after establishment of the 200-mile fishing zone. A partnership between Bellingham Cold Storage and Sovrybflot, the commercial arm of the Soviet Ministry of Fisheries, it fished in US waters, using leased Russian processors and American fishing boats and marketing the product internationally. After passage of the Soviet joint venture law in 1987, fishery joint ventures were established with partners

in Japan, the US, South Korea, Hong Kong, Australia, and Vietnam.[30] At present, there are more than 100 Russian fishing joint ventures, including more than 30 with Japan.

Russian firms with access to the Western capital market have been able to retrofit their ships with fuel efficient engines and state of the art technology. Firms acquired new supertrawlers, which can both catch and process fish, through leasing arrangements with Western shipyards, funded by Western banks.

However, in spite of the rising technical efficiency of the Russian fleet, reported catch has declined steadily from its reported peak in 1988, and the share of high-value products, such as salmon and crab, has fallen.

[Insert Table: Fish and Seafood Production]

In part, the decline in production reflects overfishing--a consequence of high quotas and illegal fishing. In part, the decline in measured production reflects a growing volume of Russian catch which is delivered offshore, going unrecorded by Russian customs authorities. (Japanese trade statistics report roughly 50 percent higher landings than Russian data.) In response, Russian fishing companies respond that high taxes, informal payments, and operating costs, frequent non-payment and arrears on the part of customers all make it unprofitable to sell in the Russian market.

[30] Tsuneo Akaha, "US-Russian Fishery Joint Ventures: A Curse in Disguise?" conference paper, Monterey Institute of International Studies, July, 1993.

In 1997, concern over under-reporting led to tighter enforcement. In May, 1997, the federal government intervened in Primore, appointing Viktor Kondratov, head of the local office of the Federal Security Service, as President's Representative. President Yeltsin transferred budget authority and the authority to approve the allocation of quotas for commercial fish, seafood, and timber from the governor, Evgenii Nazdratenko, to Kondratov. On January 1, 1998, the primary responsibility for monitoring and enforcement of fishing quotas was to be transferred from the Moscow enforcement arm, Glavrybvod, to the Border Guard. (So far, this process seems to be moving slowly.)

Members of the industry question whether the Border Guard will, in fact, provide more effective enforcement. That organization, too, faces wage and payment arrears from the federal government. Sources in the fishing industry report incidents of theft of catch and other forms of "hold-up" involving individuals in the Border Guard.[31]

In 1998, in spite of high production and technical modernization, the formal accounts of Russian fishing organizations imply that many are "drowning." Several are bankrupt or in receivership after defaulting on high fixed lease payments. In 1997, fishery scientist Vlad M. Kasczynski reported that, out of 65 new and 19 reconditioned fishing vessels delivered to Russia under leasing arrangements with Western shipyards, 30 ships were in default on Western bank loans totaling $71.8 millions.[32]

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[31] Interview in Seattle, Washington, September 2, 1998.

[32] Vlad M. Kaczynski, "Reconstruction of the Russian fishing fleet through leasing arrangements with Western shipyards," Joint School of Marine Affairs-Fisheries Industry Seminar, February, 1997.

One of the larger Russian companies, Vladivostok Base of Trawling and Refrigeration Fleet, ceased operation in January, 1998. This firm, which was owned, in part, by Dal'morproduct, the commercial arm of the Russian Fishing Committee, had received Russian government guarantees for its bareboat lease payments on 12 Spanish-built trawlers. Russian Far East Update reports that the 12 trawlers will be operated by a new joint stock company, Super of Vladivostok, which has received "generous quotas" for 1998.[33] Chesterton Investments, Cayman Islands, which formerly marketed VBTF's product, is one of the companies that will market Super's catch.

In sum, then, the interlinked state-commercial networks that provide access to the Russian pacific fishery present a mixed picture. On the one hand, the establishment of firms and joint ventures offshore allows the industry to modernize its capital stock, something that is not happening in other industries. Activities which appear unprofitable in Russian accounts may, in fact, be rewarding for insiders in the industry and the government, but at the expense of transparency. Measured as a share of the value of the total harvest, government budgetary revenue, either at the center or in the region, appears modest, although territories may be deriving in-kind benefits as well. Rates of harvest appear to be drawing down stocks. The process of gaining access to quotas is likely to generate corruption both in the region and at the center.

In August, 1998, the Russian Fisheries Ministry announced a draft government resolution, which would provide that, in the future, 15-20 percent of allowable catch of certain valuable species, such as salmon,

[33] Russian Far East Update, Vol. VIII, No. 2, February, 1998, p. 3; Interfax Business Report, 21 Jan 1998 cited in FBIS-SOV-98-022, 22 Jan 1998.

sturgeon, and crab, would be offered to the highest bidder at regional auctions. They promised to consult the statistics of trading partners to monitor illegal export of fish. Industry observers countered that changes which gave allocators a better measure of the true value of access might increase, rather than reduce, corruption. Clearly, an annual auction would provide less incentive to undertake specialized investment than would a procedure involving the auction of a license or long-term right to access.

To the specialist in resources, there are a variety of ways in which a public decision-maker could try to manage the coastal fishery in order to limit overfishing, foster sustainable development, collect some share of the resource rents into the central or regional budget, and reduce the incentives for corruption or evasion. These mechanisms could include taxes on resources, taxes on fishing effort, imposition of quotas on aggregate catch, and individual quotas.

In the Soviet-era, the Ministry of Fisheries allocated regional and local access to resources politically, assigning control to corresponding stocks of fishing ships through a political process. With domestic prices of fish products, ships and equipment, and fuel all very far from world prices, attempts to estimate underlying input efficiencies or desirable long-run rates of harvest must have been difficult. Opportunities for corruption in the sale of underpriced caviar and crab on the world market must have been great.

Today, the existing administrative framework for limiting access and assigning quotas needs to be converted from an opaque lobbying process to the transparent sale (and enforcement) of limited rights to fish. The experience of the US North Pacific Fisheries Management

Council in creating a market for fishing licenses is far from ideal, but it is preferable to the pattern of corruption and criminalization of access rights which is emerging in the Russian Far East.

Chukotskaya Autonomous Okrug

Passengers on Alaska Airlines flights from Anchorage to the Russian Far East sometimes stop briefly in Chukotka when their flight lands for fuel at a military airbase outside Anadyr. When my flight arrived at that bleak outpost in the summer of 1994, the acres of barracks in the desolate landscape appeared totally empty until, finally, a jeep and a gasoline truck approached. A young woman in a quilted cotton jacket dragged a hose from the truck to refill the airplane while the driver of the truck lounged next to it, smoking a cigarette. While the tank was filling, the young woman disappeared into a depression in the field, returning with a bouquet of wildflowers for the crew. In the meantime, the young officer of the Border Guard stationed at the door of the plane reminisced about his hometown, St. Petersburg, with Russian-speaking passengers.

During the nine-hour wait for a Custom's official imposed on us by the local military, I saw only one decrepit, propeller aircraft arrive and depart the airfield and a single truck arrive from the ferry crossing with the town of Anadyr. It seemed as if Russian power had abandoned its Siberian North, leaving it in the hands of a few ill-fed and poorly-clad caretakers.

Tiny Chukotka's regional finances reflect the complicated economic relationship with Moscow of a region which is still largely government owned and subsidized. In the Soviet era, the region, a desolate landscape of tundra in the Far North, was a district of Magadan. In 1992, the Russian parliament gave it independent status. In that year, total population, much of it military, was 124,000 (down from 155,000 in 1991).[34] There were a reported 70,500 in the labor force. Three years later, in 1995, reported population had fallen to 91,000; total employment was 45,500.[35] Small as they are, these figures probably are a considerable overstatement of actual economic activity in the region. The region's non-ferrous mining (tin and gold), its electric power network (including the aging nuclear power station Bilibino), its coal mines and fishing collectives employ fewer than 8,000 in the official economy. Pevek (13,000) is its main Arctic port, serving a tin and gold mining region. Anadyr (17,000), its administrative center, once served a network of bases that are largely unoccupied today. However, accurate depiction of their state could add to Russia's vulnerability in the Pacific.

Nevertheless, in 1997, Chukotka's industrial output was a reported 1.384 trillion rubles, or 15.8 million rubles per capita for each of its 87,000 residents. The July, 1997 issue of Russian Far East Update and interviews with a representative of the regional government provide some of the detail.[36] Aside from local gold production, which totaled 11,426 kg. in 1994, tin mining, and production of local coal, Chukotka is maintained by the federal government using in-kind support plus a line item in the federal budget.

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[34] Gosudarstvennyi komitet possiiskoi federatsii po statistike., Osnovnye polazateli sotsial'no-ekonomicheskogo polozheniia i khoda ekonomicheskoi reformy v regionakh dal'nevostochnogo ekonomicheskogo raiona rossiiskoi federatsii. Moscow: 1994, p. 86.

[35] Gosudarstvennyi komitet possiiskoi federatsii po statistike. Regiony rossii; informatsionno-statisticheskii sbornik. Moscow: 1997, p. 328.

[36] This section is based on: Elisa Miller, editor, Russian Far East Update, July 1997, pp. 7-10 and interviews with Alexander Karp, a representative of Polar Pacific, Seattle, Wasington February, 1998.

In-kind support includes a fishing quota from the State Fisheries Committee and export rights for oil. In 1995, the regional leadership created the Chukotka Fishing Company, when the company bought a large Russian-built trawler-processor. Shareholders of the firm were the Chukotka Trading Company, the Development Fund of Chukotka, the Association of Indigenous Peoples of Chukota, and the Far Eastern Investment Company (Moscow), a company managed by the regional authorities.

In 1996, the State Fisheries Committee granted the Chukotka Fishing Company a quota of 50,000 metric tons, although only 25,000 tons of fish were actually caught. Almost two-thirds of that catch was caught by a large trawler-processor managed by Alaska Ocean of Anacortes, Wa. on a profit-sharing basis. In 1997, the quota was 60,000 tons of fish, including 1000 metric tons of crab. Revenues from fishing go into the Development Fund of Chukotka, managed by the Committee on Northern Affairs and Indigenous Peoples, headed by the governor.

In addition, in 1997, Moscow gave Chukotka the right to export up to 1 million metric tons of crude oil per year to Western Europe, exempt from excise taxes. Far Eastern Investment Company invests the proceeds of those exports until they are needed for regional imports of fuel. (The region has a small local on-shore oil field and hopes to build a refinery to produce about 50,000 metric tons of fuel annually.) Far Eastern Investment Company has a seat on the Moscow Stock Exchange and a portfolio of Russian investments.

Thirdly, Chukotka receives a line item in the federal budget equal to about $100,000 per year to cover the region's annual provisioning. (About $1150 per capita.) However, since federal subsidies are usually much delayed, the region has had to borrow the money to pay for provisioning, using its oil receipts as collateral.

Chukotka Trading Company is the purchasing arm of the administration. It handles about $100,000 in turnover annually, importing food, coal, and mining machinery. Last year it bought a fish processing plant. It also holds rights to develop the offshore oil deposits in the Chukotka Sea. Chukotka companies are managed from Moscow because most of its payments---payments to gold producers, subsidies for provisioning, and oil export rights---originate in Moscow.

The administrative arrangements for managing Russia's Siberian North have certain features in common with arrangements in the US state of Alaska. The US military and other federal agencies, such as the Department of the Interior's agencies providing services to Native American communities, are run from thousands of miles away. Although the Alaskan native communities are the titular owners of vast tracts of land, local communities have little direct influence on the amount and direction of spending. Yet, in the American case, mechanisms to provide accountability are in place to document and monitor revenues, expenditures, and costs. In the case of the Russian institutional arrangements, such mechanisms have yet to be established. Until such mechanisms are in place, there is scant information to determine whether federally-allocated rights to resources are used for regional subsidies or for private wealth.

Crony Capitalism and Resource Management

In 1998, with formal privatization almost complete, the legal foundations for exercise of property rights and the mechanisms of resource management and corporate governance fall far short of the arrangements required to introduce genuine competitive markets.

Russia's Duma continues to oppose the establishment of full, legal private property rights in agricultural and urban land. They continue to impose numerous restrictions in legislation presented to them. Without land ownership, private firms are unable to use their plant and equipment as collateral for loans or to purchase and sell the full rights to a business.

The rights to resource stocks and resource sites are government property, administered by a number of government agencies. These agencies have formal procedures for acquiring rights to resources, but, in practice, the rights are subject to frequent revision and to the risk of holdup. Firms attempt to gain security through participation in relationship systems, but, with frequent political changes, there are high risks of having the wrong friends.

For example, the State Minerals Fund is administered by the State Committee for Geology and Rational Use of Resources (State Geological Committee.) The Russian Federation Committee oversees territorial committees which coordinate the licensing of rights to use mineral resources in conjunction with the territorial administration and other government agencies.

The licensing of mining operations is complex and subject to revision by the Russian regulators. A mining company obtains a license by means of an auction, tender, or "competition" (in which performance criteria are specified in detail.) International firms seeking access to resource stocks must prepare a feasibility study or development plan.[37]

A license assigns exclusive rights to a resource site together with the right to use, but not own, the surrounding land. The license specifies fees, payments, or product shares and detailed terms of access and performance. Fee schedules typically consist of a fixed, initial payment and a periodic fee.

Western investors seeking access to Russian resources face multiple constraints. Precious metals, such as gold, are considered state property and must be sold to approved institutions within Russia. Cost estimates, feasibility studies, and calculation of ore reserves deviate from industry practice elsewhere in the world.[38]

In practice, as our case studies suggest, access to resources is arranged within a complicated relationship system. Both the territorial governor and his administration and Russian Federation authorities and their regional representatives play a role in setting up arrangements. In practice, either federal or territorial authorities may block development, so the firm undertaking a project faces considerable risk of being held hostage.

In the case of the most valuable export resource, oil, the restructuring of the industry into eleven vertically integrated production and refining complexes was carried out at the center between the Ministry of Fuel and Energy and the State Property Committee, with the final industry structure validated by presidential decrees. Initially, the

[37] The following paragraphs draw on information in James Dorian, "Minerals and Mining in the Russian Far East," in Tsuneo Akaha, ed. U.S. Japan Cooperation in the Development of Siberia and the Russian Far East. Westview: 1994.

[38] Private Sector Report to the US-Russian Business Development Committee, US West Coast/RFE Ad Hoc Working Group. Sumary Report and Recommendations, 1996.

new oil giants were holding companies, owning less than half of the shares of their subsidiaries, but in the second stage of privatization, influential business leaders acquired controlling shares in several of the oil majors in a series of shares-for-loans transactions with the Russian government. Subsequently, most of the oil-industry holding companies were integrated into Financial Industrial Groups, or FIGS. Often organized around a bank which could turn to international financial markets to consolidate ownership, the financial barons who controlled these business groups played a key role in the re-election of Boris Yeltsin in 1995 and went on to enjoy close insider links to the Russian government agencies overseeing privatization and regulating production.

The close inter-linking of Russia's financial oligarchs with government authorities in the Russian Federation is popularly called "crony capitalism." Crony capitalism is a set of administrative arrangements designed to allow members of a government and political elite to acquire control rights to assets and to transfer the cash flow rights to themselves. To the outside observer, this hybrid between government administration and market competition seems to offer Russian citizens the worst of both worlds. The government provides, not ownership, but access on highly advantageous terms. The firms, whose rights to resources are dependent on the maintenance of a system of political relationships, receive monopoly rights, but enjoy uncertain tenure, so they have incentives to decapitalize their assets, moving the proceeds offshore to a lower-risk environment.

In many regions of Russia, the territorial governor operates as a local baronet managing the territory's resources in the interest of a local elite and representing local interests in negotiations with the center.

Relationship systems, originally organized around the Communist party, played a vital coordinating role in the Soviet economy. In the Soviet regions, two firms in the same city but subordinate to different ministries were unable to trade with each other in input markets. However, if their directors were part of a local network, then they could break bottlenecks, resolve disputes, and lobby the center. Between themselves, local officials and managers managed to provide some of the local infrastructure that went unfunded from the center.

Similarly, today's crony capitalism can facilitate barter and extension of credits in a closed capital market, but it is also the mechanism for capturing wealth, controlling access to resources and markets, subsidizing, and redistributing. Since self-enforcing agreements work best when access to assets has a high franchise value, crony capitalism restricts entry. In the foreign market, restriction of competition implies protectionist, anti-foreign policies.

[Insert Table: Crony Capitalism]

The Virtual Economy

The opaque relationships of crony capitalism are played out in a system which still has much in common with the Soviet era. In Soviet plans, there were two monetary circuits. Industrial producers paid for raw materials and delivered products in a non-cash system of budgets. Budgets were debited for purchase, credited for delivery, and any overdrafts on the cost side were ultimately bailed out by Gosbank. Workers, on the other hand, received cash rubles to spend in the consumer market. Costs had little meaning in this system, since activities that served various hidden agendas of enterprise managers were charged as costs of official activities.

Today, argue Barry Ickes and Clifford Gaddy, there is still a paternalistic, loss-making sector of value subtractors which survives by reporting a variety of official activities:

> In December 1997 the Inter-Agency Balance-Sheet Commission of the Russian government reported: "An economy is emerging where prices are charged which no one pays in cash; where no one pays anything on time; where huge mutual debts are created that also can't be paid off in reasonable periods of time; where wages are declared and not paid. This creates illusory, or virtual earnings, which in turn lead to unpaid, or virtual fiscal obligations, with business conducted at non-market, or virtual prices."...Russia's virtual economy is based on illusion, or pretense, about almost every important parameter of the economy; prices, sales, wages, taxes, and budgets.[39]

Beneath the surface is an informal economy, operating on the basis of barter and offset. Sometimes Russia's new dual economy is a device for postponing the eventual closure of a bankrupt firm, say Gaddy and Ickes. But at other times, with weak corporate governance, the virtual economy reflects a hidden transfer of income from an official entity to a private beneficiary. Robert McIntyre, of the World Institute for Development Economics Research, cites the Accounting Chamber of the Russian parliament:[40]

> These privatized companies continued to this day to export large physical volumes of valuable goods while declaring themselves unable to pay wages, taxes or input bills at home. The new owners of many such industrial and resource production enterprises secreted the proceeds of foreign sales abroad, deposited in personal, not corporate accounts.

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[39] Clifford Gaddy and Barry Ickes, "Beyond the Bailout: The Roots of Russia's Economic Crisis," http://www.brookings.org/fp/w-papers/gaddy/gaddick1.htm.
[40] Letter to the Editor, Financial Times, (15 September 1998).

Ownership versus Access

Under the institutions of crony capitalism, a harvester gains, not ownership, but access to resources. So his/her behavior is are likely to differ from an owner's behavior. How would a government which has sovereign tax power and is the owner of resources maximize its rents? An owner of resource stocks would invest in resource development and exploration to the point where the efforts yield the rate of return on other investment. He/she should extract resources only if the marginal net return over variable cost of current extraction equals or exceeds the present value of expected future returns from not extracting. These future returns include the discounted net return from future use of existing stocks, the productivity of existing stocks in producing future yield, the effects of stock size on extraction costs, and the possible benefits derived from enjoying the stock in unharvested form. Current extraction may even compete in the manager's program with option demand--the desire to hold the stock until later in order to have the option of possible alternative uses.

A government would need a combination of taxes and regulations to achieve these results. As the resource owner, the government would want to ensure that the resource was sold for an appropriate price and that the rate of extraction was appropriate. Its tax goal would be to collect as much economic rent as possible through taxes that did not distort the incentives facing the harvester. One such tax would be a royalty for the right to exploit the deposit. The government might also choose to share some of the risk associated with extraction, if this reduction of risk led the harvester to reduce the implicit risk premium that it required from the project. A production-based tax or production-sharing arrangement would provide for sharing of risks.

One of the implications of efficient management is that the majority of resource rents should be captured at the point of production in a region. However, in Russia, one goal of the Federation government is to lower the price received by producers extracting resources in the regions. The federal government attempts to centralize the collection of rents, both to increase its share of the rent and to provide central control over information as to the size of the rent and the form of its capture. There will be a preference for arrangements that conceal information.

In consequence, resource use under crony capitalism differs from market ownership in at least three ways. First, there are significant "idiosyncratic" costs of maintaining control under crony capitalism. Second, since central and regional authorities are competing for control of economic rents, the administrative arrangements will reflect this strategic interaction. Third, since tenure is insecure, a harvester will have a shorter time horizon and will attempt to move its portfolio into less risky assets, probably through capital flight. During almost seven years of economic reform, the partial and incomplete reform of rights to resources has impeded investment, fostered capital flight, and sown the seeds of conflict between the Federation government and Russia's regions.

Economic Crisis and Central-Regional Relations

In the fall of 1998, a new leadership which included Prime Minister Yevgeny Primakov, former Soviet Head of Gosplan, Yuri Maslykov, and former Soviet Central Bank Head, Viktor Gerashchenko promised to re-ignite Russian inflation, increase the role of the state in the economy, and strengthen central control over territories that withheld taxes and evaded central regulations.

The likely outcome of such plans appears to be increased hardship for Russia's citizens and continuation of Russia's crony capitalism with a different group of cronies. The critical mass of the state is likely to weigh more heavily in economic outcomes than it did in the past. A larger share of the potential rent from resources will be spent in subsidizing inefficient domestic manufacturers rather than funding capital flight. Still, the goal of increased productivity and increased well being will be unattainable.

The actual delineation of federal, territorial, and regional (raion) rights to resources will still be in contention as it has been for the past several years. Today, all of the territorial governors in the RFE are elected and exercise considerable authority. (The exception is Evgenii Nazdratenko whose budget authority and control over resource allocations, fishing quotas and logging rights, were transferred by President Yeltsin to the President's representative, Lt. General Viktor Kondratov, former Head of the Federal Security Service in the region, although it is possible that Nazdratenko will regain his authority, as well, under a new leadership.)

These powerful regional governors are former industrial managers who profited from the privatization of regional assets in 1992-95 and who operate within a relationship system that provides some stability at a time when the formal rules of the system are contradictory. Today, as always, the federal government attempts to pit one region against another, discouraging their attempts to find a common cause. Moreover, it has given autonomous regions, called okrug, independence from the territories to which they formerly belonged, increasing their dependence on the center and raising the costs of regional cooperation.

In the individual territories, the parliament has a large number of members and meets infrequently. Its legislative authority is exercised by specific commissions of its members. Each territory has, in addition, an appointed President's Representative (already mentioned, above) who is responsible for coordinating the activities of the many federal authorities in the territory. Relations between the Governor and the President's Representative are often uneasy.

While regional authorities have uncertain rights, they have heavy responsibilities. In the former Soviet Union, the individual territories merely carried out centrally-determined policies, often under the direction of an industrial Ministry that was dominant in the region. Moscow maintained its control, in part, through arrangements that set each region in competition with its neighbors for centrally allocated resources. In practice, centralized funding for territorial infrastructure was always insufficient and territorial and municipal officials had insufficient authority to provide effective coordination. So, in practice, industrial ministries contributed to local infrastructure, coordinating their efforts through the Communist party.

With the collapse of the former Soviet Union, territorial and municipal authorities took over the responsibility for providing many local public goods. Gradually, a division of tax revenues between the territories and the center is emerging to support decentralized supply of public services. As of January, 1995, the RFE retained 72 percent of taxes collected in the region, a larger share than the all-Russian average of 59 percent. These shares varied from a low of 61 percent in Primore to a high of 99.5 percent retained in the Sakha Republic. Three Northern territories--Yevreyskaia, Chukotskaia, and Koryakskii autonomous okrugs received federal subsidies.

[Insert Chart 6: Share of Taxes Retained in the Regions]

During the years of economic reform, the RFE has steadily lost population as military activities have decreased and demand for military products has fallen. In the future, it is unlikely that resource extraction alone could underpin the region's economy at the present level, even with a thriving energy sector. RFE ports could serve as future nodes for regional transport infrastructure, but such development would require major improvement in the physical and institutional infrastructure of the region.

If a new leadership decides to revitalize the military, this could stimulate the economies of cities, such as Arsenev, Petropavlovsk, and Komsomolsk-na-Amure. Development of Sakhalin's energy would provide a genuine spur to economic activity, at least during the investment phase, and availability of low cost fuel would overcome the energy shortage that has handicapped the region's economy.

Moscow has the means, in its control of quotas, licenses, and rights to resources to re-centralize control of resources in the region. Separatist sentiment is unlikely to be strong in the RFE region, given the society's sensitivity to a population of over 100 million Chinese on its border. A more likely response to Moscow's capture of resource rents would be increased rule-breaking and evasion.

To balance the pressures from a dominating center and from powerful neighbors, the regional leaders might seek to build trade and investment links with more distant countries, such as the US and Europe. Yet, that goal of increased investment will be slowed by recent financial crisis.

Both Russia and the RFE region's interest would be best served by a dynamic, prosperous Pacific region, but, even with the most favorable scenario for expansion of energy production, it will still be difficult for the RFE to achieve that prosperity.