Part I

Chapter 3: Command Economy and its Legacy

ABSTRACT: The nature, structure, and functioning of the contemporary Russian market economy has been substantially influenced by the legacies of its predecessor, the Soviet command economy. This chapter outlines the key defining characteristics of that prior economic system and how they influenced its functioning and performance. These characteristics determined a structure of production and interaction, a critical mass of economic, political, and social institutions, and patterns of behavior and understanding of economic and social processes that maintained a politically effective if economically inefficient system. That system was destroyed by the radical reforms of the 1980s and 1990s, yet it bequeathed many structures, institutions and behaviors that remain, in varying if diminishing degrees, as legacies of the prior economic system. Their impact lingers in the structural problems faced by the Russian economy and in the policies pursued by the Russian political leadership. Understanding these legacies is important to understanding the current path of development of the Russian market economy.

Key Words: Command Economy, Central Planning, Physical Legacies, Institutional Legacies, Behavioral Legacies, Russian Market Economy.

1 Introduction

The contemporary Russian economy has been molded by many factors. Its location and natural endowments, Russian history and culture, and the cataclysmic events of the 20th century have all played significant roles in determining the structure and functioning of the Russian economy, the nature of its institutions, and the problems it faces.

Perhaps the most significant influence has been the nature of the economic, social and political system which preceded that of the contemporary Russian economy. Borne of the cataclysms of World War, Revolution, Civil War, and a “Great Socialist Offensive”, the “Command Economy” organized the material bases of social and political life in pursuit of a utopian dream. It supplanted the developing market economy of the Russian Empire, crushing its institutions, and implanting in their place hierarchically organized and centrally directed structures striving to control all economic, as well as social and political, activity. Thus the command economy developed as a coherent, and diametrically opposed, alternative to any market (‘capitalist’) economy.

This political-economic system, in place for over two generations, profoundly altered the nature of economic (and social) development in the Soviet Union. The structure of capital, labor, and production, the location of economic activity, the nature and structure of economic interaction, the nature and sources of innovation, and how the Russian people and elites understood both the nature and meaning, the goals and objectives, of economic activity, and how it should be organized and managed, were all fundamentally changed. It is this system, and the spectacular chaos of its collapse after 1987, that provides the initial conditions for the development of the current Russian market economy. Its legacies have influenced, and occasionally molded, policies and institutions, constrained options, imposed barriers, and generally channelled the development of the post-Soviet economy. These legacies are both physical and systemic — structural, institutional, and behavioral, and have played a dominant, if fading, role in the early development of the post-Soviet market economy. Many (physical and institutional) legacies have been overcome in the past decade, while others (institutional, behavioral and intellectual) remain deeply embedded in the economic system.

In this chapter I present my understanding of those legacies, their source and persistence, and their impact on the Russian economic system. Section 2 summarizes the nature of the system, the Soviet ‘command economy’, that spawned the contemporary economy in the transition period of 1988 – 2005.[1] By the logic of its operation and development, that economic system implanted a structure of economic activity, which has constrained and molded the processes of transition. Section 3 focusses on physical legacies reflected in the sectoral structure of production, its location and supporting infrastructure, and bequeathed technologies. Section 4 addresses the more 'systemic' legacies, those reflected in the broader institutional structure of the new economy. These include the heritage of 'missing institutions' necessary to the proper functioning of a market economy, as well as a vast array of dysfunctional and counterproductive institutions inherited from the past. Finally the most deep-seated 'legacies of command' — those of belief, understanding, 'economic culture', and behavior — are discussed. These frame and mold the decisions and interactions of all economic agents, in particular of 'elites' in a position to determine economic outcomes. Together with the institutions they support, these legacies are most resilient to change, deeply influencing the evolution of the Russian economic system. The chapter concludes with a discussion of their continuing impact, and of the nature of the economic system they bequeathed the Russian economy.

2 The Command Economy

> A "command economy" is one in which the coordination of economic activity, essential to the viability and functioning of a complex social economy, is undertaken through administrative means – commands, directives, targets and regulations – rather than by a market mechanism. ... Economic agents in a command economy, in particular production organizations, operate primarily by virtue of specific directives from higher authority in an administrative/political hierarchy, that is, under the 'command principle'. (Ericson, 2006).

The nature, defining characteristics, and structure of the Soviet command economy have been extensively discussed in the comparative economic systems literature (Grossman, 1963,

[1] Gorbachev's *Perestroika* launched serious systemic 'reform' with the implementation of the "Law on State Enterprise" and its supporting "Basic Provisions" (*Osnovnye napravleniia*) and the promulgation of the "Law on Cooperation" in 1988. While in a number of respects (lingering legacies) the 'transition' is not yet over, in most respects it can be considered over by Putin's second term.

1987; Ericson, 1990, 1991; Kornai, 1992; Ericson, 2006, 2007). For much of its existence, it provided a complete, coherent alternative to market systems, even those with substantial state ownership and strong state direction of the economy. Attempting to implement fully 'rational' human direction of social, political, and economic development toward achievement of a utopian state, the command economy aspired to total control over all economic activity. The impossibility of realizing such a 'totalitarian' objective meant, in practice, that the system leadership and its implementing organs had to relinquish control outside of those areas of its primary interest, those critical to determining material production and its uses in society. And even in priority areas, much of the detail of commanded activity had to be left in the hands of poorly informed, self-interested subordinates. Still, this aspiration led to unprecedented influence over economic behavior, and continuing efforts to maintain and enhance that influence, efforts that in large part defined the command economy.

The Russian version was further influenced by deep cultural and historical forces (Pipes, 1974; Keenan, 1986; Hedlund, 1999, 2005) that made its aspirations, its driving ideas, socially and politically acceptable. Deep rooted collectivism, accepting the supremacy of the group over the individual, supported a paternalistic, indeed patrimonial, political system in which the polity and society are legitimately controlled by a 'leader' and his close subordinates, and reward is based on service to the state, personified in the leader.[2] These cultural characteristics were reinforced by the massive role of the state and its leadership (the Party), ideologically legitimated by its deep understanding of the direction and laws of history. This leadership presumed to be uniquely qualified to direct and manage the developing economy in its urgent pursuit of modernization, of the rapid growth of industrial and military potential, and the creation of the material basis for future society. Both ideology and the urgency of the situation created an "imperative of control" that inevitable drove the logic of the organization and structures that defined the Soviet command economy.

[2]It has been argued that this was necessitated by the harsh environment and perpetual external threat, placing society on the edge of survival are requiring coordinated, redistributive, social action to ensure that survival. See Keenan (1986) and Hedlund (2005).

This imperative of control over the growing economy required the centralization of (at least) all important decisions, and hence required structures making central planning, *ex ante* coordination, and *ex post* management of economic activity both feasible and effective. This posed an increasingly overwhelming task as the economy developed, grew in size and complexity, in the face of limited information, communication and computation capabilities of the leadership. To manage the vast amounts of information required both for planning and for the provision of operational instructions/commands to implementing agents, a complete, elaborated hierarchy, in which both information and instructions might be both aggregated to the top and disaggregated to the bottom, was found necessary. Economic activity was determined in and controlled by nested hierarchical structures, each facing a relatively simple subproblem of planning and implementation, working with aggregates at all but the lowest level.

This simplification of the economic planning and management problems allowed effective focus on priorities and the achievement of sufficiently important goals. In doing so, however, it rendered decisions crude, consistent only (at best!) with respect to planning aggregates, and systematically isolated decision makers at all but the highest levels from the consequences of their decisions, a source of fundamental irresponsibility in operational decision making.[3] Further, priorities were achieved at the expense of non-priority sectors and activities, which were still subject to mandatory targets and arbitrary interventions from above, but had to fend for themselves without taking resources from priority uses or disrupting more important (from the perspective of the highest authorities) activities. Hence resulting plans, necessarily developed in haste on the basis of delayed and partial information, were always incomplete, and suffered numerous inconsistencies which, however, could not be allowed to disrupt the achievement of priorities.

Another consequence of this imperative was the destruction of markets and market institutions, the foundation of any economic autonomy, and their replacement with a set of

[3] This is most vividly illustrated in the discussions of plan allocations, their implementation, and incentives for plan performance in Nove (1986).

institutions antithetical to proper market functioning.[4] Thus institutions were required enforcing subordinate obedience both to plans and operational interventions from above, and restricting subordinate autonomy. In particular, strict control over the physical allocation of all material and human resource allocation had to be maintained, and subordinate capabilities for unauthorized 'initiative' had to be severely limited. This included rationing material inputs and access to labor and capital, and severely limiting access to, and the effective power of, 'money' — a generalized command over goods and services that is the foundation of any effective economic agent autonomy in a complex social economy. It also included tight regulation of the incentives and parameters guiding allocation at levels of detail beyond central purview, and severe restrictions on the flexibility/capabilities of subordinates to respond to problems. Information from planners was rationed on a "need to know" basis, liquidity was provided only when and as needed, and Soviet 'money' was restricted to a mere unit of measurement and account, where possible.[5] All legitimate incentives were tied to "service to the (Party and) State" as interpreted by superiors in the hierarchy, with individual wellbeing dependent on such contribution.[6] And arbitrary (*ex post*) discretion was necessarily left in the hands of, in particular political (Party), superiors to alter commands in order to fix "problems," to "get things done." Thus the institutions of the command economy strove to block all unauthorized initiative and force strict compliance with commanded (both explicitly and implicitly) activities.[7]

Of course, large areas of economic activity proved too complex, or insufficiently important, to be centrally planned and directly managed. Thus households and many agricultural

[4] A discussion of these essential characteristics and their systemic implications is contained in Ericson (1991). A more elaborate discussion, focussing on the political nature and "shortage economy" consequence of this system in contained in Kornai (1992).

[5] As experience had shown that, outside of emergency war time rationing, the direct planning of consumption allocations was an impossible task, money was given a limited 'active' role in the *ex post* implementation of planned allocations of consumers' goods and services. See below.

[6] The second economy provided a largely illegitimate, if increasingly allowed, alternative for wellbeing as the system aged. See below.

[7] Informal 'institutions' and patterns of behavior of those forced to live within these institutions of course softened the impact of the command logic and structure, allowing corruption and a 'second economy' to aid in managing the impossible central planning and coordination tasks required to truly implement a command economy.

organizations remained outside the formal state sector, necessarily operating in a (partially) monetized environment, and hence had to be dealt with through 'quasi-markets' for labor, consumers' goods, and some agricultural produce. Here money was necessarily more active than in the state managed sectors, opening opportunities for decentralized initiative and so posing a continual threat to effective state control.[8] Hence its availability and use had to be subject to as strict monitoring and control as possible, a primary task of the Soviet dual monetary system. Yet, despite extraordinary controls built into this system (Garvy, 1967), the inevitable errors in planning and surprises in implementation led to growing 'liquidity' outside of centralized controls, undermining 'plan discipline' and the ability to effectively manage economic activity. And this increasingly fed the growth of a "second economy" outside of, if largely parasitic on, the state 'planned' command economy.[9] This illegitimate, in terms of the logic of the command economy, 'market economy' acquired an outsized importance in the early transition as a foundation and a functioning model of 'the market' and 'market behavior', behavior which was, however, quite different from that which is required for a well functioning market economic system.

The Soviet command economy was a system well suited, and indeed built, for 'mass mobilization'. It was a coherent, politically driven "shortage economy," defying market logic in most of its economic interactions. It was inherently economically inefficient, albeit effective at achieving priorities of the political leadership. The Soviet system initially showed its effectiveness by achieving large-scale, quantifiable regime priorities, goals so important that cost could be no barrier. Thus the Soviet industrial structure, collectivization, urbanization, war time mobilization, and structural recovery from the devastation of war and occupation were achieved in record time.

But these systemic characteristics also implied an unavoidable, deep economic inefficiency in all that was accomplished. Fine cost-benefit trade-offs, indeed all but the crudest

[8] See Grossman (1963). Ericson (2006) develops the threat of 'active' money to the proper functioning of the command economy.

[9] See the discussion of Alexeev (2007).

aggregate trade-offs, were beyond the capability of the system. Such trade-offs require detailed and precise information of particular and changing circumstances, and of fine valuations of all relevant materials and activities, and hence require *decentralized* authority and decision-making.[10] Further, they invariably, in some circumstances, indicate that some central objectives should **not** be pursued; cost-benefit analysis implies constraints on behavior — explicitly rejected in the Soviet approach. Therefore, economic efficiency and cost had to remain a distant secondary consideration, as the central authorities had neither the capability, nor truly the desire, to let efficiency considerations disrupt central planning and control over economic development.

As the Soviet economy grew, became more complex and less amenable to central oversight and control, the consequences of this inherent economic inefficiency became more salient, undermining effectiveness in achieving priorities and reducing economic growth. To counter these tendencies and restore economic dynamism, the leadership turned to numerous reorganizations, refinements in planning, incentives and controls, and numerous partial liberalizations, but stopped short of challenging the essential characteristics of the command system (Schroeder, 1979). Each of these reforms disrupted the logic of the system, and were hence rendered impotent, or dysfunctional, by the system's response, leading to their revocation or replacement by further partial reforms.[11] Thus the defining characteristics of the system (Ericson, 1991) determined a coherent, stable system, one that systematically rejected partial reforms. This only changed when the characteristics were comprehensively attacked in the chaotic transition beginning with Gorbachev's *Perestroika*. Yet they provided the foundation of the legacies, the initial conditions, bequeathed to the Russian transition economy.

In the following sections I briefly review the most salient of these many legacies, breaking the discussion into 3 sections. The first, group deals with the physical legacies embedded in the inherited structure of production, assortment, and quality of economic activity, its

[10] The logic behind this is clearly laid out in Grossman (1963).

[11] For a detailed discussion of how reforms inconsistent with these characteristics were undermined and reversed, see Kontorovich (1988) on the Kosygin reforms and his broader analysis in Kontorovich (2007).

location and supporting infrastructure. The next set of legacies can be roughly labeled "Institutional," in the sense of North (1971). These involve the "rules of the game," both formal and informal, and the organizations, agencies and groups that support and/or implement them. These legacies — economic, political and social — are more deeply rooted than those built into physical structures, and have at least as great an impact on economic policies and outcomes, on efforts to 'modernize' the Russian economy. Finally come the less concrete, but still critically important, legacies of 'understanding, behavior, and culture.' Economic outcomes ultimately derive from human behavior, and that in turn depends on more than resources, capabilities, institutions, and rational calculation. Equally important are the cultural values, the beliefs and understandings about both how the world actually works and how it should work, about what is desirable, what is legitimate, and what is permissible. These norms and understandings both frame and constrain the choices, the perceived problems, constraints and opportunities that policy makers and economic actors face, and hence the kinds of decisions they can make and enforce. In Russia, they are deeply embedded in inherited political and economic culture, one rather different from that in which modern market economies evolved.

3 Physical Legacies: The Structure of Production and Interaction.

At the beginning of transition, the structure of economic activity — its location, its capital and asset configuration, labor and other input use, and output assortment — was the consequence of some 60 years of 'commanded' development. This "Soviet" structure was created to facilitate central planning and control, rapid industrial growth, and the development of military capability. The plans and prices, around which economic activity was oriented, reflected political, ideological and security concerns, were largely innocent of economic understanding, and hence were seriously distorted with respect to true economic costs and opportunities. Only political objectives, obvious physical constraints, and engineering considerations, supported by prices that were economically arbitrary, truly influenced its development. The resulting economic structure was supported, and to a large extent systematically hidden, by Soviet pricing that failed to reflect economic (market) valuations.[12] It was able to reproduce itself and grow, as long as each component fulfilled its aggregate output-delivery plans, and followed orders to the maximum extent possible, given its assigned and acquired resources. It was, however, inconsistent with any coherent pattern of economic valuation or cost accounting.[13]

Thus virtually every production operation, every investment activity and location decision, was economically inefficient, and highly wasteful in its use of resources, materials, energy, labor and capital, despite meeting critical planned "needs." The inherited overall structure of production was fundamentally non-viable in any decentralized environment, where incentives and trade-offs are based on market valuations/prices. It implied, after any true price liberalization, serious problems of cost recovery in the operation of much of industry, and hence the need for massive cross-subsidization to keep it operating in a decentralized, non-command, mode.[14] This conundrum lies at the heart of the physical legacy bequeathed by the Soviet Union to its Russian successor.

The "Soviet growth model," with extensive growth built on massive input and resource use, also created a resource trap. Growth of existing, well understood, activities absorbed all free resources, starving innovation and slowing future growth. Further, productivity inexorably declined from the lack of homeostatic mechanisms, of informational 'valuation feedback', needed to stop funneling resources to low productivity uses. Thus the economy

[12] This problem of pricing and its implications is discussed in Ericson (1999).

[13] The argument is developed in Ericson (1990, 1991).

[14] Why should this be a problem? The dimensions of the chains of non-viable production made shutting them down both politically and socially impossible — these production activities were the core of the Soviet "social safety net," and there was no substitute market-oriented safety net in place. Shutdowns would snowball in these economically irrational, yet physically necessary, 'technological chains' if any piece were to close, depriving an unacceptably large part of the population of employment, and most other industry of needed inputs to keep operating, unless they were in a financial position to import, a luxury only a few, resource based firms enjoyed.

was dominated by resource extraction and processing, heavy industry, machine building, and industrial construction — the 'planable' industrialization-priority sectors, with a large underdeveloped agricultural sector, and the small sectors providing consumers goods and services operating as residuals in the economic system. Finally, the massive commitment of resources to military-oriented industry, infrastructure, and technologies placed a large and growing burden on capabilities of the system. This hypertrophic and economically inefficient military-industrial sector was a major structural legacy provided of the Soviet system (Rosefielde, 2005, and Chapter 22 in this volume).

The command economy imparted a number of other significant structural distortions, impeding the development and proper functioning of market institutions through their impact on real economic opportunities and costs. For example, to facilitate planning, and based on a misplaced belief in (engineering) economies of scale, production activity was concentrated in massive facilities (production plants) with sole suppliers and users ("technological chains"), eliminating the redundancy and backup inherent in market competition.[15] To keep vertical control simple and clear, subordinate firms ("enterprises") were limited to single, massive (contiguous clusters of) plants producing a very limited assortment, eliminating the possibility of organizational, scope, or non-engineering scale economies in production. These massive facilities often became the core of a 'city', a population center built around the enterprise with only minimal supporting activities available to the population, with the enterprise responsible for the provision of most public services and infrastructure.[16] This "socialist construction" left a structural legacy of an efficiency-killing social burden on enterprises, and of "mono-cities" requiring substantial, sustained external support to remain viable in a market environment.[17] Firms were also highly specialized by design into technologically based (near) monopolies in tight technological chains, albeit with massive, wasteful

[15] See Joskow, et. al. (1994) for a discussion in the context of competition policy in post-Soviet Russia.

[16] See Commander and Schankerman (1997) and the discussion and enterprise survey data in Haaparata, et. al (2003).

[17] The viability of many of these cities, and the political and human repercussions of their possible failure, was cause for serious concern in the 2009 recession. See *RT.com*, "Pikalyovo touches on plight of Russia's 'monocities'," 17 June 2009.

‘auxiliary production’, reflecting the striving for autarky necessary to succeed in the Soviet system.[18]

This striving for autarky, and the effort to avoid external dependence at the national level, led to a hypertrophic development of industry, ‘overindustrialization’ relative to market economies.[19] This was reflected in over-capacity for basic industrial materials and overuse of those materials; excessive capacity in inefficient “machine-building and metal working” (engineering) sectors; inefficient, input intensive, and low productivity agriculture; energy and materials intensive industrial output; and in enterprises specialized to producing an extremely limited assortment of relatively simple versions of their assigned output. Further, every agent’s effort to buffer itself against external shocks and the uncertainties and rigidities of the planning system, led to vast accumulations of unused, and often unusable, (partially) hidden reserves of material inputs, investment materials, labor, and machining capacity, and a rapidly growing stock of unfinished construction of further industrial capacities.[20] The absence of any economic criteria of relative value or obsolescence further led to the maintenance of virtually all installed capital and all enterprises and facilities, resulting in an age structure and employment of the capital stock that was wasteful, and indeed unsustainable, when market based costs had to be covered by earnings from its use.[21] The distortion of capital structure was further reflected in the structure and location of employment and factor use, resulting in irrationally and sparsely built infrastructure, poorly maintained and without a clear “owner” responsible for its maintenance.[22]

The lack of any real economic valuation also resulted in a location of industrial and other economic activity, built for planners’ convenience and security/defense considerations,

[18] Ickes and Ofer (2006); Guriev and Ickes (2001).

[19] Aslund (1995) and Lazarev and Gregory (2007) for classic tables showing relative sectoral size. Also, Gregory and Stuart (2001).

[20] See the analysis of the Soviet materials and equipment supply system in Ericson’s (1979) Dissertation. Nove (1986) catalogues these phenomena in industry.

[21] In 1990, 46.4% of the capital stock was “worn out”, with less than 7% being replace each year; over 26% of machinery and equipment had been in place over 15 years, with less than 2% being retired each year. See, IMF, et. el. (1991), and the *Rosstat* (2003) statistical handbook tables, Chapter 14, pp. 253-4.

[22] This was nicely illustrated in the annual Russia survey by Edward Lucas, “Putin’s Choice,” **The Economist**, 19 July 2001.

that was innocent of real transportation, location and other opportunity costs, and hence profoundly wasteful of social resources.[23] One lasting consequence has been the continuing existence of 'closed' cities, 'academic cities/villages', and "mono-cities" built around one or two large enterprises employing the lion's share of the workforce. Many of these, those not involved in basic metals or energy resources production, have proved non-viable in the post-Soviet market environment, and survive only on substantial subsidies, enforced by the state.[24] These legacies were aggravated by the command economy's fundamental lack of real trade, financial intermediation, banking, and any market business services, or indeed consumer services beyond the most elemental, as discussed in the next section.

This structural legacy of Soviet 'development' is nowhere more apparent than in Siberia. Here the vastness of territory and resource potential, and the absence of constraints from prior development, opened the way to virtually unbounded economic waste, the repetition and magnification of mistaken, wasteful and unnecessary economic activity without obvious or immediate negative impact on the rest of the economy. Thus Siberian development, innocent of true economic cost considerations, generated an extreme case of nonviability of much non-extractive industry, in particular of manufacturing. Siberian and Far Eastern industries further suffered from construction, maintenance, and operational "costs of cold," including massive breakdowns and weather related disruptions, phenomenal costs of transportation and communication over vast and inhospitable distances, and the maintenance cost of their infrastructure.[25] They also suffered from the general lack of complementary economic activities that make production work smoothly and allow a reasonably comfortable life to the labor force and its families.

Hence development was based on only an 'administrative-military/security' rationale

[23] Examples include unsustainable regional/local autarky in food production, "interior" and "northern" locations in extremely hostile and costly environmental conditions, and manufacturing concentrations that ignored costs of procuring inputs and disposing of outputs. Some of these are elaborated in Gaddy (2001) and in Hill and Gaddy (2003).

[24] Mono-city problems were highlighted by Putin's direct intervention in Pikalëvo in 2009. See, for example, **Gazeta.ru**, "*Rossiiskie monogoroda ne khotiat povtoriat' sud'by Pikalevo*," 20 July 2010, or Kostomarova and Blake (2009)..

[25] See the study of Soviet Siberian development by Hill and Gaddy (2003).

for the extraction and exploitation of resources, without consideration of human, material, financial, ecological, etc., costs. As long as the command economy persisted, these costs could be ignored and borne in ignorance. With its collapse, they became an increasingly obvious, and growing burden on the transition, absorbing resources and inflicting obvious pain when not adequately dealt with. The development of, and resulting situation in, Siberia is further discussed in Chapter 36 of this volume.[26]

Thus a fundamental legacy of the Soviet system was that the economic resources, the capabilities and capacities left to transitional Russia, were tied up in immensely wasteful activities in fundamentally irrational locations and configurations, without the structures and institutions necessary to facilitate their reallocation toward new, value-producing economic activity. Russia inherited a micro and sub-micro structure of production — of capital, labor, capacities [capabilities], and interactions — largely unable to cover true costs of production, with existing economic resources overcommitment to this wasteful structure, interconnected through a fragile, thin, ('singular') inflexible network of (previously planned) interactions supporting 'reproduction' of this same structure. And (private) activities outside of this structure were largely marginal, parasitic extensions, feeding off of the irrationalities of the industrial structure and its built-in, 'planned' valuations.

4 Institutional Legacies

The command economy similarly framed the institutional environment for transitional Russia. Many of the formal institutions of the Soviet Union changed rapidly with its collapse, yet the informal institutions, the way organizations and agents operate and interact, remained largely intact, resisting the changes, and molding the operation of new formal institutions into some conformity with inherited understandings, relations, and procedures. Where new organizational forms and rules were introduced, their content and the nature of their functioning were initially defined more by attitudes and understandings inherited from the Soviet

[26] J. Thornton, "Regional Challenges: The Case of Siberia and the Far East," Chapter 36 below.

Union, and indeed Tsarist Russia, than by the formal Western models on which they were based. This can be seen in the slow and partial introduction of the key institutional arrangements required in a modern market economy.

4.1 Economic

The economic institutional legacies of the Soviet command economy arose from its systematic elimination and criminalization of market infrastructure and activities, denying the post-Soviet economy critical contractual, financial and market distributional institutions. Not only was the economy left without these critical institutions, but their place was filled by inherited institutions that actively obstructed modern market development.

Central to these legacies was the initial absence, and then incompleteness and ambiguity, of property rights. Initially only the Soviet State held formal rights in productive property, and they were both absolute and undefined; they were what state agents said they were. There was a strong, inchoate sense of "workers ownership" of the means of production, which influenced the approach to mass privatization, but which had no clear operational content. Thus the Soviet collapse led to chaotic, and both legally and socially questionable, processes and means of acquiring productive property, raising serious doubts as to the security of that property.[27] There was a lack of "free and clear" ownership, questionable enforceability of property rights, except for the politically connected or through private means, and a general lack of contract protection and enforcement. This generated extremely short behavioral horizons, and subsequently efforts to minimize investment and to realize gains as soon as possible. It also meant that economic agents had to fall back on social and political ties, on personal connections and networks, with extra-economic and extra-legal means of enforcement, in order to engage in complex economic activity.[28] Hence there was a tendency

[27] Hedlund (2001) contains a trenchant discussion of how institutional and behavioral legacies perverted the privatization process and its outcomes. Also see Black, Kraakman, and Tarasova (2000).

[28] See the discussion in Ericson (2006a) for some detail and references. On the use of force in business relations, see, for example, Radaev (1998). Examples in retailing in three Russian cities are analyzed in Frye and Zhuravskaya (2000). The long continued use of contract killings in enforcement has been highlighted

for existing organizations to rely on inherited networks, and to maintain inherited ties and activities, rather than engaging in entrepreneurial restructuring and market exploration.[29]

Further, the Soviet economy left to Russia only a minuscule private sector, one that was largely informal. In the fall of 1991 only about 2.5% of Russia's industrial output was non-state produced, with cooperatives comprising only about 3% of non-agricultural employment.[30] In 1992 'legal' small business employed just more than 10% of non-agricultural labor, and over 25% of such business was in Moscow or St. Petersburg.[31] And much of this business was under control of 'rackets', both criminal and Party, or of entrepreneurs in the second and shadow economies.[32] As the feasibility of central planning had required sole suppliers and users, unique transportation links and wholesaling organs, and minimal intermediate inventory holdings, a key economic legacy was the lack of a dense and redundant set of networks for economic interaction. Furthermore, the fundamental irrelevance of money for large-scale economic, and in particular production, activity meant that there was no proper intermediating banking or financial system. Thus the demise of the central planning and allocation system, the disappearance of the hierarchical controlling structures of the *Party* and *Gossnab*, and the breakup of the monobank left economic agents without the trading and financing options essential to the functioning of a modern market system.

The natural consequence was a highly personalized and politicized intermediation, aimed in large part at overcoming political barriers and extracting 'rents' for insiders. Hence economic agents were subject to opportunistic exploitation by individuals and groups with personal connections, and their intermediating networks derived largely from their prior Soviet positions, or from the Soviet criminal underground. Consequently, most markets were initially highly segmented, and quite dependent on the goodwill and facilitation of

in the **Jamestown Foundation Monitor**, for example in its 10 August 2001 article, "From Moscow to Vladivostok, Contract Killings are Common."

[29] There were of course always exceptions, particularly in the non-priority sectors where a certain 'entrepreneurship' was needed for success in the command ecoomy. For transition examples, see Krueger (2004).

[30] Ivanov and Kolbasova (1992).

[31] OECD (1997). In Poland, in contrast, the private sector accounted for 29% of industrial and 40% of all employment, and 16% of industrial and 30% of overall output. See Ernst, Alexeev, and Marer (1996).

[32] See Handleman (1995), Dolgopyatovo (1998), and Volkov (1999).

local and regional political authorities. And those markets that were truly national were subject to similar political influence at the Federal level.

The conditional, politicized nature of 'property rights' bequeathed by the Soviet system was also reflected in the absence of any system of corporate governance protecting the interests of minority outside owners. Those with control, the new "bosses" 'owning' and running the enterprise, were initially unconstrained by law, regulation, or market tradition from personal exploitation or expropriation of assets and cash flow; they became new, all-powerful 'Soviet' Directors, now unbound from ministerial superiors and Party discipline.[33] This undercut the foundations of new investment and any basis for broader legitimacy of business activity, making these "owners" and their businesses more politically pliable and credibly subject to 'just' expropriation by political powers.

These legacies were reinforced by the lack of disinterested (third party) adjudication of disputes.[34] Just as Soviet First Secretaries, administrative and Party functionaries could dictate the terms of resolution of conflict, the interpretation and implementation of plans, so political agents throughout the transition period worked to influence regulators and courts, rendering the outcome of property and contract disputes as much a function of political relations and influence as of the content of the dispute.[35] This was to a large extent just a continuation of Soviet "telephone justice." Thus economic agents were forced to rely on themselves, on political or criminal 'protection', to enforce agreements, contracts, and/or payment in their economic interactions. And activities most requiring a stable legal foundation, such as those involving financial assets, real estate, and the creation or liquidation of a business, initially had to operate in a vacuum, driven only by the daring of their entrepreneurs and their willingness to resort to extra-ordinary, extra-legal means. A natural consequence was the implicit, and often overt, 'criminalization' of much private economic

[33] The continuation of these behaviors late into the transition period is nicely catalogued by Black, Kraakman, and Tarasova (2000).

[34] See Ryterman and Weber (1996), Hendley, et. al. (1997), and Sachs and Pistor (1997) for articles discussing the legal legacies and situation in the early transition.

[35] The 2004-6 destruction of the leading private oil company, *Yukos*, is a late example of this.

activity, continuing a Soviet legacy of 'shadow' "market" behavior.

This dysfunctional economic legacy was initially reinforced by further inherited organizational and institutional characteristics including:

(i) continuing operation for a substantial period of many Soviet economic organizational structures, under control of old *nomenklatura* officials, or their close friends and relatives;

(ii) initial state 'ownership' of almost all productive assets, and the inherent inefficiency of their use (discussed above) that was massively aggravated by the collapse of Soviet planning and controlling structures;

(iii) monopolization of product-level production, supported by the singular, often economically irrational, ties of the collapsing Soviet "sellers' market;"

(iv) Soviet-based segmentation of markets, given by those planned ties and the seriously underdeveloped and misdirected transportation and communication infrastructure;

(v) the absence of a real, effective "money" due to continuing 'circuit segmentation' (Dual Monetary System), lack of emission control, including 'Ruble zone' emissions by other republics, and the absence of intermediating instruments and institutions;

These institutional legacies were naturally subject to pressures for change, and, in varying degrees, shrank and/or faded over the first years of post-Soviet transformation. Yet they initially provided a structural and institutional environment that filled the institutional space, "crowded out" those institutions necessary for a properly functioning market economy. They reflected both economic and social capital, physical and relational networks, that systematically undercut the development of functional market relations, impeding the introduction and development of new market-oriented institutions and their supporting social capital.

The institutions required for a properly functioning market economy, largely missing in the Soviet legacy, have been discussed extensively in the analysis of transition by international organizations.[36] They can be summarized in four groups:

- Foundational institutions, necessary for the very existence of markets: well defined private property rights; freedom of contract and initiative, upholding the voluntary nature of economic interaction; a stable money that is an effective means of exchange and store of value; flexible prices and valuations, responsive to market pressures; and a criminal code that allows and protects market activities, interactions and agreements.

[36] The institutional foundations of a properly functioning market economy extend well beyond the economic sphere. See EBRD (1999) and the evolution of the World Bank's Development Reports, 1996, 1999, and 2006.

- Institutional structures protecting and stabilizing the influence of these foundational institutions on economic activity: legal institutions protecting property, contract, and the rights of owners against extortion, expropriation, fraud, and violence or the threat of violence; institutions supporting the provision of public goods and the infrastructure for effective market intermediation; effective monetary and fiscal policies and instruments (tax, spending mechanisms) maintaining a stable macroeconomic environment in which decentralized economic activity can flourish.
- Guiding and regulatory mechanisms, with disinterested enforcement structures, to support the regular, smooth functioning of the market system: corporate and commercial law; mechanisms for enterprise creation (registration) and dissolution (including bankruptcy); accounting and corporate governance rules; market supporting civil and commercial codes; security and investment fund laws; anti-monopoly regulations; tax, trade and banking laws; land laws and registration mechanisms; housing and condominium laws; labor and employment laws; government procurement law; currency and foreign investment (capital account controls) law; etc.
- Institutions providing appropriate protection for society, consumers, workers, and the 'losers' in market competition, allowing the system flexibility to experiment, and make mistakes, as it moves toward an evolving equilibrium.

Introducing the institutions of the first three groups required struggling against prior Soviet structures. However the collapse of Soviet institutions left a true vacuum in the place of the fourth. Mechanisms of state social support rapidly withered with government revenues and the devolution of responsibility, without funding, to regional and municipal authorities. Furthermore, state enterprises, responsible for much of the social support system, rapidly shed these responsibilities as their markets shrank and they 'privatized', refocused on survival, and on the extraction of profit/rents for the 'owners'. Thus a social safety net, providing unemployment benefits and other temporary social support, social insurance and pension systems, and environmental and safety regulations urgently needed to be put into place.

However, as transition began, most market arrangements, incentives, and behaviors remained formally criminalized, or legally ignored, and even when politically encouraged, were often still subject to arbitrary censure, penalty, and reversal by political organs. This contradictory institutional environment lasted almost a decade while awaiting the formal change in institutions, the promulgation of new laws and normative acts, and the creation of structures supporting, enforcing, and hopefully encouraging the new economic system.[37] This lack of an appropriate institutional environment, reflected in all the formal and informal institutions

[37] It was only under the Gref reforms (2001-3) that a legal foundation was fully put under the Yeltsin decrees and civil code supporting market institutions. Even in 2010 the criminal code remains market-unfriendly, casting suspicion on any unauthorized private activity (Pomerantz, 2011).

and behaviors inherited from the Soviet Union, comprised a primary obstacle to its rapid successful transformation to a modern market economy.

It must be emphasized that the situation was not one of just inefficient, poorly functioning or underdeveloped market institutions — the typical situation faced by policy reformers. The Soviet system bequeathed a total lack of basic "market software" (property rights, market experience, non-criminal initiative, civil legal protections and adjudication, etc.) going far beyond dysfunctional or missing physical institutions, such as a court system, financial and equity markets, tax and social support systems, factor markets, etc., that would be needed for 'jump starting' a market system. Furthermore, the "institutional space," the legal and organizational ground on which new institutions must be built, was occupied by structures embodying dysfunctional "social capital" — networks and relations built on patterns of interaction and cultural understandings that stood in the place, and blocked the generation and growth, of institutions supportive of a market economic system.[38]

4.2 Political

Much of this economic institutional environment is derivative of the nature of political governance and power, a direct legacy of the Soviet system, with roots in a deeper 'Muscovite' legacy.[39] In that system, vast discretionary authority, unchecked by law or institutional constraint other than the power of higher Party organs, resided in political and administrative organs, whose whim (interpretation of plans, and of their superiors' intentions) became 'law' for all subordinates.[40] This personalization of economic authority, political power and governance largely survived the demise of the Soviet Union. Indeed, it was enhanced by the elimination of the Communist Party and its discipline, leading to an extraordinary intertwining of economic and political authority and decisions. It continued the system of "bureaucratic perquisites" for service to the state, going back to the idea of 'service nobility'

[38] See Chapter 8, "Institutional Performance," for a discussion of the 'misuse' of institutions in the post-Soviet Russia.

[39] Keenan (1986) and Hedlund (1999).

[40] See Ericson (1991, 2007) on the economic logic of this in a command economy.

which receives benefits ('estates'), largely in kind, for managing the State in the interests of the autocrat.

This system was refined in the demonetized Soviet Union to a tight "Nomenklatura" system in which monetary rewards were negligible relative to the benefits/perquisites available to those in positions of power. This continued in the remuneration of the bureaucracy and governing organs in the early transition of Russia.[41] It allowed personal gain and political considerations to dominate economic choices, disemboweling markets of their economic content by further distorting pricing and other market signals of economic value. By intertwining the personal and the public, the political and the economic, it fostered ubiquitous "corruption" at all levels, rule by "decree" rather than law and contract, the predominance of patron-client relations, and the domination of formal institutions by personal relations.[42]

Such a personalized, "fealty-based" system is the antithesis of one based on the "rule of law" so essential to the functioning of a modern market economy. While its roots are undoubtedly historically and culturally deeper than the Soviet system,[43] that system by its very nature amplified the personalized, premodern, and anti-market aspects of the inherited structures of political and economic relations. This absence of "rule of law," of effective constraints on both the strong and the state, was clearly visible in Yeltsin's Russia with its autocratic, elite (insider) dominated governance, its exercise of arbitrary discretion at the top, with obsequious submission at the bottom, and with the resort at all levels of government to the use of secret instructions, orders and decrees that operated above all laws.[44] It was also clearly visible in the ubiquitous predation against new, unauthorized ("outsider") activity and initiative, particularly reflected in the difficulties of small business

[41] See Voslensky (1984) and Matthews (1978) on this elite and its remuneration, and Sergei Khaitin, "New Russian Nomenklatura," *Moscow News*, 28 April – 4 May 2004, on its successor.

[42] While in many respects resembling east Asian and Latin American "crony capitalism," the phenomenon in Russia was initially much more pervasive and destructive of market economic activity, as it is unencumbered by tradition, moral constraint, and pre-existing markets, both domestic and foreign. See Hedlund (1999).

[43] For some discussion of these roots and their impact on reform, see articles in Sachs and Pistor (1997), and the development in Hedlund (1999).

[44] This is nicely discussed in Reddaway and Glinski (2001), although the discussion is scattered throughout the volume due to its primary focus on political and social developments.

and family farming.[45]

Thus the Soviet Union bequeathed a legacy of personalized, unaccountable political power, answerable only to itself at the highest level, and enforced by subordinates only answerable to their hierarchical superiors, unconstrained by universal law or procedures. There was an absence of any "checks and balances" on the exercise of power, other than its own natural limits in the chaos of the Soviet collapse. Although rudimentary democratic practices and institutions were struggling to develop in the wake of the Soviet collapse, and democratic rights and freedoms were beginning to be asserted, this had to take place in an environment without institutional support, without a fully legitimate constitution, without non-totalitarian criminal law[46], civil code and procedures, juries, electoral system, or legislature. This added to the chaos and uncertainty in the institutional environment in which economic transition and development has had to take place, leaving a strong imprint on the course the Russian transition initially took.

4.3 Social

This arbitrariness of political and economic power was reinforced by another critical legacy, the absence of autonomous social institutions, and the extreme vulnerability of those that were formed in the early post-Soviet period. The Soviet legacy of state support for, and *kontrol'* over, all legitimate social organization loomed as a obstacle to legitimate self-organization in the post-Soviet era. Independent social organization, without a state *imprimatur*, remained suspect in the eyes of those with political and economic power, thus narrowing the possibilities for creating and maintaining such organizations.

Until high *perestroika* in the late 1980's, all organizations that might constitute civil society were either illegal or strictly subordinate to, and directly controlled by, Party organs or its derivative structures such as *Komsomol.* For example, all musical, theater and artistic

[45] See the discussion in Aslund (1997), Shleifer (1997) and Wegren (1998).

[46] This is "law" that is instrumental in supporting a totalitarian system; it 'criminalizes' any unauthorized activity.

groups, all chess and sports clubs, and all forms of recreational activity outside the immediate family were subject to organization, approval and 'kontrol' by some 'responsible' Party or State organ. Such control extended to all forms of legal civic association, whether social, political or work related. Soviet labor unions were "house pets" of the state management, and functioned largely as transmission belts for information gathering and dissemination, and for the management of state guaranteed workers' benefits.[47] While a number of independent labor unions in the European mold were to arise during the early transition period, the large successors to the official Soviet unions remained dominant, but weak and unable to, or uninterested in, upholding workers' rights; they appeared to be more rent seeking agencies working in collusion with management to maintain as much of the old structures and prerogatives as possible. And the Orthodox Church in Russia had always been an arm of the state, and remained such, albeit in a stronger position relative to the much weakened state.

The late *Gorbachev* period saw a flowering of civil society under the protection of official *glasnost'*. Non-Orthodox, religious organizations arose from underground, often in the face of political opposition, but either remained disengaged as they reasserted themselves in their spiritual domain, or struggled to survive under increasing political pressure. NGOs, largely focussed on environmental and human rights issues, began to be formed, spurred by the liberalizations of *Perestroika*. They were, however, built on a very narrow social base, and an even narrower financial one, many relying to a large extent on foreign support to survive, thus undercutting their legitimacy.[48] And myriad new political "parties" sprouted and proliferated under Yeltsin's chaotic regime, but withered in the face of Putin's reestablishment of political order.

Thus the roots of civil society were extremely shallow and weak, as evidenced by its steady marcescence under both Yeltsin and Putin.[49] In general, societal organizations remained

[47] See Ruble (1981).

[48] This was used by Putin in 2005 to 'tame' most NGOs through mandatory re-registration, bringing them under close state oversight, albeit not control. See Horvath (2011).

[49] A vivid discussion of the origins, growth, and gradual cooptation and destruction of the democratic

ineffective in articulating or representing alternative social interests to those of the ruling elite. There remained a systematic lack of any countervailing social or political power to the arbitrary discretion of the governing elite, facilitating the personalization and idiosyncrasy, and hence self-serving nature, of economic and political decisions and interactions. The only truly independent organizations were in the 'shadow economy' or criminal spheres, providing a model whose emulation could not further the development of a modern market society. Hence the social and political environment remained hostile to open market development, albeit not as hostile as in Soviet times.

This social legacy also stimulated and rationalized a general lack of initiative among the mass of the population, and supported the failure of society to assert its rights against the authorities. Instead, "authority" was generally looked to for initiative and problem solving; the 'elite' was expected to decide for all, with democratic formalisms a cover for legitimacy, just as market forms were a cover for political power. Finally, the absence of vigorous civil society stimulated the search for individualized, special relation-based, solutions to economic and social problems, and in particular to a "clan" or "family"-based striving for self sufficiency.[50] This Soviet legacy seriously undercut the development of generalized, trust and law-based, interaction and its supporting institutions that characterize properly functioning market systems.[51] And they reinforced the behavioral and conceptual legacies passed on through social norms and structures complementary to the '*weltanschauung*' of the command economy.

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movement and its associated civic organizations under the Yeltsin regime, see Reddaway and Glinsky (2001), especially Chapters 3, 4, 6, and 7.

[50] This is much of the basis for Russia's historical and continuing "economy of favors." See Ledeneva (1998).

[51] Of course, this is a matter of degree. Personal ties and networks play an important role in well functioning market systems also, but they do not comprise its central, driving component. Rather they are embedded in impersonal networks and markets which provide a rich, heavily redundant, set of 'outside options' ensuring that voluntarily entered special relations are value-adding for the individuals, and not stifling or exploitative.

5 Conceptual and Behavioral Legacies

The most deeply buried and long lasting legacies are perhaps those rooted in the minds of the Russian people and its leadership. The economic, social and political legacies discussed above reflect these deeper patterns of behavior, and their associated understandings of, and attitudes toward, the economy and markets. These beliefs were inherited from the Soviet period, and indeed the deeper Russian past, and have evidently inhibited market development and market-functional behavior, particularly in the first post-Soviet decade.[52] They comprised an "economic culture" and an understanding of how an economy works that were profoundly contrary to the necessary relations in, and proper functioning of, a modern market economy.

These understandings derived, in part, from a number of fundamental beliefs behind the Soviet economic system, including:[53]

- dictatorship of the proletariat — or why the "knowing elite" must be able to impose its vision and policies on society;
- predominance of the 'collective' over the 'individual' — or why social control must supersede individual choice and initiative;
- nationalization of the means of production — or why political processes must control the flow of economic activity;
- labor theory of value, with value created only in material production (not services);
- centralized state planning in quasi-physical terms — the only way to truly meet social needs;
- the irrelevance of money and prices to determining what should be done; social and political *needs* should fully determine;
- legitimate wealth and wellbeing (reward) should derive only from service to the state.

Such ideas fed on deeper cultural traditions, supporting a thorough rejection of economics as a "bourgeoise pseudo-science," including the economic concepts of "opportunity" and "sunk" costs. One consequence was the "reification" of value in physical structures. This,

[52] This is emphasized in Hedlund's (1999) study of Russia's "predatory capitalism." See also Kathryn Hendley (1999), who argues that this lies behind the lack, on the part of Russian business and society, of a sufficient 'demand for law' to enable the reform of both laws and the legal system to become effective. Another monograph that addresses this issue is Rosefielde (2007).

[53] See Aslund (2002), p. 38, which influenced this partial list.

together with a faith in undiminishing returns to scale and a need to deal with only limited numbers of objects and projects, led to the pursuit of grandiose development schemes, giant production facilities, and endless production runs. Another was the general belief that value is determined by (labor) expenditures (sunk cost), and a subsequent faith in the value and utility of costly inherited structures, regardless of what market signals might indicate.[54]

This absence of economic understanding extended to the role and functioning of markets in general, of prices and financial constraints, and to the general lack of substantial economic meaning in Soviet prices and monetary relations. There was very little understanding of how market value is determined, of the informational role of price levels and, more significantly, of their changes, in determining what should be done in a market system.[55] In Soviet understanding, money and prices *should* merely *reflect* what needs to be done, and that should be determined by other, 'real economic' and social, considerations. Indeed, there was a belief that the will of the elite, reflecting social objectives, determines (and should determine!) activity undertaken. Hence money should follow 'economic need', rather than limiting and forcing choice among possible alternatives.

This supported the widespread post-Soviet attitude that payment is purely a matter of "financial and economic relations," that it depends on the relationship between agents, and not on the economic activity involved. Important economic activity need not be financially viable, activity and payment need not necessarily be related, and failure to cover costs is a problem with prices, not with the activity.[56] Thus there was an initial lack of acceptance of

[54] Of course, in the early chaotic years of transition, volatile inflation and price instability rendered market signals extremely noisy and unreliable, allowing decision makers to avoid the issues of the true value of their inherited assets and operations.

[55] There were, of course, a few individuals in government and business, as well as some economists, who did understand these aspects of economics, but they were far from a majority in policy, business and political circles in early post-Soviet Russia.

[56] These beliefs were clearly reflected in interviews in Woodruff (1999), and in discussions of disputes between electricity suppliers and municipalities over payment for energy. See A. Korvin, "Cold War Breaks Out in Lenin's Hometown," <*http://www.gazeta.ru*>, 18 March 2002. They can also be seen in the repeated claims that energy and/or utility prices are too high, despite their below market-clearing levels, or that subsidies are necessary for operations in the north or to preserve some enterprise or sector in a specific region. Instead of questioning the value of operations that are apparently non-viable at market prices, the call is for prices to be "fixed" so that the operations appear viable.

"budget constraints." The Soviet "soft budget constraint" (Kornai, 1992) was fully accepted by society, including the economic elites, as necessary and desirable.

The subordination of economic activity to political authority was understood as natural. Government was believed the critical 'player', superior to others in the system, rather than a 'referee'; it is legitimately responsible for guiding, indeed forcing, economic decisions in the social/state interest. State agents were accepted as legitimately 'above' market constraints. Those with the interests of the state at heart, in particular the leader of the state, were seen to operate legitimately outside the rules, indeed to make rules and enforce them on others so that 'proper' outcomes are attained. The goals and desires of individuals in society must therefore be subordinated to the collective interest, realized through the decisions and actions of the state and its agents, whose interests have legitimate primacy.

This understanding was reinforced by an inherited legacy of "rule aversion" whenever rules might constrain the elite; what is 'proper' is to be left to discretion of the authorities. "Law" was used as an instrument of control; there was no conception of the 'rule of law' as a constraint on all agents, including state actors, regulating social and economic interaction. Further support came from traditional Russian norms of a "subservience" culture, placing patrimonial obligation above property rights and individual choice, particularly as the Soviet system had erased market concepts of property. This behavior was further reinforced by the traditional "*krugovaya poruka*" — joint, collective responsibility of all for all, with obligation to denounce deviation, thus maintaining discipline and order in subservience. Finally, inherited attitudes fostered a general lack of social trust, a wariness or fear of outsiders, strangers, and superiors, undercutting the foundations of civil society and market relations; only immediate family and closest friend could be relied upon. This lack of social trust was reinforced by the legacy of ubiquitous surveillance and the fostering of anonymous reporting by citizens on each other.[57]

These legacies thus meant that the only effective way to operate was through the ex-

[57] Jacob and Tyrell (2010) find a strong economic impact of this legacy in the former East Germany.

ploitation of personal relations, fed with favors.

> "During the socialist period , webs of personal relationships were really the principle currency in society . . . informal social networks were the most important mechanisms for getting things done, obtaining access to goods and services, and attaining and acquiring accurate information about events."[58]

These informal networks provided the basis for most social interaction as the post-Soviet period opened, and their ubiquitous exploitation legitimized behavior that, from a Weberian normative perspective, is 'corrupt', making "corruption" the 'way things are done' — normal, indeed necessary, interpersonal and institutional dealing.

These bequeathed understandings were also associated with the acceptance of different "rules of the game" for 'insiders' and 'outsiders', a general hostility toward 'outsiders', and paternalistic managerial and governmental attitudes toward "their" enterprises and operations.[59] Thus only trusted insiders, or those who make special arrangements with the authorities, were accepted as legitimate, undercutting the general competition that is so essential to the proper functioning of markets, to the proper determination of prices and valuations. Finally, there was a critical misunderstanding of the meaning and function of "property rights" in a market economic system. Property was understood as conditional (temporary) control granted by authority in return for service or 'proper' behavior, and hence "privatization" was largely understood as the seizure/redistribution of existing property rather than the creation of secure, tradeable legal rights facilitating the generation of new value.[60]

These 'legacies of understanding', in particular the profound Soviet misunderstanding of fundamental economics and the logic of complex economic development, lie behind and nour-

[58] Kennan Institute Meeting Report, V. 20, #2, 2002, A. Ledeneva, "Better a Hundred Friends than a Hundred Rubles."

[59] Thus can be seen in the revealed attitudes of managers, businessmen and politicians in their statements quoted in Blasi, et. al. (1997) or Woodruff (1999), for example.

[60] These attitudes and understandings were reflected in the way bankruptcy law, in its various reformed versions, was implemented. See Lambert-Mogiliansky, Sonin, and Zhuravskaya (2000). While some surveys indicated that workers and managers looked on enterprise assets as employee, rather than state, property, it was not understood as 'free and clear' ownership with disposal rights. It was seen as their property conditional on 'legitimate', including some private, use; formally the state and its agents had ultimate control.

ish the structural and institutional issues discussed above. The blinders of Marxist ideology and the systematic destruction of any independent thought generated perverse principles of development, undercutting the market economic viability of the resulting structures. These consequences are most obvious on the "clean slate" of Siberia on which the Soviet Union built a tragic structural legacy that marketizing Russia still faces today (Hill and Gaddy, 2003; Chapter 36 below).

6 Lingering 'Legacies' in the Russian Market Economy

The Russian economy has come a long way since the demise of the Soviet Union. The Gaidar 'Big Bang', its 'Gref Reforms' continuation, and the decade of strong economic growth, 1999-2008, have substantially transformed the economy and economic system, washing away many, if not all, of the systemic characteristics of its predecessor. Russia clearly now has a 'market economy', at least in the sense that most economic interaction is carried out through 'markets'. Indeed, in many respects, Russia is now a "normal (middle-income developing) country" (Shleifer and Treisman, 2005). Yet in many of the areas discussed above, one can see lingering effects, traces of the command economy, rendering the Russian market economy somewhat different from that of its middle-income peers. (Lazarev and Gregory, 2007; McKinsey Global Institute, 1999, 2009).

6.1 Structural Remnants

The structure of economic activity in Russia is now similar to that of upper-middle income market economies, although the share of the resource industries may be understated through transfer pricing. New service sectors have arisen and flourished, and most other sectors have made substantial strides in modernizing their capital and production structures, with labor productivity rising most in those sectors suffering from the greatest drop in demand, i.e. inheriting the greatest plan-induced structural distortion. The economy is now populated with new, sometimes *de-novo*, firms in almost all sectors, although many transformed Soviet-era state and privatized enterprises have restructured to varying degrees and remain in operation. Indeed, as Lazarev and Gregory (2007) have shown, most macro-sectoral structural differences from upper-middle income-level market economies had disappeared by 2006. However, resource extraction and primary processing sectors remained dominant in the economy, with energy sectors, after accounting for transfer pricing, generating some 25% of GDP and almost 40% of exports.[61] These resource extraction and processing sectors provide most of the income of the Russian state, and are the primary source of the 'rents' it can dispose of in the pursuit of its objectives.[62] In addition, the regional distribution of this industrial structure is adjusting much more slowly, if at all, and may indeed be growing more distorted, with less efficient operations receiving more protection from market-driven adjustment in the regions outside the center and those specializing in resource extraction (Ickes and Ofer, 2006).

Furthermore, much of the capital stock, the plant and equipment, in both new and surviving firms remains in place and many firms in almost all sectors remain unrestructured and often unprofitable.[63] Even in priority defense industry, the general obsolescence of capital, and hence product, is a continuing complaint of the Russian military.[64] Studies of efficiency in 10 critical Russian sectors, undertaken by the McKinsey Global Institute (1999, 2009), show both great strides forward and substantial lags in efficiency behind advanced market economies. Labor productivity in 2007, despite increasing 1.7-fold since 1999, remained only 26% that of the U.S., with inefficient 'business processes' accounting for 30-80% of the inefficiency gap. Indeed the Russian steel industry, one that has been subject to substantial restructuring and renovation, had labor productivity only one-third the U.S. level in 2007, with one-third of the productivity gap resulting from the use of obsolete, inherited, capac-

[61] World Bank (2004). This is similar, if greater than, other middle-income resource rich countries such as Venezuela, but substantially less than more developed resource exporters such as Australia.

[62] Rents from the oil and gas industries averaged near $500 billion in 2006-8 (Gaddy and Ickes, 2010). Also see Chapter 15 below.

[63] Even in 2008, about 35% of Russian manufacturing firms were unprofitable, *Rosstat* (2010).

[64] Machine tools in use are up to 90% obsolete, as are procedures and work flow management,yielding productivity one thirtieth that of the EU and US, according to a *MinRazvitiie* study in 2008. See McDermott (2011).

ity. Even the 3 largest, most efficient steel plants have total factor productivity only 77% of the U.S. average, despite the capital productivity of the new equipment being higher, a result of inefficient processes and use of labor (McKinsey Global Institute, 2009, 41-58).[65] Much of this lag in efficiency, including survival of seriously inefficient and unprofitable firms and operations, is a remnant, a lingering legacy of the Soviet command economy, and the way those economic structures were built under that system. In addition, the inefficiency of the physical structure is seriously aggravated in most sectors by high levels of political/regulatory intervention and constraints, a further legacy of the Soviet system (McKinsey Global Institute, 1999, 2009).

The physical legacy of inherited infrastructure also has a continuing impact (NIO, 2000). There remains a critical lack of roads, much of housing and other physical structures are crumbling, and the railroads, the backbone of both Soviet and post-Soviet industrial transportation, require some $50 billion in new investment over the next five years. Indeed, the state transportation development plan for 2010-2015 indicated that $495 billion investment in infrastructure was needed. Similarly, the development plan to 2030 for the Russian "energy complex" indicated investment need of $2 trillion.[66] As with industrial and social capital, the deficiencies in the inherited infrastructure arose as an unavoidable consequence of the nature and structure of the command system, and its inability to determine proper economic valuation.

One highly visible structural legacy is the large number of "mono-cities" (*monogoroda*).[67] Arising from a peculiar Soviet understanding of 'rational location', involving maximal regional specialization of production within the autarkic national economy, these represented a triumph of planning, and military/security, rationality over economic, of will over nature.

[65] This productivity gap in industry is larger than that of most upper-middle income economies, such as Venezuela, Chile and Mexico.

[66] *Energy Strategy 2030*, approved by the Russian government 27 August 2009. <*http://www.energystrategy.ru/projects/docs/ES-2030_(Eng).pdf*>

[67] These came to the world's attention in 2009 when workers in Pikalyovo in the northeast blocked a major highway and railroad line between Moscow and St. Petersburg, bringing Putin to town to demand that Deripaska, the owner, continue to support the factories there. See Kostomarova and Blake (2009).

Built around a single plant or technological cluster, they formed indispensable links in the singular technological chains of planned production with only minimal complementary economic activities absolutely necessary to support the required work force and population.[68] They were particularly prevalent in the north and east of the Urals, meeting strategic/military as well as planning needs, and they clearly reflected, indeed implemented, the 'mastery of Siberia' regardless of economic cost. And because of the Soviet price system and pricing principles, with its regional, sectoral, and priority differentials, this cost was largely invisible to planners and the decision-making authorities, if increasingly clear in the growing waste in capital, materials, and natural resources on the spot. With the collapse of the Soviet system and the growing influence of market forces in the 1990s and 2000s, almost two-thirds of these production centers – mono-cities – were revealed to be non-viable as economic entities, requiring substantial (cross-)subsidization by the state, either through virtual economy chains (Gaddy and Ickes, 2002) or directly by the Federal or regional governments, in order to prevent human catastrophe. Some of the remainder became truly viable when Soviet export and price restrictions fell away, as they were built around the extraction and primary processing of energy or other high market-value natural resources.

In 2000 the Russian government identified some 467 cities and 332 smaller towns as 'mono-cities', over half of which still require special support, whether directly from the state or from industrial owners subject to state coercion. Most of these have a narrow, inflexible production base, with obsolete technologies and physical capital, crumbling infrastructure, and an immobile population. Most of these, with firms outside of basic energy and resource extraction and processing, produce the "wrong products in the wrong places," even though many appeared viable in 2000-2008 due to high prices for resources and the industrial products they (still inefficiently) produced.[69] The crisis of 2009 thrust this structural legacy

[68] Mono-cities are officially defined as those with over 25% or the workforce employed in, or over 50% of the value of output produced by, a single firm or technologiucally related cluster of firms. They include not only a broad spectrum of manufacturing cities, but also energy/metals cities with export opportunities, academic cities, and former 'closed'/military cities.

[69] World Bank (2010), pp. 21-5. Also see Chapters 21 and 36 below.

of the command economy to the forefront of Russian government attention, which in 2010 allocated 27 billion rubles to 27 different mono-cities which had submitted comprehensive plans for dealing with their economic and social problems and diversifying their economies. These funds (less than $1 billion) have apparently had little impact, and all such support was withdrawn from the draft Federal Budget for 2011-13.[70] Mono-cities thus remain an ongoing, and draining, legacy of the command economy.

6.2 Institutional and Behavioral Remnants

Most of the formal institutions of a modern market economy are in place in contemporary Russia. Market intermediation of economic activity predominates in a well monetized economy with standard fiscal, monetary, and regulatory institutions. Property rights have been formally established, laws regarding their exercise, including in corporate governance, have been promulgated, and a new Civil Code and court system established for their protection and adjudication. And the web of formal permissions, licensing, and regulations affecting small and medium businesses has been simplified and shrunk over the first decade of the 21st century. Thus many of the institutional legacies of command have been formally addressed by reforms over the past nineteen years. Still, a substantial portion of the economy, over 50% in 2009, remains outside the fully "market sphere," a subtle legacy of command.[71]

Banking and financial intermediation are dominated by state enterprises, despite over a thousand private banks.[72] Most utilities and housing services remain in the state sector, despite the breakup of *UES*, and the railroad and oil and gas transportation pipelines remain in state controlled monopolies, despite 'privatization'.[73] The state retains substantial

[70] *Vedomosti*, 16 September 2010.

[71] This was asserted by both Finance Minister Alexei Kudrin and Deputy Minister of Economic Development Andrei Klepach in interviews, **RIA-Novosti** on 5 October and 2 July 2009, respectively.

[72] Starobin and Belton, "Russia's Big Get Bigger," **Business Week** (International Edition), 16 July 2001, and "In the Shadow of Giants," **The Economist**, 17 February 2011. See the discussions of Russian banking and finance in Chapters 26 and 27 below.

[73] These include *RZhD* (Russian Railroads), *MinAtom,* Electric Transmission, *Transneft, Gazprom,* and the communal housing and services sector, among others. See the discussions of the oil sector (Chapter 16), the natural gas sector (Chapter 17), the electricity market Cchapter 18), the railroads (Chapter 23), and

ownership in most large industrial enterprises, and a controlling share in most enterprises in the energy and transportation sectors. There are several hundred major 'State Unitary' enterprises with direct government support, a long list of 'strategic sectors/enterprises', and a growing number of priority industrial/technological development projects maintained in special, favorable 'hothouse' economic conditions.[74] In the latter cases, the special conditions amount to an attempt to replace inherited Russian economy institutions with an institutional environment similar to that in developed market economies. Finally, a number of state corporations have been created, many over the past five years, to take the lead in major development initiatives. While these have been subject to some criticism for inefficiency and waste of state resources, there has been little movement toward their reform or transformation. And while 'privatization' remains a continuing policy of the Russian state, it is no longer focussed on creating new autonomous economic actors, but rather on raising budgetary funds and investment for still state controlled enterprises and projects. Thus substantial *dirigisme*, a dominant state role in the economy, remains an active legacy of the command economy.

This role derives, in part, from a conceptual legacy, a "state oriented" ideology that legitimizes all economic activity and reward (captured in the ideal of *Gossudarstvennost'*). It requires that any significant economic activity must be first and foremost in the "Interests of the State." This, indeed, is what legitimizes substantial private gain. As political legitimacy, the credibility of political leadership, depends on maintaining and improving economic performance, on raising standards of living, the state requires significant levers through which to direct, to control the development if not its details, of economic activity. It is now recognized that 'markets' are not necessarily a barrier to adequate, albeit not absolute, control; most of the fundamental Soviet misunderstanding of markets and prices is gone. Markets are now seen as effective instruments to be managed, and prices as carriers of economic value which,

communal services (Chapter 34) of the present volume.

[74] See the list of Strategic Sectors in the Figure below. The most prominant recent 'project' is the attempted "silicon valley" clone in Skolkovo. See <*http:/www.i-gorod.com/future*>.

however, must be managed as well, at least in key areas.

The current, practical approach to implementing this ideology is through finance, rather than through physical allocation as in the Soviet economy. Significant economic activity is thus to be directed from financial "Commanding Heights," built around the five key State Banks: *VTB, VEB, Gazprombank, Sberbank, Rossel'khozBank.* Deeper control of banking and financial activity is then implemented through subservient industrial conglomerates: *Alfa Group, Rusal, Nornikel, Rosneft, Gazprom,* etc., and their 'pocket banks', using 'personalized' *('adres'noe')* management of credit flows. Major business developments require 'official' approval, particularly if foreigners are to be involved. And major, development impacting, investment decisions, in particular, require (at least tacit) approval at the highest political level.[75] Important business leaders thus report to the President regularly, with details of their private business's development discussed. And major company heads are regularly called to report individually, just as are political subordinates, to the level (Federal, Regional, Local) appropriate to the importance of their economic activity, continuing the role of Party First Secretaries in the Soviet economy. Those who resist, who are not amenable to direct state control, are subject to removal either through legal action or not so subtle pressure to sell out to more amenable, or state, entities. This has been the fate of *YUKOS, Sibneft, Rusneft,* and Western Oil Majors, including *TNK-BP*'s loss of control over *Kovytka* natural gas deposits and forced restructuring.[76]

State control, if not always direct management, also extends to "Commanding Heights" beyond banking and finance, with a particular focus on the extraction and processing of natural resources, especially energy carriers, and on industrial/resource transportation: railroads, pipelines, and shipping.[77] Of particular concern to the Russian state, for their role in

[75] Key among the sins of Khodorkovsky were his plans to build private oil export facilities in the northwest for direct export to the US and Europe, and to build a private pipeline to export oil to China, both bypassing the state monopoly exporter, *Transneft.* See, for example, Goldman (2008) p. 111-2.

[76] See Goldman (2008) for vivid discussions of this pressure, and Ericson (2009), p. 54, with regard to control over natural gas.

[77] See Chapters 15, 16, 17, and 19, on resource dependence and the oil, natural gas, and metals sectors respectively, below.

determining the development of the economy, are the sectors generating the highest 'value added', the greatest "rents" (export revenue earning), and the critical 'intermediating' and infrastructural sectors (e.g. transportation, communications) that hold the economy together. A law passed May 5, 2008, established a list of critical manufacturing and "Strategic Industries" (see Figure below) in which the state has a direct interest, and in particular a decisive say in any interactions with foreigners.

Figure: "Strategic Industries"

– hydrometeorology, geophysics
– nuclear energy (materials, waste handling, research, equipment design and construction, safety studies)
– manufacture, maintenance and sales of technology used for intelligence or code encryption
– design, manufacture, maintenance, sales and use of weapons systems and arms
– design, testing, manufacture and maintenance of aerospace technology, air safety, space activities
– large circulation publishing, TV and radio broadcasting
– natural monopolies (excluding electrical power and municipal heating distribution, postal services)
– major telecommunications companies (excluding Internet providers)
– major metals producers if their products are used by defence industries
– prospecting and quarrying of important minerals
– fisheries

Source: *Vedomosti*, 6 May 2008.

Each of these is explicitly subject to state "*kontrol'*" of its development and, in particular, over ownership changes in the sector. As in Soviet times, a fear of 'loss of control' still overrides efficiency considerations.

In addition, state, and state-directed, investment remains the primary source of new development, even when the financial resources tapped for the investment are private. Businesses are expected by all political levels to contribute beyond taxes to the pursuit of political and developmental objectives.[78] In the late 2000s, "National Projects" to realize "Putin's Plan" were established, to be implemented through a series of new "Federal Corporations." They are explicitly to promote the diversification of Russia's production structure,

[78] Olympic structures around Sochi, including physical infrastructure, are being supported by "voluntaty donations" of the major Russian companies and their 'oligarchs.' Indeed, in the wake of an announced 10% cut in the budget financing of *Olympstroi*, *Gazprom* pledged $20 million to support construction in 2009. See **RIA Novosti**, 24 February on the budget cut, and **Vedomosti**, 6 April 2009, on stepping up support for construction.

infrastructure, and thereby her economic development. By the mid-2008 there were six such major corporations: *Rosatom; VEB*, the state development bank*; Rostekhnologiia; Rosnanotekh; Olimpstroi;* and the *Housing, Municipal Infrastructure Development Fund.* Since then, *Russian Venture Capital, Rosagrotop, Avtordor*, and now President Medvedev's *Russian Development Fund*, have been added.

Two of the most important new corporations are *Rosnanotekh*, which is to organize and fund basic research in 'frontier technologies', and *Rostekhnologia* whose mission is to modernize Russia's machine-tool and engineering industries. *Rostekhnologiia* was formed by combining *Rosoboroneksport,* which had earlier taken over *AvtoVAZ*, and several defense industry firms. It has since aggressively moved to take over other, often private, machine-building, engineering, and other industrial firms. In early July 2008, President Medvedev signed a Decree giving *Rostekhnologiia* ownership in 426 firms in different branches of industry, 246 of which were largely privately owned. While most acquisitions are related to the defense sector, ownership in airlines, spas, and trading companies has also been acquired.[79] While capitalized out of the state budget, these 'corporations' are supposed to leverage private funds toward the achievement of state development priorities.

In addition, development/investment plans are coordinated and implemented through "National Champions," both state and privately owned, operating in critical, strategic sectors. These firms include *Gazprom, Rosneft, Lukoil, Rusal, Polyus Gold, Alrosa,* and *Severstal'*, among others.[80] Together with the "national projects" run by the new Federal Corporations, these enterprises give the political leadership of the Russian state extraordinary control over the direction and shape of Russian economic development, a continuing legacy of the command economy.

Further legacies, remaining after nearly two decades of 'transition' and recovery, are subtler, but no less damaging, than these physical and institutional legacies of the command

[79] **BOFIT Weekly**, #29, 18 July 2008.

[80] The role of these companies in the energy sector is nicely discussed in Goldman (2008). In all cases, these companies' leaders regularly report to Putin and discusses their strategic plans, particularly regarding international operations.

economy. They are rooted in the *informal institutions* of the prior system, the patterns of behavior and understanding, the social and political norms, that animate the operation of the often new, formal, market-oriented institutions. They are most clearly visible in the political, legal, and social spheres, and in how those impact the functioning of the market system. They include, as discussed above, continuing acceptance of the primacy of the state, and its top representatives/leaders, implying a very limited role for autonomous private and social institutions. State service remains the highest (fully legitimate) calling, and the primary legitimate basis for material well-being.

In service to the state the 'personal' and 'public' become intertwined, and authority becomes 'personalized', reflected in personal relations in which fealty is the ultimate virtue deserving of full protection. This situation is reinforced by Soviet concepts of "public property" which still cloud the distinction between the public and private realms. Thus fortunes are made with the support of the state and informal channels, which implies that 'owners' cannot be fully in possession of their property.[81] This is also a continuing legacy of the Soviet downward 'unaccountability' of political and economic power/authority, of the legitimate arbitrariness (*proizvol"*) of the elite, of those in positions of power. And it is a continuing cornerstone of the absence of any real "rule of law," of its replacement by Putin's "dictatorship of law" as an instrument of political, economic, and social control.

This can be seen in the lack of success, despite Presidential initiatives, to reform Soviet criminal law to be fully consistent with a market economy and with the new, more market friendly, civil code. Indeed, the criminal code is still 'Soviet' in relation to economic crimes, ignoring the reforms in the civil code, as was pointed out 16 September 2010 in a study presented to Duma.[82] As Ledeneva (2011) has argued, the rule of law has been diverted by a powerful set of informal practices. In its place in Russia we see "patrimonial power

[81] In a July 2010 interview with The Financial Times, Deripaska announced that he was ready to give it all back, if Putin so asks. *<http://www.ft.com/cms/s/2/a2ba7bf6-9069-11df-ad26-00144feab49a.html#axzz1G7mo37J2>*

[82] The Interior Ministry and *Procuratura* have worked to delay and nullify Medvedev's proposed and decreed legal reforms. See Pomerantz (2011).

structures" where decisions are made on the basis of people's relationships and traditional forms of authority. Patrimonial governance mechanisms remain in place, only weakly challenged by the democratic forms introduced under Gorbachev and Yeltsin, but increasingly 'hollowed out' under Putin and Medvedev. Thus ubiquitous, and indeed growing, corruption should be seen less as criminal than as the use of personalized trust, compensating for defects resulting from 'selectivity' in the workings of formal institutions; it is a means of coping with the larger, largely inherited, system. Participation in corruption is then rationalized by all involved as necessary — for survival, to increase efficiency, maintain trust in face of arbitrary and changing 'rules', to maintain competitiveness — as recent surveys have shown. (Tulaeva, 2011).

This behavior is facilitated by a further lingering legacy – the acceptance of different "rules of the game" for those in different political and social positions. This preserves what has been called "*soslovnoe obshchestvo*" (Zaborov, 2009), an 'estate'-based society, where roles, opportunities, and rewards are differentiated by position in society. This both reinforces the ability of the state to control what it feels it must in the economy, and increases the importance of personal connections and relations. It also places a barrier before 'outsiders', whether Russian or foreign, who might want to undertake any initiative, launch any new activity, in the economy. Without connections, at least tacit political approval and/or protection, entrepreneurship is difficult, particularly in areas that the state finds important, 'strategic'. Ownership control must remain in State, or at least trusted Russian, hands in all such areas. Where foreigners earlier gained control of a firm in a 'strategic' industry, they have been systematically squeezed out, or into minority positions.[83] Minority ownership without control, contractual relations providing capital, 'know-how', and technology are welcome, but the Russian State and/or its "champions" must have ultimate authority. And major deals between Russian state and foreign entities are considered "strategic" and

[83] Various forms of political and 'legal' pressure, including arbitrary use of environmental laws, have been applied. See Goldnam (2008) for a survey, and Ericson (2009) for this process in the oil and natural gas sectors.

beyond legitimate challenge by other Russian business interests.[84] All of this protects the role of the Russian State, and its highest leadership, in determining the nature and directions of Russian economic development, a role assumed, if in weakened form, from the Soviet command economy.

This behavioral legacy was also reflected in the Russian State's response to the financial crisis of 2008-9. There was a clearly displayed and expressed fear of foreign dependence, of 'loss of control' over Russian assets and hence over the direction and nature of the development of the economy; the experience of the '90's, showed the danger of foreign creditors' influence over policy! The Russian state thus stepped in to 'rescue' Russian industrial assets that had been pledged as collateral for foreign loans, sometimes directly and sometimes through legal action 'freezing' assets so they could not be used to pay debt to foreign banks.[85] And major debtors were forced to sell foreign assets, rather than using further Russian assets as collateral.[86] As in the past, support for households/individuals was primarily undertaken through the workplace, supporting producers to avoid layoffs and to maintain both operations and services to their workers and communities, falling back on the Soviet tradition of work-based social support.

Finally, one can see the 'legacy of command' in both Putin's and Medvedev's approach to "modernization." Behind all the rhetoric of liberalization, openness, and democracy, still stands an understanding of the process as state directed and state-driven.[87] What constitutes

[84]See the Igor Sechin interview in the **Wall Street Journal**, 22 February 2011, on the BP-Rosneft equity swap for Arctic drilling. There he warns AAR (owners of TNK-BP) and BP not to let "commercial interests get in the way of a strategic project. ... We consider this project a priority, a strategic one, and we want to realize it."

[85]Some $62 billion was funneled through *VEB* to support business capital and refinance foreign debt; see O. Kuvshinova, "*Dve treti biudzheta*," **Vedomosti**, 21 October 2008. On the latter, the Omsk Court froze *Vimpelcom* assets, owned by *Alfa Group*,, preventing their use to pay debt to foreign banks, **Wall Street Journal**, 28 October 2008. That freeze was lifted after *Alfa* received a state loan to pay off the debt.The same court is apparently being used by *Alfa Group* to seize the Norwegian *Telnor*'s share of *Vimpelcom.* See G. White, "Russia Raises Legal Pressure on Telnor," **Wall Street Journal**, 4-5 April, 2009.

[86]Deripaska was forced to sell off foreign acquisitions, *Hochtief* (German construction company) and *Magna Industrial* (Canadian auto parts manufacturer); see **Wall Street Journal**, 4-5 October, 10 October, and 24 October 2008. Metals 'oligarchs', Prokhorov and Lisin were also forced to sell assets, or abandon acquisitions; see **Wall Street Journal**, 11 December 2008.

[87]See Medvedev's "Go Russia" white paper, <*http://archive.kremlin.ru/eng/speeches/2009/09/10/1534_type104017_221527.shtml*>, and his "Address to the Federal Assembly" in 2009

a modern, innovative economy is to be determined by the State, and to be created through priority 'innovation' projects and special 'experimental' cities and zones. While the Russian leadership's 'vision statements' contain all the right words about freedom and innovation, the bottom line remains that these should be supported by State funds which must be used 'properly', to meet the needs and demands of the State. And of course they must always be moderated, channelled by social concerns; true experimentation must only be allowed in special, State protected environments and 'incubators'.

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Thus the command economy has bequeathed to Russia a "constrained market economy," one that is largely politically motivated and directed. While markets are ubiquitous, and retain their primary microeconomic coordinating and motivating functions, their role in directing economic activity toward opportunity, signalling long-run desirability and pushing away from unprofitable directions, is limited in key sectors of the economy, that role being substantially assumed by political authorities. Initiative is no longer generally "punishable," but major initiatives require approval of 'higher authority' to go forward, and become "punishable" if pushed against disapproval, as happened to *Yukos.* The highest authorities remain unaccountable, law remains an 'instrument of control' rather than 'regulator of relations', property rights remain, to a significant extent, 'conditional' on economic behavior and relations, and the State remains the "engine of growth."

Russia further has an opaque, personalized (informally regulated) 'rent redistribution' system, supporting the elites and a large number of, largely inherited, inefficient production operations. These include mono-cities and 'strategic' whether because of product or location, producers, supported by the transfer of massive rents from the energy and metals resources sectors (Chapter 15 below). This is a natural legacy of the command economy with its inability to evaluate economic activities and its inherent lack of alternatives to wasteful 'development' for use of its resource rents. This system has been recently characterized as

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<http://archive.kremlin.ru/eng/speeches/2009/11/12/1321_type70029type82912_222702.shtml>.

"neo-feudal" (Inozemtsev, 2010), "rent-addicted" (Gaddy and Ickes, 2010), and "Muscovite" (Rosefielde and Hedlund, 2007). All such characterizations capture aspects of, and ultimately derive from even if they perhaps exaggerate, these lingering legacies of the prior command economy, and its deeper social and cultural roots.

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