If money only grew on trees - The Russian forest sector in transition

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Introduction

"Russia is endowed with enormous forest resources." Unfortunately, this is a common claim based on misconception. Russia does not have enormous forest resources but a tremendous amount of forests, which is something quite different.

Why is Russia, despite its affluence in terms of forests, unable to utilize its endowments to generate economic



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growth and social welfare? What happened to all the hope that the forest sector would become a central engine in the transition toward a Russian market economy? This article attempts to answer these questions by using the forest sector as an example, but other sectors would certainly apply.

There is no one-to-one correspondence between the size of a natural resource and its economic value. This scenario is illustrated in a great number of developing countries, where they often possess significant "resources," but due to various political, organizational and technological factors, their resources are not contributing to the well-being of their people. Accordingly, the Russian forests are not necessarily assets just because they exist. A forest resource can be regarded as an asset in an economic sense only within a suitable framework of institutional arrangements.

The same applies with technology. A general renewal of forest technology is not the solution to the current problem, despite its common claim. Without adequate institutional arrangements, any technological investment could be in vain.

Indeed, Russia does have huge forests. The total forested area is about three to four times that of Canada and stretches over eleven time zones. Russia holds 23% of the world's forest areas, and 55% of the coniferous stock, just to mention a couple of relevant measures (Nilsson and Shvidenko 1997). However, after about ten years of transition, the figures are discouraging (Table 1).

From consulting the figures in Table 1, it becomes evident that "the invisible hand" of the market economy has not yet touched the Russian forest sector in any significant way. For example, consider Arkhangelsk, one of Russia's largest forest regions. Here harvesting reached a peak in 1987/88 with a total of around 25 million m³. Since then, cutting has drastically decreased and, in 1996, the harvesting level was only about 29 percent that of 1988. Between 1990 and 1996, the production of commercial wood dropped from 19.4 million m³ to 7.2 million m³, and in 1994, production fell below the 1940 level (Carlsson et al. 1999). The situation is virtually the

Is It Really Capitalism?

The transition toward capitalism and market economy would supposedly provide economic growth and increased welfare. But why hasn't it? Let us first ask, what really is a market economy, and do the qualities distinguishing a market economy apply to contemporary Russia?

"[A market economy is] an economy in which scarce resources are all (or nearly all) allocated by the interplay of supply and demand in free markets, largely unhampered by government rationing, price-fixing or other coercive interference. In classifying real historical economies, the level of "marketization" is not primarily an either/or issue, but rather a matter of degree. The greater the proportion of the goods and services produced in the society that are allocated by market processes (rather than by government edict or the operation of unchangeable custom), the more meaningful it is to refer to its economy as a market economy [...]" (Johnson 2000).

As the quotation indicates, the question of the possible existence of a market economy in the Russian forest sector is rather a matter of degree. This also means that it is not easy to judge whether the sector actually moves toward such a stage. Transition toward what, is the question? By necessity, the applied evaluation criteria for such a movement must be rather broad. To qualify as a "decent" market economy – in contrast to "robber-baron capitalism" – the following conditions should be met:

- Constitutional rules are acknowledged and transparent.
- The structure of property rights is settled and well defined, (i.e., private actors can acquire property or get the right to utilize property for their own benefit).
- Rules and regulations from official authorities are regarded as legitimate and apply equally to similar actors.
- The market decides prices of property and goods, and costs should reflect the real costs.

same for the whole of Russia. The question is, why did this happen, and what can be done to improve the situation?

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Table 1. Removal of wood in Russia (million m ³).					
	1985	1990	1995	1997	1998
Industrial wood	271	256	92	66	64
Other wood	66	48	24	24	18
Total	337	304	116	94	82

Source: The World Bank

- Decision-making regarding collective choice and operational rules is decentralized.
- Private investors can realize the returns on their investments.
- Rules are enacted to prevent the devastation of natural resources.
- Legitimate authorities take measures against violations of rules.

However, after investigating the forest sector in eight Russian regions, from Khabarovsk in the Far East to Mumansk in the Northwest, we have come to realize that many of these criteria are still poorly met (Carlsson *et al.* 2000). Let us look at some examples:

- Almost all enterprises of the forest sector are privatized, except those that belong to *Rosleskhoz*, the Russian Federal Forest Service, and some other public authorities. However, many companies were only privatized in name and ownership has often remained unclear. Besides, in the absence of effective bankruptcy and arbitrage procedures, a common behaviour among vulnerable firms to avoid total collapse has been to "trade" company shares for tax deficits and other public dues. It goes without saying that this creates an unhealthy unification between public authorities and private actors, the separation of which is the very idea of privatization and market economy.
- The last few years have seen a significant increase of non-market transactions, such as bartering. Figures are alarmingly high and this also applies to the forest sector. We have interviewed large forest firms that only sell a small part (10%) of their production for real money. Typically, regional and local authorities are heavily involved in this game.
- Rules are enacted to prevent devastation of forest lands, but authorities lack the means to monitor and implement those rules and regulations. The same goes for fire protection, regeneration, and other essential activities to protect and cultivate forest lands.
- In many places the pricing of timber is a farce. No real competition exists and the very ideas of leasing and auctions fall altogether flat. From this, we can safely assume that prices are artificially low, and accordingly, Russian timber should be very competitive in international markets. But, as already indicated, this is not the case.
- Well-defined property rights are a prerequisite for efficiently functioning market economies. When it comes to Russia and its forests, the situation is ambiguous. Who are the real owners of the forests, the Russian Federation or the subjects of the Federation, or both? What happens when the interest of the two deviate? For example, who is supposed to clean up polluted areas, the region or the State? Many experts have also drawn attention to the fact that the forest code and other subsidiary rules collide with the constitution. For example, the constitution allows all types of ownership, while the forest code forbids private forest ownership.

• A further indication of a poor market economy is the low level of investment. If private investors were confident that they could realize the returns on their investments, the investment level should be significant, especially among foreign investors. But, this is not the case.

Property Rights Not Equal to Private Ownership

The most essential question for a market economy is not who is the legal owner of goods and resources, but whether or not the property rights are well defined. Property rights are not the same as ownership, but rather how economic actors define their relations to one another and to the resource in question. "Property rights are the relations among individuals that arise from the existence of scarce goods and pertain to their use" (Pejovich 1998). If these relations were formed solely through day-to-day decisions, kinship, corruption, crime, etc., the world would be less predictable, enterprises would not be able to plan and make accurate calculations on investments – all essential factors in a market economy.

The economic relevance of property rights depends on how well these rights are recognized and enforced in society, which in turn is determined by the existing institutional framework. Institutions consist of those formal and informal rules that are used *de facto* by a set of actors. More precisely, institutions can be defined "as the legal, administrative and customary arrangements for repeated human interactions, [...] the prevailing institutional framework in a society consists of formal and informal rules" (Pejovich 1998). Thus, the institutional framework affecting the Russian forest sector is obviously composed of a large set of written as well as unwritten rules.

To summarize, well-defined systems of property rights and institutions make the world predictable. This means that transactions become cheaper – in fact, barter, negotiations for privileges, bribes, etc., take time and consume a lot of resources that might have an alternative use. What is more important, however, is that an ill-defined institutional framework shapes "short shadows of the future" (Axelrod 1984). Businesses need the opposite. For example, if a manager of a firm is confident that he will continue to interact with a certain partner – let us say they trade with one another on well defined and agreed upon terms – he will behave accordingly. His behaviour today will affect future interactions therefore the shadow of the future is long. But if he expects his partner to be unfaithful, if rules will suddenly change, and if he does not know if he will survive economically, it might be better for him to act as if today were the last day in business.

This example highlights two important aspects for understanding the current Russian situation:

- Market economies are built from the ground up, not by means of political command and certainly not by political authorities
- 2) Nevertheless, the need of an active and effective government is essential.

The political and economic history teaches a paradoxical lesson, namely that dynamic businesses thrive on stability. How can that be? In a market economy, firms and other actors in the forest sector, for example, are used to calculating the risks of performing particular economic actions. One difference between the concepts of uncertainty and risk is that

risks can be calculated and are insurable. While commercial risks can be traded and shared, as in financial markets, political risks, (i.e., risks associated with qualities of the political system) are uninsurable. One can distinguish between three such risks: the collapse of the entire political system, the breakdown of the economy, and unpredictable behaviour by governmental authorities.

Although these three types of political risks are interdependent, it is mainly the third type that shapes the current problems in Russia. Political risks "are 'systemic' in the sense that rules governing economic transactions can be abolished, or changed, without enforcement possibilities" (Eliasson *et al.* 1994). However, a sound entrepreneurial behaviour and the long-term financial commitments existing in the Russian forest sector would require enterprises to mainly deal with business risks, risks emanating from mistaken decisions, bad calculations, misjudgements, etc., rather than trying to insulate themselves from unpredictable government behaviour. Therefore, "it is the task of political authorities to minimize or eliminate political risks as a means of achieving economic growth" (Eliasson *et al.* 1994).

Thus, it can be concluded that as long as a confusing or contradicting system of regulation exits, *ad hoc* public decision making, intermittent enforcement of rules, and other expressions of political unpredictability in the forest sector, its problems will continue. Therefore, the regional authorities and elected assemblies should by all democratic means promote institutional stability and, thus, transparency of rules. Ultimately, such measures will improve predictability. In fact, it can be argued that sometimes it would be better to have inappropriate but stable and enforceable rules, rather than rules that are nicely tailored but often changed. Unnecessary rules can perhaps be evaded, but in a situation where all rules are in a state of disorder, possibilities to evade rules are limited as well.

How do enterprise managers and other commercial actors react to the current situation? They behave as expected: they reward mistrust with mistrust, they are reluctant to invest, they negotiate for tax offsets and other privileges, and they do not follow rules. Frankly, why should they behave differently?

The Rippling Effect

During the past three years we have conducted investigations of the forest sector in eight Russian regions. Structured interviews have also been done with approximately 250 forest enterprises. To be able to make comparisons, we have completed a mirror study with Swedish firms. Here are some of our results (see Table 2):

Note the following peculiarities among Russian firms and compare those with the Swedish:

- In a country with a tremendous amount of forests almost half of the firms perceive a shortage of wood.
- Most firms are not investing.
- Most firms do not export.
- The vast majority of the firms have no bank contacts.
- Although figures might be too low, they show that at least half of the firms are involved in barter.
- Payment procedures are built on mistrust.
- Violations of agreements are a rule rather than an exception.

All Russians know that firms have extensive social responsibilities, such as provision of housing and transport for their

Table 2. Attributes of forest firms in Russia and Sweden. (Percent) Russia N=221N = 24Activity of firms Forest managing 8 8 24 4 Harvesting Sawmill/harvesting 25 33 31 Sawmill 33 Pulp/paper 4 4 8 17 Trading/consultant Background of firms/ownership 29 24 Public 0 Privatized 42 34 71 New private Investing in company? 36 85 15 No 64 Social responsibilities 54 83 46 17 **Export of production** Great >40% of the vol. 24 21 10 Less <40% of the vol. 4 No export 66 75 Bank relations? Yes 17 82 18 No 83 Amount of timber supply Enough 56 78 44 22 Shortage Method of selling payment 56 100 44 Barter and cash 0 Arrangement of selling payment 0 37 On delivery Before delivery 48 4 After delivery 4 96 11 0 Mixed Violation of buying agreements 0 Big problem 44 Small problem 30 4 96 26 No problem Violation of selling agreements Big problem 59 0

labour, health care, child care, and provision of fuel wood. It should be noted, however, that Swedish enterprises also engage in social activities, but the responsibilities are different. Typically, Swedish firms are engaged in different kinds of sponsorships, such as support of local clubs or individual athletes, or buying textbooks for a local school. A few of the larger Swedish companies provide housing for some of their employees, but never for the entire workforce, as the Russian firms might.

Small problem No problem 23

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The representatives of the forest firms were asked what they regarded as the most binding restriction for running their enterprise. Finding a market was *not* mentioned as a major problem by the Russian firms. They rather claimed that the tax system is the biggest hurdle. This result certainly reflects a number of well-documented odd features of the Russian tax system, such as the multitude of taxes and tariffs, the intransparency of the system, and the "draconian" sanctioning

practice. Between 1991 and 1996, the Russian taxation code changed 256 times! So, it is no surprise that the tax system is considered unpredictable. Taxation experts have characterized the tax penalty regime as draconian, with fines of 100% for the first violation, and 200% for the second, and so on (Rogfalk 1996). According to a survey by the "New Russian Barometer," 56% of the population is of the opinion that there is no need to pay taxes if you do not want to do so. If caught, 27% are convinced that paying bribes could solve the problem (Rose 1998). Of course other obstacles mentioned by both Russian and Swedish firms can be attributed to the forest and business legislation.

When asked to suggest changes that might possibly improve the situation, both Russian and Swedish managers suggested lower taxes and changes in the legislation. It should be noted, however, that the existing forest legislation is regarded as a bigger problem among Swedish enterprise leaders than Russian leaders. From their comments it becomes clear that the Swedish enterprise leaders perceive the strictness of the environmental legislation as the problem. However, this attitude only illustrates the fact that the Swedish institutional framework is transparent and well defined, meaning that both rule monitoring and rule sanctioning work quite well. Accordingly, rule compliance is also high. Therefore, in the eyes of individual Swedish business leaders, the environmental clauses are regarded as a restriction on the profitability for the individual firm.

Finally, approximately 20% of the Russian firms called for a general renewal of technology and about the same percentage suggested that the State should coordinate the forest sector. Nothing similar can be observed among the Swedish firms. In fact, there are a number of Russian firms that openly wish to become State-owned again. This might be interpreted as an indication of the fact that the disintegration of the Soviet management system has not been replaced by alternative and well-functioning ways of organizing the sector based on market economic principles. If the situation is chaotic and market mechanisms do not work, calls for formal coordination are understandable.

What if The Economy is Virtual?

We have claimed that the Russian forest sector – and probably a great number of other sectors as well – have few qualities associated with efficiently functioning market economies. But socialism is gone and the Soviet State is dismantled. Or is it? If Russia is neither capitalist nor socialist, what is it? The answer is that the forest sector, to a great extent, is a reflection of the fact that the Russian economy as a whole is a *virtual economy*, as some experts have labelled it.

"... it is based on an illusion about almost every important parameter: prices, sales, wages, taxes, and budgets. At its heart is the pretence that the economy is much larger than it really is. This pretence allows for a larger government and larger expenditures than Russia can afford. It is the real cause behind the web of wage, supply, and tax arrears from which Russia cannot seem to extricate itself." (Gaddy and Ickes 1998)

Such an economy can function only if it is insulated from market competition. This might be through an extensive use

of barter, which effectively breaks the market-based price signals and allows the use of fictitious prices of goods and services that are separated from their market values. This practice maintains the pretence of value creation, while industry might in fact be a value-destroyer. Consequently, if this assumption is correct, there are hoards of would-be unemployed workers, engineers, bureaucrats, and others in Russia today. And, this certainly applies to the forest sector.

Let us take an example – Why don't Russian forest firms invest, an act that presumably would reduce their "distance" to competitive markets? Is it because of money? Lack of markets? Bad management?

- If one sits on a good resource and if there are potential markets, money can be generated. This money might be used for investments in order to create more resources, thus earning more money.
- The theory of the virtual economy starts from the assumption that managers of Russian enterprises are rational, but that they have strong incentives to continue to run their firms even if they are not profitable.

The social responsibilities associated with operating Russian firms are part of the explanation. Barter, tax offsets, and other non-monetary solutions are common features in the enterprises' activities. In addition, the lack of effective bankruptcy and arbitrage systems contribute to postponing a "creative destruction" of firms in the sense that Schumpeter envisaged as a driving force of a market economy. Thus, firms can continue to produce, although their outputs are not sold for money. Such production tends to generate "soft goods" that can only be traded in virtual quasi-markets, rather than in real commercial markets.

Most Russian forest firms have a substantial distance to travel before they can meet the demands of competitive wood markets. Why then do managers avoid restructuring? Their first option should be to invest in making production more effective, but, as stated above, that solution has its own problems. The other option, according to the virtual economy theory, is to invest in "relational capital," such as performing services for the local authorities, negotiating for privileges, etc.

Whether forest firms choose to invest in relational or physical capital depends on the initial (inherited) stock of capital in their possession. The managers will simply prefer the type of investment that is most profitable, and it is obvious that the Soviet integrated forest industrial system (that was inherited in 1991) provides a rich fund of relational capital from which to profit.

A Feeble Light at the End of the Forest

In an attempt to assess how deeply involved forest firms are in this game, we found that only 12 out of 203 firms behave as "normal" market actors. Still about 60–70% of the firms are deeply rooted in the virtual economy, behaving like anything but commercial players. This alarming fact indicates that remnant features of the Soviet system still exert a strong influence on economic behaviour.

The virtual economy is only possible to uphold if there is an inflow of money from the large State monopolies that keep the merry-go-round running. Furthermore, it is only possible to maintain the system as long as political authorities at all levels of government participate in the game. Here we should keep in mind what we said earlier, that, in a market economy, it is the task of political authorities to minimize or eliminate political risks as a means of achieving economic growth. But, now it is exactly the opposite. If nothing happens, new generations of entrepreneurs and business leaders will imitate and adopt the predominant behaviour. As a result, the road to a sound market economy might be an endless detour.

What Should be Done?

There are no easy decisions that solve all of these problems immediately. Let us put it this way: different approaches should be taken on different levels.

The constitutional level

• All ambiguities concerning property rights should be sorted out. Collisions between the constitution and subsequent laws must be eliminated. Different types of ownership should be allowed; this does not mean that the forests should necessarily be privatized. Focusing on constitutional issues does not neglect the fact that a number of political problems, (e.g., the role of the parliament versus the president, as well as many macroeconomic questions) must be solved in order to establish a solid foundation for a vital forest sector. But, if constitutional issues remain in a flux, there is simply nothing to build upon.

The collective choice level

- Federal and regional policy programs, which are in line with market economic principles, should be worked out. This means that such programs should not be based on the idea of political, administrative coordination of business activities.
- A thorough taxation reform should be enacted. The whole system of taxes and fees, not only the number of taxation rules, should be simplified, made more transparent, and as a consequence, enforceable.
- Politicians and bureaucrats should withdraw from direct involvement in individual enterprises. As a rule, regional bureaucrats should not take over and run firms that are nonviable.
- All democratic means should be utilized to create law and order.
- By virtue of their credit practices, banks and other credit institutes should encourage entrepreneurship, exports, and the establishment of joint ventures with foreign companies.
- Forest enterprises should create their own independent branch organizations in order to draft and settle binding agreements concerning rules of conduct and standards, and to govern the operation of the enterprises in the forest sector.
- The infusion of cash to the forest sector from "prosperous" state monopolies should be stopped. This would lead to the shutdown of the worst value-destroying "economic zombies."
- The bankruptcy system and the arbitration courts must be made more efficient.
- Education and training for people to learn new tasks and technologies must be developed; democratic citizenship should be encouraged.

The enterprise level

Constitutional and collective decisions determine the degrees of freedom for the firms. But this is no excuse for enterprises to sit back and "twiddle their thumbs." A number of things can be done:

- Learn from others; there are a number of good examples.
 There were positive developments in the forest sector during 1999. If this, as many experts believe, is not only a short-term effect of the devaluation of the ruble, every single firm should ask: what was the trick, how did these firms succeed?
- Firms should make increased efforts at product development.
- Focus more on the economics and less on the engineering.
 Most large industries are filled with engineers and other production staff. But the bottleneck is rather a lack of business competence, such as management accounting and industrial marketing.
- Educate and develop the work force, (e.g., in English, modern business accounting, quality management, etc.). Similarly, good behaviours should be rewarded, work ethics should be held in high esteem, and business leaders should act as moral vanguards.
- Finally, for larger industries, vertical integration might prove profitable. Companies could, for example, create their own harvesting units or start their own transport firms. In the present situation of unclear property rights, ad hoc rules, and irrational transport pricing, vertical integration might be a rational decision. In this way, the managers of processing plants may gain a better control of the transactions, and as a consequence, reduce the total costs. This "solution" is triggered by an absence of viable markets for forest products. Under other economic circumstances, such integration might even increase transaction as well as production costs. Every coordination and integration process must be the result of the companies' own decisions. These solutions cannot be implemented if the old political structure intervenes in the forest sector.

Russia has the Power to Solve its Own Problems

Since this article is written by "foreign experts," albeit without full knowledge of Russian realities, we do not for a moment believe that foreign expertise could, or should, turn the Russian "supertanker." An institutional framework suitable for the development of the forest sector must be created from within Russia by enterprise managers, politicians, forest managers, and other stakeholders. As many times before in history, Russians must take charge themselves and outline their own road to the future. Indeed the opportunities offered by the *Perestroika* have provided such a new crossroad.

To take advantage of this opportunity requires, however, that those who are supposed to govern must be aware of the complexities conveyed in this article. For example, it requires that many of those who operate in the virtual economy became aware of their own role in the drama.

Sometimes actors in the virtual economy complain loudly about the current state of affairs, wishing that businesses would work better. This is a classic case of a "dog chasing its tail." Hence, those who complain might be a part of the problem. There are others, of course, who understand the current situation, who are dedicated to making things better, and who might have good ideas of what to do.

We think that all key participants should confront the issues in open and honest discussions, and come up with both short- and long-term suggestions, policy recommenda-

tions, and concrete decisions. These "policy exercises" should be structured to promote open deliberation and mutual understanding among stakeholders, interest groups, and scientific disciplines. In these exercises, foreign experts might provide the results of their investigations. They may have insights about modern Western forest management that might fertilize the process – and help the Russian forest sector work more efficiently.

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IIASA homepage: http://www.iiasa.ac.at/

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