
GAAMA Metaphysics

Introduction

Five years ago, I began a project to assist in the development of the Ukrainian Capital Market. My initial assignment was to develop back-office procedures for the Ukrainian securities self-regulatory organization, PFTS. As first flight approached Kiev's Borispol Airport, I began to read the Kiev Post. Of particular interest was an opinion poll inquiring, "What should be done with Chernobyl's damaged nuclear reactors?" Virtually all respondents thought that government experts should resolve this issue. Since markets are about opinions, I began to appreciate the sensitivity to the initial condition and the related difficulty in changing a command economy.

Today there is a greater diversity of opinion in the Ukraine. Kiev has a vibrant consumer market and a developing durable goods market. The biggest difference between 1997 and today is convenience. Then, money and my driver could obtain whatever I needed. Now, Kiev offers not only the products but also many of the conveniences that Americans have come to take for granted.

Yet progress in the consumer and durable goods economic sectors has not extended into the capital market. I have been privileged to be part of two separate projects that were led by two very dedicated and capable project managers in Geoffrey Elkind of KPMG and Nancy Gordillo of Financial Markets International. Nevertheless, despite our hard work and delivery of professional products, Ukraine's capital market exists today more in form than in substance.

WHY? ... Because the cart was placed before the horse. If one thinks of the Soviet economy as a giant distribution system, donor agencies built airports before renovating roads and railroads. It is this paper's thesis that slower-than-expected capital market development in some Newly Independent States ("NIS") is attributable to a misperception of the former Soviet Union's governance structure. "Soviet Inc.," was an unprofitable firm, **NOT** an inefficient market. Its CEO, Joseph Stalin, was a "Robber Baron" of an industrial monopoly. Its politburo was a compliant Board of Directors. "Soviet Inc." was a hierarchical structure complete with an organizational chart and procedures manual for the production of goods and services. The marketing department set prices through a

command-and-control process rather than through buyer-and-seller negotiation. Instead of a corporate town (i.e., Akron, Ohio), “Soviet Inc.” was a corporate continent, a conglomerate that employed approximately 200,000,000 workers and encompassed 13 time zones.

Having diagnosed the former Soviet Union as an inefficient market, donor agencies provided market infrastructure and regulations. In some instances, this constrained entrepreneurial initiative by adding complexity to the pre-existing Byzantine bureaucracy. A financial shopping mall was built without providing desirable enterprises to stock the shelves. If consumers were unenthusiastic to purchase the goods and services of post-Soviet successor enterprises, why would investors want to acquire the securities of these enterprises?

Sensitivity to initial condition

In August 1991, the Soviet Union was “atomized.” Thousands of enterprises were hurtled across its socio-economic universe. But what was the commercial DNA bequeathed to the economic enterprises of the post-Soviet successor states?

To understand why the Soviet Union is defined, as an “unprofitable firm” requires differentiating among the various governance structures. The following 2x2-governance matrix illustrates the process by which economies organize their normative commercial activity.

Governance Matrix

Transparency Profitability	Open	Closed
Commercially Viable	<i>Markets</i>	<i>Firms</i>
Self-sustainable	<i>Government Agencies</i>	<i>Industrial Policy Regimes</i>

The model combines binary benchmarks that analyze ranges of economic activity relative to transparency and profitability. The transparency construct addresses the treatment of information. Markets tend to be “open” (Soros, 2000) and develop disclosure regimes for information requirements (i.e., NASDAQ’s advertising budget), whereas firms are inclined to be “closed” and guard trade secrets

through intellectual property protection (i.e., patents, trademarks, and copyrights). The profitability construct analyzes whether NIS economies can evolve beyond self-sustainability (rewarding the enterprise's employees and management) to commercial viability (rewarding the enterprise's employees, management, and risk-capital contributors). Commercially viable enterprises tend to be in the private sector and employ a marginal-cost model (profits are maximized where marginal revenues equal the marginal cost of the *n*th product sold). Self-sustainable entities, on the other hand, tend to be affiliated with the public sector. They are inclined to use an average-cost model (e.g., an industrial policy enterprise such as the post office delivers a letter for the same rate, irrespective of whether the letter is to be delivered across the street or across the country). Then these constructs are combined to design a robust model for understanding. Given the paper's thesis, the focus of the discussion will be the reflexive development of markets and firms.

When post-Soviet successor states became independent, economic policy makers had to determine what end-condition they desired. This required knowing whether the "Soviet Inc." governance structure was that of a "firm" or a "market." Turning around "Soviet, Inc." required an operational restructuring to increase efficiencies and a financial reorganization to lower the cost of capital. The independent variables of market development are infrastructure and regulations, whereas the independent variables of enterprise turnarounds are products and people. A firm turnaround begins by redesigning its products and retraining its people. The old corporate culture must be replaced. Otherwise the "iron law of oligarchy will centralize power, ossify operational components, and stagnate the thought processes in an attempt to retain control.

To this point, it is instructive to compare the restructuring experiences of the post-Soviet successor states with IBM. IBM was the flagship of American industry during the 1970s. Many thought IBM represented the best of American technology. IBM's primary product was not technology, but "job insurance" for the Chief Information Officer (CIO). Marketing representatives would "close" sales with the statement that "nobody ever lost their job by buying IBM." Translation: should a problem arise, IBM would put its corporate muscle to work to solve your problem. This worked well until mini-computers replaced mainframe computers at the start of the *Information Age*. To maintain their corporate dominance, IBM made a big bet on the OS₂ operating system.

They lost. IBM's stock, which had peaked at \$200 per share in the mid-1980s, began a prolonged ten-year slide to \$50 per share. During this retrenchment, IBM was restructured numerous times. Each time, unfortunately, the new Chief Executive Officer (CEO) was promoted from within IBM's management. He owed his allegiance to IBM OS₂ operating system and corporate cronyism. When the stock bottomed at \$50 per share, the institutional investors asserted themselves and selected a non-technician, Louis Gerstner, to be the new CEO. Gerstner barely knew how to operate a computer – he was a retailer, but he knew how to operate a company. He broke IBM's corporate culture, redesigned their products, and turned around the company. The stock recently traded as high as \$100 per share. IBM totally redesigned its product line and now describes itself as an “advanced information technology company providing: technologies, information systems, products, services, software, and financing.”

Markets

Markets are coordinated pricing systems that allocate voluntary exchanges between consumers, workers, and owners of production. Markets are non-linear, dynamic systems (Peters, 1996) that involve:

- The exchange of goods and services with associated property and contracts;
- Communication of the prospective transaction's terms and conditions;
- Informing the level of demand that exists for the product; and
- Infrastructure and procedures to settle and clear transactions.

Markets are open in function (i.e., disclosure and transparency) and horizontal in structure when they reach maturity. They are incentive enablers. Markets tend to distribute goods and services that are "bought" or are self-selected by consumers. These products usually are complete with respect to both product information and transactional infrastructure. Markets produce transactions and tend to report their activity in terms of transactional value (vs. transactional volume).

Markets are systemic in process. Changing one element of the market system changes the entire system. They are evolutionary in nature. Each stage's precondition must be satisfied prior to an evolutionary transition.

<u>Market stage</u>	<u>Functions</u>	<u>Precondition</u>	<u>Solution</u>
Introductory	Order taking	Property rights to buy and sell	Quotation system
Development	Retailing	Post-trade record-keeping	Back-office procedures
Growth	Trading	Clearance, settlement, and custodial services	Depository
Prime	Underwriting	Corporate governance and transparency	Collaborative Commerce
Maturity	Hedging	Risk Management	Derivatives

Market governance is provided by securities regulation. As illustrated by the matrix below, industry participants are profiled by their likelihood to be disadvantaged through asynchronous (bad timing) and asymmetrical (inaccurate and/or misleading)

information flows. These limitations will manifest themselves as either transactional and/or market pricing problems.

Regulatory Matrix

Activity Participants	Transactional Practices	Market Pricing
Corporate insiders - Ownership - Position	1. Notification of general meeting 2. Payment of dividends 3. Disclosure of material events 4. Re-registration policy 5. Insider trading - Tippee - Tipper	1. Transfer pricing 2. Asset stripping 3. Anti-dilution policy 4. Corporate restructuring 5. Foreign direct investor 6. Block investor
Broker/dealers - Broker/agent - Dealer/principal	1. Cost of services is a function of : - Reservation spread (capital) - Order-processing cost - Risk bearing (inventory) - Adverse information (dealer/customer ratio) 2. Disclosure of capacity 3. Record-keeping 4. Segregation of customer funds and securities	1. Firm quotes (backing-away) 2. Front-running 3. Manipulative practices 4. Parking
Investment Companies	1. Reciprocal business 2. Fictitious trades	1. Net asset value determination 2. Pyramid schemes
Public investors	1. Realistic and accurate disclosures 2. Suitability 3. Churning 4. Straw account	1. Best execution 2. Mark-ups 3. Interpositioning 4. Bucketing

Firms

Firms are non-market solutions. These economic units transform inputs into outputs for use by other economic agents (Dietrich, 1994). They internalize transaction costs and/or infomediate (Hagel, 1999) products and related transactional processes to shift the cost burden in favor of their comparative advantage. Firms

produce goods and services and exist to provide an after-tax return to their owners (commercial viability). Firms are organized to perform integrated functions that otherwise might be outsourced to a competitive market place. This includes but is not limited to economies of scale for input acquisitions; inventorying for diversification of slack and peak periods for economies of scope; and internalization of administrative coordination for economies of span. Firms, like markets, are evolutionary in nature. Each stage's precondition must be satisfied prior to transition.

<u>Firm stage</u>	<u>Functions</u>	<u>Preconditions</u>	<u>Solutions</u>
Introductory	Awareness	Matching product's capabilities with consumer demand	Business plan to identify the mission and capitalize the company
Development	Interest	"Ah-hah" factor, giving clients something they always wanted, if they had only thought of it.	Test, beta, and production models to fulfill need
Growth	Decision	New reality for critical mass threshold of 50 million clients	Distribution channels to capture market share
Prime	Action	Square of user-base determines materiality (Metcalf's Law).	Advertising to maximize value
Maturity	Affinity	Replacement rate demand	Strategic elements for client satisfaction

Firms tend to be closed in function (i.e., trade secrets and barriers to entry) and vertical in structure when they reach maturity. They are incentive seekers. Firms provide sponsorship for innovative products that have to be "sold". They refine the transactional processes through "intermediation" and "infomediation." Goods and services that are "sold" are regarded as "works in progress." Firms compensate for a lack of product information and/or market infrastructure deficiencies until goods and services develop a critical mass and can be integrated into markets. Firms tend to report their activity in terms of transactional volume (vs. transactional value). Corporate governance determines how to reward the enterprise's stakeholders: legal corpus, individuals, and state. It is the equitable apportionment of the enterprise's revenues as derived from the best-practice stewardship of corporate resources in pursuit of commercial viability.

Differentiation

Differentiating "markets" from "firms" reduces to whether customers or marketing departments are better suited to determine prices for the goods and services of a particular industry during specific stages in the product and business cycles. In essence, firms seek to internalize transaction costs, while markets

disintermediate the nonvalue-added factors of the transactional process. Transaction costs require three elements to be present: bounded rationality or a limit to due diligence, opportunism, and asset specificity that prohibits substitutions such as rice for potatoes (Williamson, 1975). The table below provides an overview from which to compare and contrast characteristics of market and firm governance structures.

Structure Characteristics	Market	Firm
Nature	Open	Closed
Information	Transparency	Trade secrets
Structure	Horizontal	Vertical
Production	Transactions	Goods and services
Distribution emphasis	Reverse markets (bought)	Target markets (sold)
Pricing	Buyer/seller negotiations	Marketing department
Transaction costs	Disintermediate	Imbed
Reform	• Regulation • Infrastructure	• Redesign products • Retrain people

Governance structures are dynamic

Governance structures change over time in response to uncertain economic circumstances. This enables economies to be dynamic. Firms such as the retailing giant Wal-Mart are changing into consumer markets, while energy markets such as the California utility industry are becoming a regulatory-driven firm.

Why is Wal-Mart becoming a consumer exchange? ... Because Wal-Mart is undergoing a paradigm shift to monetize its transactional volume into transactional value. A critical mass of Wal-Mart's products have reached the "bought" status. To continue its 20 percent ten-year compounded annual equity growth rate, Wal-Mart reorganized its governance structure to drive efficiency and maximize shareholder value. Wal-Mart creates value by aggregating buyers and sellers, creating liquidity by matching bids and offers, and reducing transaction cost by disintermediating the non-value components of commerce. To the extent that Wal-Mart's provides two-way, buyer-seller communication, it is deemed to be a Metcalfe network, it is rewarded with a premium P/E multiple of 37. This compares with Sear's one-way catalog approach of Sarnoff network that has a P/E multiple of 20.

What enables Wal-Mart to become a consumer exchange is its enterprise system? Imagine a computer system that runs your company. Low on product? It orders more and tells your employees when to stock shelves. It extends credit, decides whose check to accept, and duns slow-paying customers. It tells you which products to drop/add, which products to give special discounts, and which products to raise price. Done properly, enterprise systems revolutionize operations. Head counts drop. Wastage plummets. Machines perform routine operations. People deal with exceptions. Management focuses on converting exceptions into routine. Systems and people work and think in real-time.

Wal-Mart spends roughly \$1.5 million per store for enterprise systems. Wal-Mart's enterprise system automatically places orders shortly before each supplier's delivery cut-off so that order quantities are as accurate as possible. Without an enterprise system, a retailer places orders by manually counting shelves during work lulls. This increases inventory overages and outages. The rewards offered by advanced technology are worth the effort. Over the last decade, Wal-Mart's grocery sales grew to \$65 billion—twice the sales of the largest supermarket chain; and are projected to double over the next five years. Supermarkets, none of which have enterprise systems or real-time management information systems, lost \$18 billion in market share and suffered a 20 percent profit drop over the same decade.

Wal-Mart's real-time (algorithmic vs. queuing) enterprise system lets Procter & Gamble stock Wal-Mart stores on consignment and get paid as products are scanned at registers. The payoff is reduced inventory expense and higher sales from better selection and fewer outages. Wal-Mart is now positioned to link its internal inventory to the Internet. The linkage will let customers browse before visiting stores, confirm that what they need is on the shelf, and search for alternatives. This is an e-commerce extension of founder Sam Walton's vision to give shoppers "what they want, when they want it" (MicroNEX, 2001).

Whether a market is emerging such as the post-Soviet successor states, or developed like the United States, inefficient public policy can reduce commercially viable industries to minimalist levels of self-sustainability. Reference the recent energy crisis in California, where utilities agreed to have their rates capped at levels once considered commercially viable. Notwithstanding above-average population growth, California restricted building electric utility infrastructure and transmission distribution systems that severely constrained new generating capacity. When, utilities could not pass on to their customers the cost of electricity higher than the original "caps," it resulted in power shortages, bankruptcies, and current rates that are in excess of the original price caps.

A meeting to restructure California's electric utility market was held between regulatory staffers from the Federal Energy Regulatory Commission (FERC) and the Independent System Operator (ISO). FERC set September 30, 2002 as the expiration date for the current price caps that control California's power market. An FERC-commissioned study found numerous flaws in ISO's governance. Doug Ose (D-Sacramento), chairman of the House Subcommittee on Energy Policy, said that he hoped the meeting would encourage market reforms. The head of a group of independent power generators in California urged the ISO to avoid "a market design that complicates energy supplies." Officials from Reliant Energy, Williams Cos., and other private generators warned that the ISO was not putting enough incentives in its plan to encourage building new power plants in the state to bolster supplies (Anderson, 2002).

Stockbrokers are censured and fined for recommending a speculative security with no dividend to elderly investors seeking income. Conversely, when the nomenclatura (whether apparatchiks or regulators) are permitted to appropriate capital surpluses (shareholder dividends) with impunity to subsidize sub-optimal policy, this conversion of private capital to cover unsatisfactory performance is called "politically correct." Bad regulation begets bad governance. If the exceptions to the rule become the rule, then privilege and corruption become best practices. This is now being revealed in the California investigation.

When prices are determined by methods other than buyer-seller negotiation, the governance structure is **NOT** a market. In California's controlled electric utility industry, the regulatory structure has become the governance structure. California's utilities are valued as different divisions of the same company due to their regulatory-driven governance structure. Does management or regulation determine:

- How much generating fuel resources to buy and at what price level to scale such purchases;
- What generating capacity should be built and what generating capacity should be acquired from external sources; and
- What transmission system is needed to distribute the electricity to meet present and forecasted demand?

Unlike natural gas or petroleum, electricity cannot be inventoried. If transaction costs exist, chances are it is a firm.

Information Age: critical event that shifts governance structure

The great economic experiment of the Twentieth Century, socialism, began in Russia with the tumultuous and bloody Communist Revolution. It ended quietly and peaceably with an electronic evolution that was ushered in by the “Information Age”. Karl Marx, the “man” of the “manifesto”, viewed history from a deterministic perspective. He believed that industrial societies were subject to breakdown and transformation through class conflict. This meant that the means of production determined the governance structure. Accordingly, the Communist Manifesto espoused the socialization of the “means of production” in a classless society where the state owns all property. Marx stated that ...

“the means of production and of exchange, on whose foundation the bourgeoisie built itself up, were generated in feudal society... in one word, the feudal relations of property became no longer compatible with the already developed productive forces; they became so many fetters. They had to be burst asunder; they were burst asunder.”

Thus, Marx establishes his “theoretical” justification for the state to appropriate bourgeois property.

Seventy-three years later Marx’s prediction unraveled during a coal miners’ strike. At first the miners thought that life could get better under communism and only demanded reform, but by 1991 they knew the entire system had to be changed. As one mining leader said:

“We have to break the old system, the idiocy that’s driven us to destitution for seventy-three years. Over the last two years we’ve understood that economic reform is impossible without a change in the institutions of power: the Communist party, the KGB, the military-industrial complex, these imperialist-monopolist ministries.”

The leader of the miners, Anatoly Malykhin, also recognized that as long as mines were owned by the state, nothing would improve. Without *Glasnost*, Malykhin and many others like him would have remained uninformed and ineffective. But with the increased information available in newspapers and on television, the new economic dissidents became a powerful force for dismantling the Soviet Empire (Shane, 1994).

In contrast to Marx's deterministic perspective to justify or predict certain economic outcomes, F.A. Hayek and the Austrian School of Economics emphasized understanding the behavior of individuals and institutions. While capitalism may have its failings, Communism failed. Its collapse is but one example of the folly of attempting to control an economy at constant equilibrium. Far-from-equilibrium conditions provide mutant innovations necessary for the development of free markets. These mutations are dynamic and non-linear.

In "The Fatal Conceit," Hayek (1988) argues that socialism has from the outset been mistaken on factual and logical grounds. Its repeated failures in the applications of socialist ideas were the direct outcome of these errors. Hayek labels as the "fatal conceit" the idea that man thinks he is able to shape the world around him according to his wishes. The Soviet Union was born in era when organization was equated with efficiency. "Too many" rules for organization constrained the Former Soviet Union's ability to adapt and innovate. To compensate for this structural shortcoming, the Soviet Union created an informational Potemkin Village where the state standards enforced a virtual monopoly on information. It was the duty of the KGB to know everything about everyone and the duty of bureaucrats to run the economy like a machine. But it was only a matter of time before the deterministic limitations of communism led to societal entropy. That time coincided with Mikhail Gorbachev's rise to power in March 1985.

Gorbachev realized that "Soviet Inc." lacked the information system to restructure and therefore was unable to address effectively the hierarchical complexity required for a global society. In the early years of the Soviet Union, the total number of goods controlled by Gosplan's centralized planning was on the order of 500,000 to 750,000 items. By 1972, the total number of goods produced in the economy was 12 million and a decade later the number had doubled to 24 million. This meant that planning only used a 2-to-3 percent sample size of total products to forecast aggregate demand. It was simply impossible to calculate real demand for all items in the economy. This flaw became exponential as the economy became more dynamic (Ellman and Kontorovich, 1998).

The Soviet Union incurred excessive transaction costs due to asymmetrical information. For political reasons the Soviet Union blocked information because it could no longer reconcile the promise of idyllic prosperity with the reality of repression. Although this ultimately proved futile in the face of the Information Age's infinite number of electronic information systems, it severely limited consumer feedback relative to product development and created ubiquitous waiting lines. The odd thing is that shortages appeared in product lines for which the Soviet Union was the largest producer in the world. In the late 1980s, the USSR produced

more than three pairs of shoes for each citizen, but people had to wait in line to buy shoes. The problem was that the available shoes did not reflect consumers' tastes. The shoes were made to fulfill a government plan, not to satisfy market demand. Thus, consumers had to wait in line for hours to find shoes that fit and were stylish. Most of the shoes that they bought were imported (Dorn, 1996).

Soviet Inc.'s management reporting system was fraught with defensive reporting (telling top management what the subordinate thinks top management wants to hear). The end-condition for Soviet apparatchiks was their project reports. They bounded their analytical rationality to reduce economic activities to a tutorial level that could be discussed in a serial, linear manner. While this best supported their need for project reports, their tutorials did not withstand the stress test of the dynamic, non-linear economic realities. Making a complex system more predictable also makes it less resilient to shocks and lessens its ability to adapt (Peters, 1999).

Command economies viewed capital as a cost-free byproduct of a political course of action. This created a lack of discipline within the budgeting process (Soros, 2000). Transactional redundancies and stagnant services resulted from an over-emphasis to achieve full-employment. Goods and services were targeted to the production goals of the planners and not the needs of the consumers. Punitive tax policies limited the efficient employment of capital in the normative economy. The "Twin Hoax" of the command economy's single entry accounting system institutionalized false economic constructs by convincing the central planners that production was greater than it was; and by convincing the tax collector that profits were smaller than they were.

"Trends" must be differentiated from "trades." Whenever a "trade" is misinterpreted as a "trend," totalitarian systems constrain market forces from remedying the root cause(s) of the problem. This results in the planner's value system being overlaid on the market's operating system, creating a bias in favor of top-down, industrial policy models that lead to errors of omission (vs. bottom-up models and errors of commission).

Since the Former Soviet Union had perverse incentives that carried greater penalties for mistakes than rewards for successes, central planners tended to err on the side of conservatism. This caused them to attempt to limit the number of variables that they did not control. This logical non sequitur created false constructs from which to manage the Soviet economy. In an attempt to be cautious, Gosplan restricted risk-management techniques by attempting to limit market concerns through market controls. This resulted in rationing and/or stagnation. Consequently, when change happened it happened quickly. The economic system that emerged differed from its predecessor as ice does from water. Similarly, as

illustrated in the chart below, post-Soviet successor states will have to transition in an economic milieu that also has undergone substantial changes.

<u>Industrial Age</u>	<u>Information Age</u>
Pyramidal hierarchies with national markets	Networks with global market • Sarnoff—linear growth • Metcalfe—exponential growth
Strong central governments, with weak central banks	Weak central governments, with strong central banks
Queuing theory that sequentially process information in batches	Complexity theory that multi-processes information with real-time algorithms
Physical property that depreciates with use	Intellectual property that appreciates with use
Political solutions: one-size-fits-all federal programs	Market solutions differentiate by consumer preferences

What Gorbachev, the reluctant reformer, came to realize was the wisdom of Hayek (1988) who wrote that before the ... “failure of Eastern European socialism, it was widely thought that a centrally planned economy would not only deliver ‘social justice,’ but also a more efficient use of economic resources. ... The totality of resources that one could employ in such a plan is simply not knowable to anybody, and therefore can hardly be centrally controlled.”

The “Information Age” provided the means to demonstrate that people valued data differently and reacted to information in dynamic, non-linear ways. When given a chance, the consumers voted with their purchases. This consigned Soviet Inc., with its average-cost models and undifferentiated consumer products, to bankruptcy.

Conclusion: The Soviet Union was an “unprofitable firm”

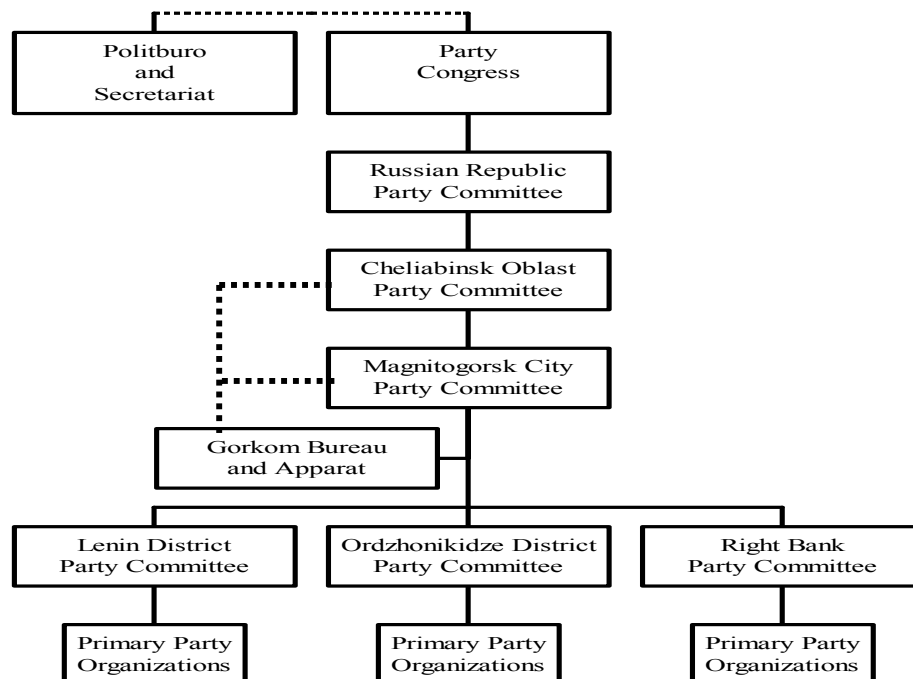
The Soviet Union was a closed, for-profit, hierarchical structure. Viewing the Soviet Union as an inefficient market created a type-two statistical error that accepted a false null hypothesis. This resulted in the “tails” of the distribution containing the non-normative conditions of the shadow economy and securitized colonization to be larger than the normative area for the null hypothesis. Soviet Inc.’s marketing department set prices through command-and-control process rather than through

buyer-and-seller negotiation. Production was reported in terms of volume rather than in terms of value (e.g., 10,000 shoes versus \$1,000,000 of shoes). Everything in the Soviet Union was a trade secret of the Communist Party. Physical barriers to entry included having a different railroad gauge at the border to prevent distribution, and an avalanche of paperwork to prevent origination and access.

The omnipresent and omnipotent party card provided access to career advancement and scarce items. Profit was paid in terms of privilege provided by the party card. The Communist party employed a hierarchical chain of command. Soviet Inc.'s personnel department, the *nomenclatura*, occupied key positions of responsibility. Communists at every level of the organizational structure were expected to implement the party's program.

The Soviet Union was vertical in structure versus collaborative, industrial policy regimes that tended to be horizontal in structure. It was a corporate continent, complete with an organizational chart and procedures manual for the production of goods and services. The following chart illustrates the party structure for the massive steel town of Magnitogorsk located in central Russia (Kotkin, 1991).

Magnitogorsk Organizational Structure



Marxism did produce attempts at market reform with “Titoism” in Yugoslavia and “Goulash Capitalism” in Hungary. Titoism held that under socialism the state must actively “wither away,” rather than get bigger and stronger as in the USSR. Accordingly, Yugoslavia’s highly centralized government and economic system gave way to sweeping decentralization and liberalization. The Soviet policy of government ownership as an enterprise means of production that gives workers control was recognized as a fiction (Harrison, 1962). In 1968, the General Secretary of the Hungarian Communist Party introduced the New Economic Mechanisms. These metrics partially abandoned the Soviet model of economic organization in favor of broad reforms that allowed markets rather than central planners to determine economic decision-making (Buss, 2000). In both instances, a lack of monetary discipline resulted in inflation that created economic problems for Yugoslavia and Hungary.

Ironically, it is primarily the US and Western donor agencies that treat the Soviet Union as an inefficient market and/or believe that market remedies are the best-practice cure for firm maladies. In “Development Experiences in Economic Transition Countries,” published in the *International Journal of Economic Development*, Dr. Kuotsai Tom Liou, Ph.D., stated that

“in a centrally-planned system, resources allocation decisions are made in response to commands from planners in the administrative hierarchy, rather than in response to prices from the market. The Soviet development model especially emphasized a high rate of investment, collectivization of agriculture, priority to heavy industry and military, reliance on large-scale and capital-intensive technology in industry, and the relative neglect of investment in agriculture and consumer goods industries.”

Likewise, in “The Destruction of the Soviet Economic System: An Insiders’ History,” Ellman and Kontorovich state that

“the Soviet system was a highly centralized structure subsuming all organized social activity. ... In this, we are in agreement with the monohierarchical (Ellman, 1989), monoorganizational (Rigby, 1990) or monoarchival (Brus, 1993) model of the Soviet system. This was a minority position in Western social science in the 1970s and 1980s.”

In the preface to “Markets and Hierarchies,” Oliver Williamson stated that one of the book’s goals was to make readers “think transactionally”. In the same way, those participating in the economic development of the post-Soviet successor

states need to “think governance.” Governance structures organize the economic activity. They provide the dynamic, competitive tension for the efficient utilization of resources as economic agents adapt and evolve. Governance identification is not so much a question of “right-versus-wrong,” but a matter of selecting “firm-versus-market” remedies to be the independent variable for economic development.

Much like the shoreline that is defined by the interaction of ocean and continent, economic development is a reflexive process. Trying to develop markets in the absence of firms (and vice versa) is analogous to one hand clapping. The composite of the Soviet Union’s governance structure for normative economic activity evolved from the dynamic tension among and between the four governance structures of firms, markets, government agencies, and industrial policy regimes. This symposium’s thesis is that that “firm” governance was most prevalent. The analytic metrics and the resultant proposals are driven from this perspective.