
Usage Guidelines:
Please refer to usage guidelines at lib-eprints@bbk.ac.uk. or alternatively contact lib-eprints@bbk.ac.uk.

This is an author-produced version of an article due to be published in summer 2006 in the *Proceedings of the VII ICCEES Congress, July 2005*. This version has not been peer-reviewed.

All articles available through Birkbeck ePrints are protected by intellectual property law, including copyright law. Any use made of the contents should comply with the relevant law.

**Citation for this version:**

The citation for the publisher’s version is not yet available.
THE POLITICAL IMPLICATIONS OF RUSSIA’S RESOURCE-BASED ECONOMY

William Tompson
August 2005

Introduction

A great deal of the burgeoning literature that has appeared in recent years on the so-called ‘resource curse’ invokes political economy explanations. The quality of governance appears as an intervening variable between economic structure and economic outcomes, helping to explain why countries that are heavily reliant on natural resources tend to grow more slowly over the long run. It is argued that their institutions tend to be weaker and their policies consistently sub-optimal. On the face of it, there is nothing implausible in such a view. After all, the major economic explanations of resource-exporters’ poor growth performance are all, at least in principle, treatable: governments have at their disposal policy tools that should allow them to mitigate, if not eliminate, such economic hardships as ‘Dutch disease’. The fact that they so often fail to do so suggests that consistent policy failure lies at the root of the problem. Yet if poor governance lies at the root of the resource curse, one must ask why resource-based economies are more likely than others to suffer from it. The answer must be that resource wealth somehow distorts their politics in such a way as to produce institutional and policy failures.

A number of possible explanations for such a link have been proposed, but because the literature has focused on political and governance issues as intervening variables, there is often a tendency to infer causation from association rather than to explore the causal links between economic structure and either the nature of the political system or the quality of governance. This paper seeks to examine those links closely in the context of contemporary Russia. It addresses a relatively simple question: do we have compelling reason to believe that Russia’s political life would have been substantially healthier – that politics would have been more democratic or governance less corrupt and more effective – if Russia had begun its market transformation without such large minerals sectors? Certainly, Russia seems to suffer from many of the governance problems identified in the political economy literature as typical of resource-rich states. To some, indeed, it seems to present a perfect illustration of the political economy of the resource curse at work. However a close examination of the Russian case suggests that it is difficult to attribute too much significance to Russia’s economic structure when explaining the ills that afflict Russia’s body politic.

The central argument of this paper is that there is little or no reason to believe that the Russian polity would be substantially healthier had the country begun its market transition with a less resource-rich economic structure. The paper looks closely at Russia in relation to a number of specific hypotheses advanced in the political economy literature on the resource curse. It finds that Russia does not conform to the expectations generated by several important strands of the literature. In a number of other cases, Russia does indeed appear to confirm the theory, in that it suffers from the kind of political pathologies associated with resource-based economies, such as pervasive rent-seeking and corruption. However, these
problems would appear to be over-determined in the Russian case. For reasons that will be 
elucidated below, it would be hard to argue that a resource-poor Russia would not suffer 
from much the same problems.

The paper proceeds as follows. After exploring the causal links that might exist between 
economic structure and politics, it proceeds to examine why natural resources might be 
expected to have a particularly significant impact. The analysis then turns briefly to Russia’s 
economic structure. This is followed by what is really the heart of the paper: the 
identification of a number of specific claims about the nature of politics and governance in 
resource-based economies and an assessment of Russia’s recent experience in the light of 
those claims. While some of the hypotheses advanced in the literature appear to find some 
confirmation in Russia, the picture is far too mixed to support any very strong claims about 
the way in which resource wealth affects Russian politics.

The nature of the problem

Why should natural resource wealth affect politics?

Why, a priori, might we expect a resource-based economic structure to have a 
particular impact on the pattern of a country’s political life? The largest part of the answer 
may be summed up in one word: rent. The one thing which virtually all primary commodity 
sectors have in common is the presence of the potentially large rents to be derived from 
resource exploitation. The question of who will capture these rents is likely to be a highly 
salient political issue. Just how the competition for resource rents plays out in political life, 
however, is likely to depend on the characteristics of the sector itself, as well as of the wider 
institutional environment.

The nature of the resources in question will play a role here. Case studies suggest that 
an abundance of point resources, such as mineral deposits, is more likely to lead to weak 
political systems and consequent economic disadvantage than are diffuse resources, like 
fisheries or forests (Deacon and Mueller, 2004:26). Point resources are potentially easier to 
monopolise. Contests to control them are therefore more likely to be zero-sum and they are 
more likely to be captured by whoever is in control of the state. A related, but nevertheless 
distinct, issue concerns the capital-intensive nature of resource extraction in many sectors, 
which is likely to mean that resource industries will tend to be dominated by fewer, larger 
firms. This, in turn, increases the incentives for state elites to nationalise those industries, 
especially where they loom very large in the national economy. Otherwise, political leaders 
may fear that such powerful private companies could prove ‘unmanageable’. In view of 
these considerations, it is perhaps not surprising that so much of the resource curse literature 
focuses on minerals (mainly hydrocarbons and metals). These are point resources, with 
highly capital intensive production and, in many cases, substantial scale economies. Such 
sectors are likely to be characterised by higher levels of (state or private) ownership 
concentration than most others.

It is important to note that it is a country’s resource-dependent economic structure that 
matters here, not its resource endowments as such. Endowments are not the sole 
determinants of economic structure. It is one of the more curious features of the resource 
curse literature that the discussion often speaks of resource wealth or natural endowments as 
a ‘curse’ or ‘precious bane’, but studies of the phenomenon tend (rightly) to identify 
resource-dependence in terms of the place of a given commodity in the structure of a 
country’s exports or production, rather than in terms of its natural endowments.
The problem of causation

It is not difficult for those studying resource-based economies to spot many of the characteristic policy errors and institutional pathologies identified in the political economy literature on the resource curse. There would thus seem to be a pretty strong case for the existence of some sort of link between a resource-dependent economic structure and certain governance problems. Indeed, if politics is, in the conventional definition, about ‘who gets what, when, how’, then it would be surprising to find that the economic structure of a polity did not have an impact on its political institutions and practices. The nature of the principal sources of national wealth in any society is likely to affect the framework for political decision-making – including goal formation, the locus of authority and the types of institutions adopted or created (Karl, 1997:44–5). With respect to resource-based economies, in particular, one might expect their natural endowments to affect the dominant mode of resource extraction employed by rulers. Resource wealth might encourage rent-seeking as a primary form of political activity. It might also prompt the ruling elite to prefer governance structures that made it easier to bestow resource rents on allies and supporters.

Nevertheless, one must be cautious in moving from the observed association between phenomena to arguments about causation. When it comes to resource dependence and poor governance, the causal relationship is often inferred with too little reflection about which way the causal arrows might run. It is often suggested that resource-based economies tend to make it harder to create democratic polities or sound governance but it may equally be that poor governance impedes economic diversification. A resource-dependent economic structure might result in part from poor institutions – particularly, weak property rights. There is, after all, evidence to suggest that certain mineral extraction sectors are better equipped to operate in a poor institutional environment than are processing sectors or services. Where property rights are poorly protected and contract-enforcement is problematic, large resource-extraction companies may be better able than firms in other sectors to engage in political lobbying, to employ private security services, etc, in order to protect their property rights and enforce their claims. In such an environment, primary commodity extraction will outgrow other sectors, leading to a resource-dependent structure. There is the possibility of a vicious circle here, as well: if the dominant economic interests in a society are able to flourish despite – or because of – defective institutions, then there may be little pressure for institutional improvement. Ruling elites may even resist reform if institutional improvements might make rent-seeking more difficult.

A further possibility is that those who argue for more straightforwardly ‘economic’ versions of the resource curse are right. In that case, it might well be economic performance that is the intermediate variable. If ‘Dutch disease’ and other such economic phenomena make it harder for a country to sustain growth, the resulting poor economic performance might be hypothesised to make democratisation or improvements in the quality of governance more difficult. One need not be an uncritical adherent of the ‘modernisation’ theory of democratisation in order to acknowledge that there does indeed seem to be a strong link between economic development on the one hand and both political democratisation and the quality of governance on the other.

There are thus at least three causal relationships we might plausibly expect to find between resource dependence and politics. Resource dependence may contribute to poor governance. Poor governance may impede diversification. Or resource dependence may undermine economic performance, thereby impeding progress with respect to democratisation and/or good governance (which, in turn, would tend to undermine economic
performance still further). These three hypotheses are not by any means mutually exclusive. Quite the opposite: much of the literature suggests that the causal arrows linking these variables may run both ways, giving rise in some cases to vicious or virtuous circles involving both governance and economic performance. In any case, it is obvious that the determinants of quality of governance are numerous and complex. Those who advance political economy models of the resource curse that rest on claims about the deleterious impact of rich natural resource endowments on the quality of governance thus face an enormous challenge, however plausible their claims may appear at first glance.

To untangle all these relationships in a rigorous fashion would require not only a close, systematic analysis of resource-based economies but also much more systematic studies of the politics and governance of more and less successful non-resource economies. The present paper does not attempt anything so ambitious. It is focused on the implications of a resource-dependent economic structure for politics and governance, and on a single case – the Russian Federation – at that. However, the above considerations remain relevant, in so far as they alert us to the need to be cautious in our own claims and also a bit sceptical when assessing the claims made in the political economy literature to which we will shortly turn.

**Russia as a resource economy**

Before proceeding with a review of the relevant literature on the resource curse, however, it is necessary to consider how, and to what extent, Russia ‘fits’ into a discussion of resource-dependent economies. On most of the measures conventionally employed in the resource curse literature, Russia undoubtedly qualifies as a heavily resource-based economy. Fuel and metals together accounted for an estimated 65% of value added in industry in 2000. In 2003, hydrocarbons, metals and other raw materials accounted for 76% of total exports, equivalent to 31.5% of GDP. Oil and gas alone constitute over half the country’s export bill. This undoubtedly qualifies Russia as a resource-based economy on the criteria used by such authors as Sachs and Warner (1995), Auty (2004), and Narain et al. (2003).

Nevertheless, Russia is not an entirely ‘typical’ resource-based economy. A great deal of the resource curse literature implicitly or explicitly assumes that the typical ‘less diversified economy’ is a developing economy, with a structure of employment, levels of urbanisation and human capital, etc., that bear little resemblance to those found in Russia in the 1990s. Russia’s problems are more analogous to those facing highly industrialised, urbanised economies following the discovery of major new resource wealth. Yet unlike the Netherlands or the United Kingdom after the discovery of North Sea gas and oil, the ‘resource shock’ in Russia arose not from the discovery of new deposits but from the rapid and radical adjustment of relative prices that occurred at the start of the post-Soviet transition. The relative prices of primary raw materials had been held at artificially low levels under central planning, and they soared after prices were freed. So did resource exports, as foreign trade was liberalised. This exposed large differences in productivity between sectors in Russia. It also triggered a radical reallocation of the resource rents derived from Russia’s primary sector, a reallocation that is still being contested.

Much of the literature emphasises that a country’s *ex ante* institutions will have a powerful impact both on how new-found resource wealth is used and on how it affects politics. It is therefore worth pausing to identify a few of the peculiar features of Russia’s institutional environment that might affect our inquiry. First, as an economy in transition, it is – quite apart from its resource endowments – an extremely ‘rent-rich’ environment. Property rights are still relatively weak and fluid, and the economic distortions inherited
from the Soviet system – or created by incomplete reforms – have generated sometimes fabulously rich ‘transition rents’. Secondly, Russia started the post-Soviet period with a large state bureaucracy but, paradoxically, an exceptionally weak state.\(^{12}\) State weakness tends to increase agents’ incentives to engage in rent-seeking rather than production (Chakraborty and Dabla-Norris, 2005). Moreover, the state’s coercive capacities are out of all proportion to its other institutional capabilities. The strongest political institutions in Russia tend to be those best equipped for coercive action, while the weakest tend to be those charged with regulating and constraining the state’s exercise of its coercive power. This further reinforces the incentives to engage in rent-seeking rather than production. Finally, political accountability, social capital and the rule of law – the three main sanctions against anti-social governance – are all in short supply.

The upshot of the above is that many of the political pathologies that are identified in the resource curse literature and that we see in contemporary Russia are probably over-determined. There is no doubt, for example, that struggles over control of Russia’s resource wealth have generated large-scale corruption. But it seems overwhelmingly likely that Russia would have had very high levels of corruption in recent years, even had its natural endowments been far less spectacular – as even a cursory look at some of its resource-poor neighbours would seem to confirm. In trying to tease out the links between resource wealth and politics, therefore, we must proceed with caution. In some instances, Russia’s federal structure will help us to gain a degree of purchase on the problem, but in too many cases, even this avenue will not be open to us.

**Political economy explanations: how does Russia stack up?**

With the above caveats in mind, we can now review the political economy literature on the possible links between economic structure and political governance, assessing the degree to which they seem – *prima facie*, at any rate – to apply to contemporary Russia. This is an exercise which makes grim reading for anyone wishing to see a democratic and well governed Russian Federation, for Russia does indeed suffer from many of the problems identified in the resource curse literature. At the same time, however, it is far from obvious that these problems are chiefly – or even substantially – a product of resource wealth.

**Rent-seeking**

Perhaps the simplest line of argument linking natural resource dependence to poor governance is that which argues that resource wealth tends to create incentives for rent-seeking. Both state and private actors in resource-rich economies may focus on capturing the resource rents rather than on wealth creation and may favour the development of institutions geared to rent-seeking rather than entrepreneurship.\(^{15}\) Economically, performance is likely to suffer, since contests for control over resources are unproductive. Moreover, control contests over resource rents are more likely to be pursued by political means and may, indeed, constitute the central axis of political conflict. As noted above, the nature of the resource sector itself may be important here, since larger, more concentrated rents are likely to give rise to greater polarisation and fiercer, more protracted control contests than smaller, more diffuse ones (Auty 2004).

Of course, the implications of such conflicts for politics and governance depend on the pre-existing institutional environment. Thus, Norway, a country characterised by democratic governance and the rule of law prior to the discovery of North Sea oil, has been able to manage its resources within a democratic framework and to resolve conflicts over resource
rents. Russia, however, conforms more to the situation described by Deacon and Mueller (2004), in which property rights and the rule of law are weak – too weak to check corruption or predation – and the political system as a whole is relatively unstable. In such a situation, the legal order will probably be unable to contain resource-control contests, which will then be settled by extra-legal or political means. Those in power are likely to focus on capturing resource rents and using them in order to shore up their own positions.

This is precisely what we find in Russia. Conflict over resource rents has been one of the central facts of Russian political life over the last decade and more. Even before resource-sector companies began to undergo privatisation, there was competition to capture the rents that accrued from the right to export primary commodities, especially hydrocarbons and metals, and to secure *de facto* control over what were still state-owned enterprises. Trading companies, transfer pricing and, in some sectors, ‘tolling’ arrangements were all used to privatise resource rents. Later on, the focus shifted to conflicts over ownership, though in some cases access to export markets remained contentious, and both transfer pricing and tolling continued to be used by insiders to appropriate rents at the expense of the state and other stakeholders.

Such conflicts must, however, be seen against the backdrop of Russia’s transition, which provided opportunities for rent-seeking in virtually every sector and which witnessed contests over the property rights to every imaginable sort of enterprise, large or small. Rent-seeking is likely to be especially attractive in any environment in which property rights are weak – as they so clearly are in post-Soviet Russia. Rent-seeking offers greater immediate pay-offs than production, and the insecurity of property rights means that the future must be discounted very heavily, so agents’ time horizons will be short. In any case, productive activities will, if successful, tend to attract predators. Thus, even if agents are well equipped to engage in production rather than rent-seeking, and are so inclined, they will probably have to invest in ‘a rent-seeking arsenal’ – that is, in acquiring political and relational capital in order to hang on to what they have. Yet having acquired the capabilities needed to engage in rent-seeking, they will face incentives to use these for ‘offensive’ as well as ‘defensive’ purposes, if only to gain a greater return on their investment (Chakraborty and Dabla-Norris 2005). In such an environment, the contests for control over oil or aluminium deposits are indeed likely to be longer, and sometimes bloodier, than those waged over local shops or struggling manufacturing enterprises. However, it is difficult to argue that the roots of the problem lie in the nature of the assets being contested rather than in the general weakness of property rights.

**No representation without taxation?**

A second hypothesis holds that resource-rich states tend to suffer from under-developed extractive institutions; it has been argued that the extractive capacities of petro-states, in particular, tend to wither. The fact that the state can derive substantial revenues from the primary sector reduces its incentive to develop any more elaborate fiscal institutions. This ensures that the state remains over-reliant on the primary commodities sector for its revenue base – and may therefore be subject to sharp pro-cyclical swings in fiscal policy. Shafer (1994:13–14) argues that states which are over-reliant on an export sector dominated by a large number of small firms tend to develop ‘specialised tax agencies to tap the huge, concentrated revenue streams such sectors produce, and specialised agencies to monitor, regulate, and promote the activities of these few critical firms’. At the same time, they fail ‘to establish the institutions to tax, monitor, regulate, or promote other sectors’.
Politically, the state’s ability to run on resource rents may well serve to make it less accountable than it would otherwise be to those it governs. While this freedom from constraint may suit rulers in the short run, the long-term cost can be considerable. Perhaps the earliest variant of this line of argument is to be found in North and Thomas (1973), who argue that the flow of silver and gold from the New World in the 16th century freed the Spanish crown from the constraints of the Cortes. In Britain, by contrast, monarchs wishing to fight expensive wars had to negotiate tax rises with parliament. North and Thomas argue that this ultimately strengthened the British state, since it gave rise to institutions such as annual parliaments and later helped secure property rights. The Spanish monarchy’s freedom from such constraints contributed to institutional stagnation and thus to political decline. More recent work on rentier states focuses on the 20th-century petro-states of the Middle East and elsewhere, but reaches a similar conclusion: government is far less likely to be accountable to the governed when rulers can finance their activities – and even provide generous benefits to their subjects – without having to tax those whom they rule.16

Intriguing though they are, these arguments do not shed much light on post-Soviet Russia. Indeed, Russia’s recent past has witnessed the opposite of what the literature suggests. Russia started the post-Soviet era with catastrophically weak extractive institutions. Instead of merely appropriating the surpluses generated by state-owned firms, the post-Soviet Russian state had to learn to tax effectively. This has not been easy and the process still has some way to go, but there is no doubt that the Russian state’s extractive capabilities have improved dramatically over the last decade, in terms not only of its ability to raise revenue but of its ability to do so without unnecessarily distorting markets or restricting economic activity.

Nor would it be fair to say that Russian fiscal institutions are too specialised on capturing resource rents. Indeed, Russia initially focused on introducing a wide range of general taxes and arguably paid too little, rather than too much, attention to capturing resource rents. Vasil’eva and Gurvich (2005) find that the total effective tax burden on the fuel sector in 2000 amounted to just 31.8% of the sector’s value added. The corresponding figure for non-fuel industry was 43.7%, while that for transport and communications was 40.8%. Even non-fuel resource sectors did relatively well: the tax burden on ferrous and non-ferrous metallurgy is estimated at 37.8% of value added and that for forestry, pulp and paper at 33.7%, lower than the figures for major manufacturing sectors, which ranged from 39.9% to 52.8%.

Tax changes introduced during 2000–03 thus served to correct the situation somewhat, as the effective tax burden on the fuel sector rose by an estimated 7.7% while the burden on non-fuel industry fell by 8.4% of value added. This was largely the result of cuts in general taxes, like VAT, set alongside increases in taxes specifically targeted at the fuel sector, which increased further in 2004–05. At the same time, the tax burden on the oil industry was recalibrated so as to make it much more sensitive to fluctuations in world oil prices. Vasil’eva and Gurvich (2005) estimate that the oil sector’s total tax burden at a Urals price of $15/bbl (Urals) was roughly 11.2% of value added lower in 2005 than in 2000, while its tax burden at prices of $35/bbl or higher was up by almost 19%.17 The abolition of the remaining turnover taxes during 2001–03 forms another key element of this story. The elimination of turnover taxes reduced the tax burden on industry by an estimated 8.5% per cent of value added. However, the effective reduction was roughly twice as great for processing sectors as for those involved in resource extraction, because the ratio of value added to sales is far lower in the former (OECD, 2004:37). Quite apart from formal changes in tax legislation, the Yukos affair brought about both a change in the informal rules
governing oil companies’ tax behaviour and an increase in the state’s ability to appropriate oil rents directly as a result of its expropriation of Yukos assets.

The tax changes adopted since 2000 have focused overwhelmingly on the fuel sector. No attempt has been made to capture a larger share of the rent in other natural resource sectors. Indeed, the effective tax burden on the forestry and metals sectors actually fell further – by 8.8% of value added in metallurgy and 9.4% in forestry, pulp and paper. These two sectors now enjoy the lowest overall tax burdens of any major industrial sectors.18

Finally, one would be hard-pressed to argue that Russia is becoming a rentier state, free of any need to negotiate the terms of extraction with society. While the state’s income from resource extraction has grown markedly in recent years, it would be a gross exaggeration to present it as a sort of petro-state, running on oil revenues without bothering to tax the whole economy effectively. Export duties and resource taxes accounted for only about 20% of revenues in 2003, far less than either social taxes (22.2%) or taxes on consumption (29.5%). VAT, indeed, remains by far Russia’s most important single tax, accounting for 35.8% of federal revenues in 2004. And while there has been a definite authoritarian drift under Vladimir Putin, it would be difficult to link this with any changes in the structure of taxation. Indeed, the post-crisis period has witnessed a major effort to improve tax discipline across the economy.

One might nevertheless hypothesise that resource rents contribute to the erosion of political accountability. However, the effect would be evident not in the nature of taxation but in state elites’ ability to appropriate and allocate resource revenues by other means. Ascher (2000) suggests that the link between natural resource rents and poor governance arises chiefly because state officials can manipulate their use to meet unpopular or even illegal objectives. On this view, the increase in direct state control over oil-sector assets, in particular, should cause some concern: whatever the defects of Russia’s budgetary system, the overhaul of the tax system after 1999 and the establishment of a treasury system of budgetary execution do appear to have increased substantially the transparency and efficiency of fiscal processes. By contrast, the governance of the major state-owned companies remains opaque and there are doubts about to whom, and to what extent, insiders are really accountable. It is widely believed that such financial opacity enables Russia’s rulers to use state-controlled companies to fund activities that they would prefer to keep off-budget. If Russia’s resource riches are undermining political accountability, it is more likely to be via the growth of direct state control over resources than via the fiscal system.

The temptations of the idle rich

A third line of argument concerning the impact of resource wealth on politics and policy touches on what Ross (1999:309) calls ‘myopic sloth’. In essence, the argument is that resource wealth gives rise to a certain complacency in policy-makers and/or private agents. Such complacency can lead to excessively lax policies and a neglect of structural and other measures needed to foster diversification. Excessive spending in the good times necessitates sharp retrenchment when commodity prices fall, thus aggravating the impact of shifts in the terms of trade. Various authors have argued that the flow of resource rents contributes to a ‘get-rich-quick’ mentality among businesspeople and a ‘boom-and-bust psychology’ among policy-makers. Anderson (1987) and Karl (1997) suggest that resource riches tend to make agents (particularly politicians) risk-averse, favouring current consumption over investment and inclined to avoid possibly destabilising development. In a
study devoted specifically to resource-rich transition economies, Esanov et al. (2001) identify a similar problem.

Ross (1999) criticises such ‘cognitive’ explanations of the resource curse, noting that they are usually ad hoc and arguably transgress the rationality assumption. He points to evidence in the work of Karl herself, as well as that of Shafer (1994), which seems to contradict the idea ‘that policy-makers collectively fall into wealth-induced stupors’. Indeed, policy-makers in resource-rich countries appear to be well aware of the dangers of boom-and-bust cycles. Yet one need not invoke widespread cognitive failure among political or commercial elites in order to conclude that resource booms can induce myopic policies.

Russia illustrates the problem well. The economic bloc of the cabinet is acutely aware of the need to maintain macroeconomic discipline across the commodity-price cycle, and during 1999–2004, Russia demonstrated exemplary fiscal discipline (Ahrend, 2004). The government, acutely aware of the lessons of the 1998 financial collapse, also undertook an ambitious and wide-ranging programme of structural reforms during 2000–03. Far from seeing the recovery of oil and metals prices after 1998 as an excuse to postpone reforms, the authorities initially seemed to view the boost to Russia’s terms of trade as a window of opportunity to pursue reforms that would have been more difficult in other circumstances. However, this has changed over time, as a result of fading memories of 1998 and growing political pressure to spend an ever larger share of oil windfalls. Polls show the public to be overwhelmingly in favour of spending the surplus revenues generated by high oil prices (VTsIOM, 2005), with social welfare, pensions and budget-sector pay topping the wish list. At elite level, the government’s fiscal hawks have come under increasing pressure to spend (or cut taxes) from the cabinet’s spending ministries, from special interests seeking federal support for their priorities and from a Kremlin determined to maintain the pressure on the government to double GDP quickly. Indeed, it would be astonishing if the accumulation of such enormous oil-generated windfalls in the federal treasury and the stabilisation fund did not stimulate the appetites of every public- and private-sector lobby in Russia.

Like rent-appropriation contests, policy indiscipline tends to be worse in a poor institutional environment – where the rule of law is weak, the political system is unstable, and state bodies are reckoned to be corrupt and ineffective. Time horizons will be shorter in such circumstances, and the more heavily agents discount the future, the weaker are the incentives to remain prudent. Moreover, if rulers, in particular, are uncertain of their own tenure, then they will face incentives to use resource rents to help keep themselves in power. In Russia, it is not difficult to see such incentives at work in the growing tendency to use oil windfalls to shore up support for the regime via tax cuts and increases in budget-sector wages and pensions, as well as to appease social protest where it emerges (e.g. the benefit ‘monetisation’ fiasco of early 2005). It is striking that, for all the discussion of Russia’s infrastructure investment needs, the authorities have been quicker to raise spending on pensions and budget-sector wages than to increase infrastructure investment. While both measures may serve to win support for the regime, the former has a much more direct and immediate impact than the latter. The reaction to the monetisation protests and the subsequent freezing of virtually all potentially sensitive reforms would tend to suggest that the authorities are indeed becoming more risk-averse, as Karl suggests, and starting to use oil windfalls for current consumption rather than to underpin forward-looking reforms.

A related problem concerns doubts about the capacity and probity of state institutions. Even some very liberal economists in and around the government remain very sceptical of the prospects for using the stabilisation fund to mitigate ‘Dutch disease’ pressures or smooth
fiscal expenditure across the commodity-price cycle. This is because they remain convinced that, sooner or later, moneys accumulated in the fund will be spent – and probably spent badly. As a result, they prefer to use oil windfalls primarily to pay off foreign debt, thereby reducing the state’s future liabilities and thus allowing for higher spending or lower taxation in subsequent years. This approach has obvious limits – Russia can only pay off so much debt – but it highlights the dilemmas faced by policy-makers keen to manage resource rents prudently but lacking both the political support and the institutions to do so.

**Bloated bureaucracies and rent-dependent industries**

The issue of what state leaders do with resource rents when they control them brings us to a fourth set of arguments about the impact of resource wealth on governance. Robinson et al. (2002) argue that resource-dependent development leads to poor performance because resource rents allow statesmen to pursue politically rational but economically inefficient ends. For our purposes, the question of economic efficiency may be set aside, but the political uses to which rents are put can indeed shape the state and the political order. As noted above, rulers will rationally tend to use such rents to strengthen their hold on power. Since the rate at which politicians discount future extraction will reflect in part their assessment of the likelihood that they will stay in power, politicians whose tenure is insecure can be expected to appropriate and manipulate resource rents more aggressively and may use them in ways that would be politically irrational if their time horizons were longer.

Robinson et al. (2002) emphasise the use of rents as a patronage resource, and cite evidence suggesting that leaders’ use of this resource tends to result in a politically motivated expansion of the state, one manifestation of which is the rapid growth of the state bureaucracy. However, even the rent-driven growth of the bureaucracy is unlikely to be sufficient to provide employment to all those not employed in the primary sector. Auty (1994, 2004), Mahon (1992) and others thus emphasise the use of resource rents to sustain a growing subsidy- and/or protection-dependent secondary urban sector. Over time, of course, the growth of a secondary sector that relies on protection and/or subsidies (whether implicit or explicit) will affect politics, for it will give rise to a substantial social constituency with a vested interest in the status quo. Thus, numerous studies of Latin America’s experience with import-substitution industrialisation suggest that the beneficiaries of subsidies and protection were a major source of resistance to reform.  

At first glance, Russia seems to conform all too well to the model just outlined. The growth of the state bureaucracy since 1992 has occasioned much comment, and resource rents have indeed been used to prop up distressed non-resource sectors. On closer inspection, however, it is clear that the picture in Russia is rather more complex.

Let us look first at the growth of the state administration. The size of the bureaucracy has indeed grown, but by no means as rapidly as is widely thought. In fact, the number of officials employed in public administration grew by just about 13.6 per cent during 1994–2001, with sub-national administrations accounting for most of the increase. The number of federal employees posted in the regions also grew, but much more slowly, while the central federal administrative apparatus actually shrank. In fact, the public administration overall employs an unusually small portion of the labour force when compared with most OECD and transition countries, which makes it difficult to argue that Russia conforms to the rent-bloated bureaucracy hypothesis. Such growth as has occurred since 1991 has resulted in part from the creation of the new agencies needed to regulate a market economy (the bankruptcy service, the securities regulator, etc), but in general, these bodies are still
relatively small. A large part of the growth at regional level appears to have resulted from the desire of financially weak regional authorities to extract subsidies from the federal centre – which means that it is unlikely to be related to resource wealth (Gimpelson and Treisman, 2002).

Nevertheless, a look at regional-level data suggests that resource wealth may play a role in fueling the growth of sub-national bureaucracies. Certainly, employment in ‘organs of state power and municipal self-government’ has grown much faster in resource-dependent regions in recent years than in non-resource regions. Between 1995 and 2003, such employment grew by an average of 22.5% across all subjects of the federation. In the ten federal subjects with the highest ratio of minerals extraction to gross regional product, however, the corresponding figure was 51.6% over the period, reaching 68% for the six federal subjects in which minerals extraction accounts for over 30% of GRP. Significantly, what matters here seems to be not the absolute volume of a region’s mineral (hydrocarbons and metals) production but the relative weight of that production in gross regional product. In other words, it is resource-dependence rather than resource wealth that counts. While a more serious statistical analysis remains to be done, this first cut is really quite striking.

The issue of the protected secondary sector is particularly interesting in the Russian case. On the whole, Russia’s secondary sector has enjoyed surprisingly little formal protection – trade policy since 1992 has generally been fairly liberal, although informal barriers have sometimes made the Russian market less open than it appeared to be on formal criteria. Nevertheless, a large part of Russian industry was kept afloat via subsidies throughout the first decade of transition. This reflected both the power of industrial managers as a lobby and fear of the social consequences of structural change. Direct subsidies from the budget and soft credits from the central bank had largely been eliminated by the mid-nineties, but they were increasingly replaced by implicit subsidies, the most important of which involved unpenalised arrears and non-monetary payments to the state-controlled gas and electricity monopolies, OAO Gazprom and RAO UES. After the crisis, cash payments rapidly became the norm again, but gas and electricity prices were frozen for several years and thus fell sharply in real terms, dropping well below cost-recovery levels. Gazprom was able to engage in a sort of ‘reverse dumping’, earning substantial rents on export markets, but RAO EES had no such rents to offset its support for domestic consumers. Instead, it under-invested throughout the 1990s, essentially subsidising the rest of the economy by running down its capital base.

The oil industry’s support for the secondary sector was minimal. Since the authorities were officially committed to curtailing explicit subsidies, all that could really be done was to use restrictions on exports in order to hold down the domestic prices of crude oil and petroleum products. Since Russia consumes far less crude domestically than it does gas, this constituted a less onerous burden on the industry. Other major resource sectors – notably timber and metals – appear to have shared in the subsidies provided to the secondary sector. This was particularly striking in the case of aluminium: its production is extremely electricity-intensive, and much of its profitability reflected access to very cheap electricity.

Up to this point, Russia might appear to conform quite well to hypotheses about a dependent urban sector. However, one of the most striking developments since 2000 has been the dramatic reduction in the implicit subsidies provided to Russian industries and households. As OECD (2004) shows, the gas and electricity subsidies have been diminishing rapidly in recent years, while Russian enterprises’ payment discipline – with respect to the budget, employees and suppliers – has greatly improved. Enterprise budget constraints have
hardened substantially since the crisis. Whether this progress will be sustained through the next downturn remains to be seen, but recent years have seen a marked shift away from the subsidy-dependent industrialisation model.

Any discussion of Russian leaders’ use of resource rents to secure political support would be incomplete without a discussion of privatisation. At first glance, Boris Yeltsin’s readiness to privatise Russia’s oil and metals industries so quickly – and so cheaply – might look rather surprising, especially as his administration was not even able to tax them effectively. In the case of Gazprom, Yeltsin simply allowed insiders to appropriate a large share of gas rents, even while the company remained in state ownership. The political leadership seemed to surrender these spectacular rents without a fight. One might, of course, simply put this down to the weakness of a regime that had in any case found it impossible to assert effective control over state enterprises or to resist pressure to alienate its most valuable assets. However, Yeltsin’s behaviour may also make more sense given his time horizons. Whatever its economic merits, the rapid privatisation of the state’s most valuable companies offered two major political benefits to a president fighting for his political life in the mid-1990s. First, it helped secure the support of the country’s most powerful businessmen for his re-election, and, secondly, it helped ensure that, even in the event of defeat, his opponents would face powerful opposition to any attempt to reverse course in economic policy. Putin, by contrast, has hitherto faced no such immediate threat to his tenure, and he is thus more interested in securing control over a much larger share of Russia’s resource rents on an ongoing basis, whether by means of taxation or direct state control over assets.

Corruption

A number of authors argue for a link between resource wealth and official corruption, not least because of the temptation to manipulate state institutions to secure resource rents. Moreover, if the bureaucracy itself is grown largely as a patronage machine, as suggested above, then it is likely to be relatively corrupt (Mauro, 1995). However, the link between resource wealth and corruption in the Russian case is anything but clear. There is compelling evidence to suggest that the problem of official corruption has grown markedly worse since 1991, but it would be difficult to attribute this development to the resource curse, given the many other factors at work.

If there were a strong link between mineral resources and corruption, we might expect to find that corruption was worse in resource-rich regions than elsewhere. The Regional Corruption Indices 2002 of Transparency International–Russia are the one relatively rigorous assessment of corruption at regional level based on comparable sociological data. Unfortunately, they are available for only 40 of Russia’s 89 federal subjects, and many of the most resource-dependent regions are not covered (Transparency, 2002). Nevertheless, they do not, at first glance, provide any support for the proposition that resource-rich regions are more corrupt than others. The most striking feature of TI-Russia’s ‘corruption map’ is that corruption appears to be substantially worse in border regions than elsewhere – hardly a surprising result, given the scale of contraband trade in Russia and the fact that ports in most countries tend to have higher levels of crime and corruption than most cities. This is not to say that resource regions are not corrupt – one of the striking features of the indices is the limited degree of variation among federal subjects. On most indicators, corruption was found to be high across the board, and the best regions were not all that much better than the worst.

The recent joint study by the polling institute VTsIOM and the small business lobby group OPORA likewise fails to show much of a link (OPORA, 2005). Their survey of small
and medium entrepreneurs did not ask about corruption specifically but rather asked respondents about ‘transaction costs’ incurred when interacting with the bureaucracy. This rubric covered not only bribes and kickbacks, but also such issues as procedural violations during inspections and difficulties with registration. To the extent that it taps forms of official predation, however, the transaction costs indicator looks like a reasonable proxy for corruption. Ranked on this indicator, Russia’s most resource-dependent regions range from sixth to 78th. There is no evident clustering of metals- or fuel-producing federal subjects in the distribution. The survey results do, however, show that the propensity of officials to take ‘illegal payments’ from businesspeople is far greater in the Southern Federal District (not a resource-rich region) than anywhere else in Russia.30

The failure to establish any apparent link between resource wealth and corruption levels does not by any means imply that competition for resource rents has not fuelled corruption in Russia. It may be that that the inclusion of more resource-dependent regions in the sample would have yielded a different result; the index does not cover many of the most resource-dependent economies in Russia (Sakha, Yamalo-Nenets, Khanty-Mansi, the Evenkii AO and the Nenets AO). Moreover, contests over resource wealth may be concentrated at the federal level and thus have little impact on regional perceptions of corruption.

There may, however, be another explanation for the apparent lack of any connection between resource dependence and corruption in Russia: corruption in Russia may simply be over-determined. Even if Russia had embarked on its market transformation with no significant resource endowments, we would expect the transition period to have witnessed a good deal of corruption. The growth of official corruption since the late 1980s reflects a large number of factors, including the breakdown not only of the political and bureaucratic controls that existed in the Soviet system, but also of the norms and beliefs that (however imperfectly) supported the old order.31 Another critical factor is the very low pay received by officials, particularly as many low-paid functionaries find themselves disposing of very valuable state assets or managing substantial financial flows. Opportunities for personal enrichment grew dramatically in the post-Soviet period, even as officials’ remuneration declined. Exploiting these opportunities has been made easier by the traditional opacity of state bodies in Russia – the evidence suggests that curbs on press freedom facilitate corruption, precisely because they reduce the transparency of public bodies.32 More generally, cross-country research shows that both the rule of law and the development of civil society (including a free press) are strongly and negatively correlated with the level of corruption (Brunetti and Weder 2003), and their weakness in post-Soviet Russia has probably facilitated the growth of corruption. In short, the larger institutional environment within which officials operate in Russia is relatively ‘corruption-friendly’.

Follow the leader?

A final set of arguments concerning the resource-governance link focuses on the character of the dominant resource sector and the way it is governed. Shafer (1994) argues that when a state’s production and export profile is highly concentrated, the characteristics of its leading sector can significantly influence its political economy. Where the leading sector is dominated by a small number of players, with high barriers to entry and exit, and a high degree of asset specificity, Shafer argues that it is likely to be both politically powerful and rather inflexible. Powerful but inflexible sectors in turn are likely to place exceptionally strong demands on the state. Shafer contends that the state is likely to suffer from an erosion of its own autonomy. State capacities are likely to be distorted, as the state develops
specialised institutions and practices to deal with the leading sector while failing to develop effective mechanisms for governing, or addressing the needs of, other sectors.

Jones Luong (2004), by contrast, focuses not on the nature of the industry per se but on the question of ownership and control, essentially identifying four major patterns for governing mineral sectors: state ownership with low foreign involvement, state ownership with high foreign involvement, private ownership with low foreign involvement and private ownership with high foreign involvement. While acknowledging the role of international factors (such as the structure of a given industry or policy convergence), Jones Luong argues that the choice of governance structure is largely the product of domestic politics. It is not determined by factors intrinsic to the nature of the sector, such as capital intensity or concentration. That said, the predominance of state ownership in major minerals sectors over the last forty to fifty years – despite wide variation in the political circumstances of minerals-exporting states – suggests that the characteristics of minerals sectors are important in structuring the choices politicians make in response to domestic political opportunities and constraints.33

It may well be that the presence of such concentrated sources of rent constitutes a political problem to which the easiest (if not the most economically efficient) solution is nationalisation. The capital intensive nature of most large-scale resource extraction is likely to mean that the sector will, in private hands, be dominated by a small number of very large private players, whether domestic or foreign. The danger here for state elites is that the political system might not be robust enough to contain conflicts over resource rents among powerful private agents or that the state might not have the capacities needed to manage such powerful private actors and to capture resource rents effectively. Provided the state disposes of the necessary force, nationalisation may simply be easier, and direct control will undoubtedly be an easier way for state elites to appropriate and allocate resource rents than such indirect means as taxation and regulation. The irony here is that while weak states may be more likely to opt for nationalisation precisely because of their limited capacities, under-developed state capacities make it more likely that a nationalised resource industry will be poorly managed.

This point is extremely important in the larger resource curse debate, as Jones Luong, Auty and Ross suggest that state ownership rather than resource wealth lies at the root of resource exporters’ apparently chronic under-performance. State ownership of resource industries may soften states’ budget constraints and encourage fiscal indiscipline. In any case, state-owned minerals producers are likely to be less efficient and less transparent, and also to be subject to more political interference. This proposition has not undergone much empirical analysis, for the simple reason that most of the literature focuses on minerals sectors in the period from the 1960s through the 1990s – a period during which the vast majority of mineral-rich countries opted for state ownership and control of mineral reserves. The resource curse might well be a state ownership curse.

While one cannot generalise on the basis of a single case, Russia’s experience would seem to be entirely consonant with this view. OECD (2004) contrasts the striking divergence in performance between Russia’s oil and gas sectors. The oil sector was broken up and privatised, while the gas sector remained a state-controlled vertically integrated monopoly. The obviously flawed nature of oil privatisation notwithstanding, the result was a dynamic oil industry that emerged after 1998 as the most important driver of Russian growth. The gas industry’s overall contribution to growth since during 1999–2004 was actually slightly negative (Gurvich 2005).
Our concern, however, is with politics. If the presence of rich natural (and particularly mineral) endowments tends to create incentives for politicians to pursue state ownership, this will undoubtedly have consequences for politics. However, the nature of these consequences will depend on the existing political order and the quality of the institutional environment. A country such as Norway, where the democratic accountability of the rulers to the ruled is well established and the rule of law is relatively strong, has a far better chance of creating a reasonably well governed country. Where political accountability and the rule of law are weak, however, the creation of large state companies in the most lucrative sectors is much more likely to be associated with greater opacity, corruption and rent-seeking by insiders. Politically, the resources placed at the state elite’s disposal in this manner may well make it easier for them to resist, or buy off, pressure for change. In short, one might hypothesise that direct control over large resource rents would enable the governing elite both to enrich itself and to entrench itself, especially if the mechanisms for monitoring the management of those rents are weak or non-existent. None of these conclusions are likely to sound in any way surprising or controversial to observers of Russia’s gas monopoly or other large oil and gas companies in the CIS.

These claims take on added significance if we accept that the institutional requirements of the ‘leading sector’ are likely to shape the economic and, to some extent, the political institutions of the society as a whole. A development strategy based largely on state control over natural resource sectors (or, for that matter, over the other ‘commanding heights’ of the economy) is likely to be far less demanding in its institutional requirements than many other development paths (Ahrend and Tompson, 2005). The development of civil society, the quality of the contracting environment (and, hence, of the rule of law), the security of property rights and the development of human capital all matter less than they would in an economy seeking to develop on the basis of private enterprise. The relatively lax institutional requirements of this strategy may, indeed, make it more attractive to rulers in settings where institutions are ex ante weak. The problem is that, in addition to being a strategy which is less promising in economic terms than many others, it is one which tends to reduce the incentives for improving institutions. The coping strategy thus risks becoming an impediment to any real resolution of the problem of weak institutions.

Conclusion

With the possible exception of the mushrooming growth of regional bureaucracies, it is difficult to identify any particular ‘resource-curse pathologies’ in Russia’s political life that we would not expect to find there any way. Too much of what ails the Russian polity is simply over-determined. It would, of course, be foolish to try to generalise on the basis of an examination of this one case, and the above analysis certainly does not form any basis on which to propose major new twists to the theory of the resource curse on the basis of the above analysis. However, the foregoing should at least warn us not to be too quick to draw conclusions about Russia’s politics (or those of any other country) on the basis of what may be a relatively superficial fit between the theory and the case in question. At the same time, the evidence of the Russian case suggests that close analysis of specific cases can benefit econometric and other cross-national comparative studies by providing an opportunity to assess the extent to which actual political processes really reflect the kind of relationships hypothesised on the basis of regularities in the data.
NOTES

1. Senior Economist for the NIS and South-east Europe, Economics Department, OECD (william.tompson@oecd.org). The opinions expressed in this paper are those of the author and do not necessarily reflect the views of the OECD or its member states.

2. See, for example, Lal and Myint (1996), who see policy failure as the prime cause of underperformance of natural resource-based economies. See also the overview of this literature in Ross (1999). Of course, part of the reason for this may be that less diversified economies have less margin for economic policy error: in other words, a highly resource-dependent economy arguably needs even better policy than a more diversified one (see Ahrend, 2005).

3. See, for example, the views expressed by various analysts cited in Bush (2005). See also the discussion in Erochkine (2005).

4. Diffuse resources, of course, may pose a different problem: if they are open access resources, then failure to establish an effective property rights regime may lead to overexploitation and a ‘tragedy of the commons’.

5. Capital intensity is partly a function of the nature of the resource, but it is also a function of technological change (fishing, for example, has become much more capital intensive in recent decades), and should therefore be seen as a distinct variable.

6. One should not exaggerate this point: there are, after all, several thousand independent oil producers operating on-shore in the United States, and Noreng (2002) sees the upstream role of small and medium-sized producers growing in the coming years. However, most major oil producers still have industries dominated by one or a very small number of producers.

7. See Wright and Czelusta (2004) for a critical look at the issue of assessing ‘resource abundance’.

8. See Auty (2004). We shall return to this issue in greater detail below.

9. For a view of this problem in Central Asia and Azerbaijan, see Esanov et al. (2001).

10. Of course, scepticism about how and where the causal arrows run is not by any means limited to the economic structure-politics relationship. Even the causal relationship linking resource-dependence to poor performance is open to question. While the statistical association does indeed seem to be pretty robust, there are plenty of questions about causal relationships – not least, because it may almost be a tautology. A strong revealed comparative advantage in natural resources may simply reflect the failure – for whatever reason – of the absence of other internationally competitive sectors (see Wright and Czelusta (2004).

11. For the classic statement on this issue, see Lipset (1959). See also the overview of the ‘modernisation’ literature on democratisation in Potter et al. (1997), ch. 1.
12. McFaul (1997) identifies three criteria of state strength: internal ideological and institutional cohesiveness; relative autonomy from society (i.e. the degree to which state structures are or are not captive to particular interests); and the ability of the state to implement policy effectively. On all three counts, the post-Soviet Russian state was exceptionally weak.


14. The owners of Yukos could doubtless attest to this reality, as could thousands of other Russian businessmen whose success has attracted the attention of would-be private- and public-sector predators.


16. See also Tilly (1992) and Ganev (2001:14): ‘Only when elites are forced to re-negotiate the terms of extraction will the “organisational residue” engendered as a by-product of the dominant elite project be harnessed for the purposes of good governance.’ Where rulers can secure the resources they need with little or no recourse to taxation, the terms of extraction may not need to be negotiated with society at all.

17. At $20/bbl, it was virtually unchanged, at around 31% of value added.

18. In the case of aluminium, at least, this reduction has probably been offset to a significant extent by higher electricity tariffs. Given how electricity-intensive Russian aluminium production is, the net effect of policy changes since 2000 is undoubtedly less favourable to the sector than a look at tax alone would suggest.

19. See Ross (1999:309), esp. the references in notes 40, 41 and 42.

20. Whether or not they actually do so is an open question: this depends on assumptions about actors’ time horizons and about whether or not they are revenue-maximisers or ‘satisficers’.

21. This view is shared by Auty (2004), among others.

22. See the overview of this literature in Ross (1999:310–11). See also Gelb et al. (1988) and Treisman (2002) on ‘dependent urbanisation’.

23. See Brym and Gimpelson (2004:92–100) for details. It should be noted that comparisons across time and countries are complicated by problems of definition, including the creation of new types of officials and the reclassification of others in conjunction with the transition.

24. Little has been done to downsize the ‘traditional’ bureaucracies left over from the Soviet era, such as the Ministry of Agriculture.

25. Enterprises also ‘borrowed’ increasingly from workers, the state and other suppliers, via wage, tax and payment arrears. For details, see Woodruff (1999) and Tompson (1999).

26. For an estimate of the scale of this implicit subsidy in the early post-crisis period, see OECD (2002:121–32).

27. When political leaders adopt policies that effectively curtail their own power, it is often because their tenure is uncertain and they hope to bind their successors.

29. See Indem (2005). Estimating corruption levels is, of course, a notoriously difficult business, and few of the indicators available allow for an assessment of trends across time. Transparency International’s ‘Corruption Perceptions Index’, for what it is worth, does now at least offer almost a decade of coverage of Russia. It suggests some gradual improvement during 2000–2004, but Russia’s recent scores, in the 2.7–2.8 range on a ten-point scale, show that it continues to be regarded as a highly corrupt place.

30. Unfortunately, responses to this indicator are not reported by federal subject – only by presidential federal district.

31. See Huskey and Obolonsky (2003). This is a key point: the role of informal norms has been little studied, but it is difficult to believe that changes in norms and values do not form part of the explanation here.


33. Economically, of course, many developing countries were advised that nationalisation would help them gain independence from foreign multinationals and would better enable them to use resource rents for economic development. See, e.g. Cardoso and Faletto (1979), Hirschman (1958) and Baldwin (1966).

34. One should not, however, be naïve about the Norways of this world: decision-making in and around Norsk Hydro and Statoil can be as opaque as anything found in Russia.
BIBLIOGRAPHY


Cardoso, Fernando Henrique and Enzo Faletto (1979), Dependency and Development in Latin America (Berkeley: University of California Press).


WILLIAM TOMPSON


THE POLITICAL IMPLICATIONS OF RUSSIA’S RESOURCE-BASED ECONOMY


Noreng, Oystein (2002), ‘Will Norway get one major oil company? - Oil and Gas in the Capitals’, World Oil, April.


VTsIOM (2005), ‘Stabilizatsionnyi fond: nuzhno bol’she tritat’, a esli khranit’, to – tol’ko v 
rossiiskikh aktivakh’, VTsIOM Ekspress-vypusk № 244, July 
(http://www.wciom.ru/?pt=46&article=1494).

Woodruff, David (1999), Money Unmade: Barter and the Fate of Russian Capitalism (Ithaca: 
Cornell University Press).

47:2, March–April.