

**CORRUPTION: ITS NECESSARY ROLE IN THE
PRE-REFORM ECONOMY OF THE
SOVIET UNION AND CHINA**

SARA A. SHERMAN AND HEATHER A. ZDON

This study was inspired by Professor Vladimir Trembl's classes on Comparative Economic Systems and the collapse of the Soviet Union. Both Sara Sherman and Heather Zdon are former students of Professor Trembl.

Sara Sherman is a double economics and psychology major graduating in May 1996. Following graduation, she plans to pursue her M.B.A. while working for a big six accounting firm.

Heather Zdon is a double economics and Spanish major also graduating in May 1996. Following graduation, she will become an analyst at a big three auto manufacturer while concurrently pursuing her M.B.A.

The variety of "corruptive" techniques employed by criminals is virtually infinite and limited only by the creative imagination and experience of the criminal entrepreneurs who devise such schemes.

The Interim Report of the United States President's Commission on Organized Crime and Racketeering, 1985

Western economies have always understood the implicit role of supply and demand. In any capitalist system the market moves to bring these two fundamentals together. Karl Marx attempted to eradicate the market mechanisms of supply and demand from his egalitarian society. This was, and is, impossible. Marx failed to foresee the profound and integral role corruption would weave in affecting supply and demand in centrally planned economy. People developed and honed corruption as a methodology to make supply meet demand. Corruption became common place... corruption became accepted... then, corruption became expected.

The economies of the Soviet Union and China have frequently been analyzed and compared. Much has been written about the "inherent corruption" pervasive in socialist economic systems. This paper, however, is different. We seek to determine not only whether the corruption inherent in both pre-reform socialist systems is similar, but also whether corruption is necessary in the early post-reform economies. Therefore, we must determine if the Former Soviet Union (FSU) and China have different patterns of corruption in the post-reform era.

Many authors argue that such comparisons can not be drawn due to differences in the structures of each country and their approaches to reform. However, our analysis fully addresses those concerns. We will focus on the way that both the structures and the contrasting economic reform movements have affected corruption within each economy. We will illustrate the many forms of corruption from the pre-reform through post-reform economies. We will compare and contrast the pervasiveness of corruption within what formerly were the two largest socialist economies in the world. We will also determine the effects of corruption on the welfare of society.

A study of economic corruption is often complicated by ambiguous definitions of the term. Hereafter, corruption will be defined as offenses that induce practices beyond the scope of official legality. In the case of centrally controlled economies in the pre-reform period, the most prominent practitioners of corruption were government officials. Their simultaneous actions of enforcing and breaking the systems rules substantially influenced the level and distribution of income in the economy. In the post-reform period, the same definition of corruption applies but the players are changing.

The veracity of government statistics and press reports is a major consideration when discussing corruption in socialist economies. The Soviet Union and China were both guilty of widespread suppression of unfavorable information. As

a general rule, in the pre-reform economies statistics were falsified, biased, and full of gaps. Any data that was released portrayed the state in a positive light; this was often accomplished through the use of biased formulas. Secondly, there was no simple correlation between actual instances of corruption and frequency of press reports on corruption (Liu 615). Reports on corruption were often used as of propaganda in order to achieve specific political goals.

This analysis recognizes the unreliability of some of the statistics and published reports of corruption in the pre-reform socialist societies. However, the reform movements have made more information available to the general public; the accuracy and reliability of published statistics is improving. Today, newspapers can provide us with more credible information. However, the majority of information analyzed herewithin has come directly from primary sources. The economists and historians cited have an intimate knowledge of the countries on which they report.

1. Factors Driving Corruption

The types and patterns of corruption are not identical in the pre-reform and the post-reform economies. The impetus for corruption in both pre-reform socialist countries was twofold: the imbalances of the central planning system and the fusion of the Party and the State. Today, corruption still persists. However, the nature of corruption in each country is no longer the same. In the present day FSU, corruption is driven by the absence of formal law and contract enforcement mechanisms. This ill-developed legal infrastructure resulted in the development of high powered mafia activity. In China, the regionalization of the national government coupled with the opening of the economy to foreign markets has produced a prevalent smuggling problem.

1.1 Corruption: Pre-reform Economies

The Soviet Union and China were both socialist, centrally-planned economies. The economies relied upon their respective central plans. The ideal plan had to be both consistent and optimal. All targeted outputs had to be consistent among themselves: total output of each industry had to satisfy the needs of all other industries and of final demand (see the equation below). Shortages or surpluses of any product indicated that the plan was not consistent. Optimality depended on the mix of products delivered to final users. An optimal plan maximized consumer satisfaction within the given resource constraints.

The organization of the Soviet Union was based on functional and specialization principles. Each region specialized in only one function, each ministry supervised only one sector of the economy and each enterprise produced only one good. There was no duplication of activity in the economy; thus, there was a high level of interdependence between regions. No single region could be self-sufficient.

The Soviet structure had inherent difficulties associated with the problem of economic complexity. As the economy became more complex, the information load became too large and too costly to interpret. Continued expansion prevented the center from successfully coordinating strategic planning. As R. Ericson explains, "Gosplan

had to bring into consistency the details of numerous solutions to partial planning problems solved independently of each other, while working with information reported at a level of aggregation too high to have direct operational significance." The sum below corresponded to Soviet "material balances" for product j , where X_j stands for gross output of product j :

$$\sum_{i=1}^n a_{ij} * x_j + Y_j = X_j \quad (a_{ij} * x_j = x_{ij})$$

These equations were incredibly complex. There were millions of variables for which to solve and millions of assumptions that had to be made regarding supply needs. Clearly, inconsistent plans were inevitable under this framework.

The Soviet Union was a more industrialized nation than China. In 1970, the Soviet center (Gosplan) coordinated material balances for over 25 million products (Qian and Zu 15), whereas, the central plan of China consisted of only a few hundred products (Qian and Zu 17). Because China was a more rural and agriculturally based economy with fewer industrial inputs to quantify, their plan was easier to coordinate.

The pre-reform structure of China called for the distribution of responsibility between the state, regional and local governments. The highest level served as the center for the government; the second level was the center for the region. Each geographic region, at each layer of the hierarchy, was regarded as an operating unit. As a result, the regional governments of China had much more autonomy than those in the USSR. Under this regional principle, responsibilities were distributed such that each region had ministries in control of production. The regional ministries were responsible for the state owned enterprises while the provinces or cities ran local enterprises. This organization, however, did not make the routine problems of inconsistent plans any less severe.

Despite these differences in structure, the pattern of corruption was the same in the USSR and China. In both centrally planned economies, the supply of needed inputs was often uncertain. When shortages did occur, the most important industries received their supplies first. Any leftover materials were delegated to lower ranked industries. The problem of perpetual shortages, therefore, prompted managers and employers to hoard inputs and goods which exacerbated the problem.

As a means to safeguard against uncertain supplies, enterprises overstated supply needs and built up excess inventory. Because enterprises in command economies operated under soft budget constraints, there were no penalties for excessive inventory build up. If an enterprise failed to cover its costs, funds were automatically diverted to the firm. Thus, managers regarded the fulfillment of financial plans as less important than output plans. Financial outcomes did not affect real economic variables.

Managers also had a tendency to underreport production capacity. This was due to the command-economy principle of planning from the achieved level; each annual plan was based upon output produced in the previous period. If an enterprise over fulfilled the output target, bonuses were high for that particular period. However, plan requirements became more difficult to meet in subsequent periods. Therefore,

managers chose an output target that was not a maximum but which resulted in bonuses nonetheless. This optimal level of inefficiency, where capacity is under utilized but output is maintained, is termed the ratchet principle.

These subtle acts of reporting misinformation to the planning committee were forms of corruption. They fit into two broad categories: overstating supply and understating production capacity. Both instances of misinformation reporting were types of institutional corruption that clearly arose from problems inherent in the planning system. Other forms of corruption such as bribery and illegal exchanges of goods also grew out of this breakdown in central planning.

Due to supply uncertainty and insufficient inputs, individuals were often forced to find other means of obtaining the necessary materials to meet plan targets in both countries. For example, restaurateurs felt pressured to offer free meals (or more) to both privately and state-employed soft drink and beer delivery men whose supplies were crucial to their business (West 128). Enterprises sent out groups of purchasing agents to roam the nation for materials and equipment. Because the central ministries frequently assigned output quotas to them without providing the required supplies, these middlemen or expeditors were employed by virtually all managers in order to get access to needed inputs. The supply expeditors quickly found that they could satisfy their firms' input needs through corrupt maneuvers.

In the Soviet Union, *tolkachi* were the supply expeditors who scoured the country in search of needed inputs to fulfill the plan and who bribed and bartered in order to obtain them. In China, *cadres* or procurement officers influenced the economy through their power to negotiate contracts and leases. They also played the role of middlemen and brokers in local economic transactions.

Corrupt acts such as bribery were not only used to keep supply channels open, but they were also used to guarantee enterprises a labor force. Theft and bribery were commonly accepted forms of wage supplements which allowed some industries a roundabout way of posting a market-clearing wage. Vodka was frequently given to employees in the USSR in exchange for overtime hours or special project work. Also, enterprises extended loans to employees which were not expected to be repaid. Factories often allocated their goods to their own employees at a discount or even free of charge before they distributed their goods along the proper channels.

In light industry and agriculture, employees were expected to pilfer usable goods to augment their paltry wages. There were greater opportunities for theft of usable goods in retail trade and public dining. Thus, employees were willing to work for wages that were set below the market clearing wage and which were low relative to other professions. Some of these employees, especially those in trade, had first access to scarce goods. Of the goods that were pilfered, they typically kept enough for their families and sold the rest on the black market at a premium. According to V. Trembl, Soviet specialists reported the share of identified and registered theft to be 46% in trade and 25% in local industry (*Employee Theft* 2). At the other extreme, heavy industry employees received much higher wages, than those in light industry, because it was more difficult to steal and profit from the industrial inputs with which they worked.

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Additionally, those who had bureaucratic status clearly gained under this corrupt socialist system. As a matter of routine, officials accepted bribes in exchange for either re-routing scarce supplies manufacturers or for providing "protection," by essentially ignoring obvious illegal acts. Party officials also habitually demanded bribes before they would issue licenses, permits, or any government documentation.

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In fact, officials did not have any other options but to demand bribes because their superiors demanded a cut of their bribe income. Superiors demanded bribes because they had the power to do so; they controlled the highly sought positions below them. If an official reported that he did not extort any bribes, his superiors assumed that he was holding out; the official was still liable for the amount that his superior believed that he had collected. An officials failure to pay his superior resulted in the loss of his job and all privileges that accompanied it. These perks and privileges were only attainable by means of one's position in the government.

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Although all of the above tactics were corrupt and illegal they did stay within the boundaries of "accepted" forms of corruption. There existed a "culture of corruption" in which such activities constituted the norm, even if they were recognized as corrupt. Only when measured against the widely disregarded formal rules, could these activities be considered deviant (Myers 203).

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1.2 Corruption: Post-Reform FSU

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Economic reform has destroyed the old organized structure of corruption in the FSU. Today, the Communist Party no longer has a monopoly on power. This lack of a firm power base, coupled with the introduction of private property rights and the liberalization of both prices and trade, has turned Russia into a virtual battleground fueled by the desire for private gain. In the FSU, business law is still in its infant stages and property rights are poorly defined. It is not clear which transactions are legal. However, in today's economy, legality is not even a chief concern because there is little hope of state enforcement. In the pre-reform Soviet Union, there was no need for special contract enforcement mechanisms because the state entered into all contracts with itself. Today, enterprises and businesses are, for the most part, independent and must enter into agreements directly with each other. "Contracts, whether formal, written documents or just oral promises, are the life blood of a market economy," states Jim Leitzel. "To undermine their efficiency is to shut down the market" ("Mafiosi" 28). Official agreements and contracts are of little use because there is no obligation to keep one's promises. Failure to fulfill contract agreements meets with virtually no official penalty.

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The lack of state enforcement has resulted in a dramatic increase in the demand for private protection services. Inevitably market demand has been met by the formation of mafia groups in Russia. These mafia organizations compete by offering security against harm in business deals. Their main benefit is contract enforcement. Mafia groups also provide dispute resolution and offer their services as loan collectors, and security agents.

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Through intimidating tactics the mafia has not only taken over virtual

control of private trade, but also has intimidated the government sector through bribes and the outright hiring of government employees, especially the police. In the old system public servants were accustomed to accepting bribe payments. Today, because their average salaries are several times below the market rate, they have no incentive to stop this practice. As one traffic policeman explains, "you see in order not to take bribes (nowadays) you have to earn a normal salary. A salary that enables you to live decently so you don't have to wrack your brain about how you're going to feed your family (Leitzel, *Russian Economic* 44)." Bribery and corruption are clearly unavoidable in the current situation.

Indeed, the degree of linkage between officials and criminals is extremely high. In fact, many government officials are closely allied with criminals. A division between the two can be made only by one characteristic: an office. According to the Minister of the Interior Anatoliy Kulikov, on an annual basis police investigate 1600 cases of links between criminal groups and the upper echelons of power (qtd. by Kisunko).

This control of state employees is allowing the mafia to follow general trends for economic crime. Corruption is moving to new and developing sectors such as banking and insurance, which require professional skills and organizational structure (Leitzel, *Russian Economic* 82). These "white collar" crimes are committed by people of respectability and high social status in the course of their occupation. Theft is now committed by pen and not by physical act. To steal physically appears to be a low profit activity and, as a result, crime is moving away from the "typical" sectors of industry and agriculture.

1.3 Corruption: Post-Reform China

Unlike the FSU, China is still a socialist nation in which the state continues to have significant power. It is the distribution of this power that is having the greatest impact on China's key corrupt activities. Decentralization is fueling the rise of smuggling, which roughly parallels its 15 year experiment with quasi-capitalism. China is currently facing a smuggling epidemic that is threatening the growth and stability of the economy. Every year since 1990, at least US \$1 billion worth of durable goods is being smuggled into China from Hong Kong (Blass 34). Additionally, the illegal trade between China and Burma is estimated to be US\$ 1.5 billion a year (Linter; "Black Market" 13). The reason for this pervasive illegal activity is two-fold: the opening of foreign trade and the regionalization of the national government.

Beginning in 1978, the former Head of State Deng Xiaoping and his co-leaders set out to re-establish some private incentives in China's economy. Their intention was to assert individuals' rights to transact with each other and, therefore, ease problems encountered in the central coordination of agricultural and industrial production. To do this, they re-established certain private property rights and allowed decentralized markets a larger role in allocating scarce goods. They allowed prices to fluctuate within these markets. China also eased trade restrictions. They did not, however, relinquish all control. Today, the government still maintains economic plans

and quantity targets and closely monitors price fluctuations.

The Chinese reform policies are giving rise to smuggling activity in a number of different ways. Trade liberalization is opening Chinese borders. However, as of yet restrictions in only some industries have been lifted; other export industries still remain under tight government regulation. Exporters are learning to circumvent these regulations through the use of improper channels. Goods are frequently mislabelled or mispackaged in an attempt to skirt state control and to avoid tariffs. False reporting, deceptive packaging, and receiving shipments of goods without a license, all constitute smuggling.

Forms of smuggling, which conceal activity from the state, are a consequence of the lack of incentives for local governments to enforce the state agenda. Local Chinese officials are not interested in customs laws. "If customs gets a duty on a television, that money never gets to the local government," says Max Lummis, director of China Access, a Hong Kong consulting firm that specializes in China consumer trends and market access (qtd. in Blass 34). Enforcement is routinely compromised by payoffs. Because Peking levies tariffs as high as 100% on imported electronics, smugglers can afford the payoffs necessary to ship smuggled goods (Blass 35).

The dual state pricing system is also enabling smuggled goods to be traded without arising suspicion. Opening the borders results in more goods crossing the borders; the more volume, the easier it is to sneak through. And, China has not resolved the incentive problem that local officials face. According to official reports, the estimated total value of goods smuggled to China was more than 20 million yuan between 1980 and 1982 (Ren 152). In 1985 there were 10,600 cases of smuggling, more than double the 1984 total (Silk 25). These figures continue to grow exponentially.

2. Forms of Corrupt Activity

The exact occurrences and forms of corrupt activities are not as straightforward as they might appear. Few records of corruption were kept by the government and even fewer accurate statistics were released to the public, during the pre-reform era in the USSR and China. Therefore, a discussion of corruption must be based more on anecdotes and individual stories. During the post-reform era, on the other hand, extensive investigations into past and current corrupt activity were conducted in both the FSU and China. As a result, a more complete understanding of the nature of corruption is possible and specific data has been released. Access to this detailed information allows for a comparison of corrupt activities as they change from the pre-reform to the post-reform era.

Not surprisingly, the forms of corrupt activity in the USSR and China were very similar. In the post-reform era, however, our analysis reveals two distinct trends. First, many types of corruption that were present in the pre-reform USSR and China still persist in both countries. Now, however, certain of these corrupt acts are carried out differently. Second, new activities (that were seldom seen or did not exist in the pre-reform era) are arising that are more specific to each country.

2.1 Corrupt Activity: Bribery

One of the most pervasive forms of corruption, in both the pre-reform USSR and China, is bribery. Bribery is the practice of giving or promising money or favors to a person in a position of trust in order to influence his or her judgement or conduct.

Gregory Grossman, an expert on the Soviet second economy activity, observed that bribery was one of the most common crimes in the Soviet Union. Likewise, a 1981 survey made in the city of Changsha in China also showed that bribery was an everyday occurrence. It stated that ninety-nine of one hundred families paid bribe money (*ren qing qian* or personal relations money) averaging a minimum of eight yuan per month (Myers 205). Bribery enabled one to cut through bureaucratic obstacles of all kinds and was necessary for overcoming problems inherent in the socialist system.

In most centrally-planned economies, cash in and of itself did not determine resource allocation. In many industries, bribes were commonly used to gain access to supplies either in order to fulfill plan targets, as discussed earlier, or to maximize personal consumption. In both countries, bribes were often used to jump to the front of lines for scarce goods. For example, in the 1970's, there was a major shortage of service stations in the USSR. The average waiting time for service was 162 hours in 1977 (Pyle 37), which could have been avoided if a sufficient bribe was paid to the mechanic.

The freight and shipping industry, in particular, suffered from widespread bribery. The shipments of flowers in the Soviet Union were a prime example. Since flowers could not grow in many areas of Russia during the winter season, flowers were shipped from other regions. Bribes or "fees" were extracted at each stop along the way as the flowers were transported to Moscow. The same principles were practiced in China. Accounts of Chinese shipping workers reveal that most of them were forced "to pay a fee to get through" every leg of their journey. Many times, these fees took the form of "required" permits which, in fact, were really just bribe payments. Specifically, Liu Zuolun, an individual who transported lumber within China, was forced to pay multiple bribes (including unloading fees, road construction fees, permit fees, expenses to entertain cadres, extortion payments, etc.) on eleven separate occasions (qtd. Myers 205).

The nature of bribery in both countries is changing with transition and reform. In the FSU, as the center loses control of the monopoly on executive, judicial and legislative power, it also loses its monopoly on the ability to demand bribes. In the pre-reform era, there was only one bribe-taker: the party/state apparatus. Reforms, however, have created the opportunity for the central government, local governments, and ministries to each require their own bribe payments. It is also important to note that in today's economies, the person paying the bribe is no longer guaranteed that he will receive the good he seeks or that he will not need to pay additional bribes in the future (Shleifer & Vishny 600). Vishny explains this phenomenon in the FSU with respect to foreign investment:

To invest in a Russian company, a foreigner must bribe every agency involved in foreign

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investment, including the foreign investment office, the relevant industrial ministry, the finance ministry, the executive branch of the local government, the legislative branch, the central bank, the state property bureau, and so on.

In post-reform China, bribery remains a widespread problem. Unlike the FSU, however, the methods of bribery in China continue in the same manner as was characteristic of the pre-reform period.

2.2 Corrupt Activity: Theft of time and goods from the State

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Another ubiquitous criminal activity during the pre-reform era was the theft of goods and time from the work place. According to Brezhnev, the former head of the Soviet state, the theft of state property was a "routine phenomenon" (qtd. in Trembl, *Employee Theft*). In fact, there is a special Russian term, *nesuny* (takers), to describe theft from the work place. Because managers, in both the USSR and China, often received "kickbacks" from these takers they "looked the other way" when theft occurred.

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This discussion of the theft of goods and time from the work place is complicated by the fact that both industry and agriculture of each country will be addressed. The property rights of agricultural products were not as clearly defined as those of industrial products. But, even though individuals worked the lands, a share of their produce was still obligated to the state. Production teams had to provide the state with its quotas before they could distribute any basic foodstuffs to their own members. Also, all lands were directly owned and regulated by the state. Thus, the theft of agricultural goods can also be included in a discussion of theft from the state.

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In order to conserve forest lands in pre-reform China, the state placed strict limits on the amount of wood that could legally be timbered. However, the peasants did not follow these directives. In order to escape being caught by the officials in charge of the forestry, the peasants chopped down trees at night. Then, they transported the lumber to distant villages where people were willing pay higher prices for the wood (Chan 458).

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Theft of time was also a problem in pre-reform USSR and China. Procurement officers, when they were not running errands, were supposed to work in the fields. However, this seldom occurred. Instead, these individuals went home for afternoon naps or left work early (Chan 463). Since procurement officers were crucial in the collection of needed inputs for collectives, they still got paid for this "stolen" time.

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In the industrial sectors, theft of time from the state produced a phenomenon known as "storming." Typically, a firm produced the bulk of its monthly output during the last few days of the monthly plan period. This enabled them to fulfill the requirements to meet output targets and to earn bonuses. Workers would then relax from the beginning of the next month until the last few days of the month, when the majority of production was once again completed. Soviet citizens were very aware of this problem. They often avoided purchasing goods at the end of the month as quality tended to fall due to the production rush (Leitzel, *Economic Reform* 23).

It is also of interest to note that there were examples of "negative theft" in

the Soviet Union. In the coal industry, the state wages were set much higher than amount needed to clear the market (Trembl, *Employee Theft* 17). In this instance, individuals bribed the managers of coal enterprises to hire them.

The nature of theft from the state is changed in post-reform FSU. Since business and criminal laws relating to private activity are still underdeveloped, there are many contradictions which leave the door open for corrupt activity. Now it is far more common, and more profitable, for theft to occur by pen (otherwise known as fraud) rather than by the physical act of taking state property. The banking sector, in particular, is being plagued by a dramatic increase in corrupt activity, which includes the use of falsified electronic bank databases and bank documents. In fact, between 1993 and 1994, the share of crimes in the financial sector more than doubled; between 1992 and 1994 there was almost a ten-fold increase. In addition, the share of routine property thefts decreased from 15.6% to 9.8%. The number of economic crimes in industry and agriculture went from 36% of total registered crimes in 1993 to 25% in 1994. (Kisunko)¹ Economic crime is an increasingly "white-collar" business.

There are also fraudulent activities in post-reform China. However, the laws are more clearly defined and enforcement is much more strict: every year since 1982, the Chinese government has waged a campaign against corruption (Forster 8; Ren 152). In China, there is a recognition of the law. Yet, individuals knowingly side-step through existing loop holes, many of which stem from the slow pace of reform. For example, a merchant bank in the Xingxi region used its official status to divert state funds to itself. These "profits" were then channelled to client firms ("Comrade" 45).

2.3 Corrupt Activity: Back Door Deals

Back door selling was a means of overcoming shortages of goods and services at both the consumer and the enterprise level in the pre-reform, centrally-planned economy. These informal networks ran in tandem with the real economy and were one aspect of the second economy.

Since prices were set below market clearing levels, access to a shortage good depended upon cash, time spent waiting in line, and one's personal connections. The Russian practice of using personal "pull" and favors trading to obtain commodities and services is termed *blat*; the Chinese counterpart to *blat* is *guanxi* which means connections. If one had access to a shortage good through any combination of the above means, one was able to turn this access into increased command over other goods through direct exchange. The phenomenon of *houmen* (Chinese for back door) referred to the actual playing out of this process (Sands 87).

Behind the scenes contracting between planning units, mostly in barter terms, was practiced by most of the state enterprises to help insure the delivery of specific inputs. Bartering of goods also occurred in the rural sector. For example, cooperatives bartered fertilizer for other needed goods like cars and trucks (Zafanalli

¹ All Kisunko statistics were taken from an unpublished brief prepared by the Ministry of Internal Affairs.

719).

Similarly, in the USSR, individuals who controlled state resources illegally exchanged them through the informal markets of the second economy. For example, butchers sold choice cuts of meals through the back door to "special" customers (Leitzel, "Mafiosi" 27). The alcohol industry provided another example of prevalent back door dealings. Second-economy operators working as middlemen bought alcohol in large quantities. Then, they resold the alcohol at a premium to minors and to individuals in restricted places or during restricted hours.

The practice of back door selling in the post-reform era is changing in the FSU and in China. The post-reform era bore witness to widespread theft of *private goods*; whereas, in the pre-reform economies individuals mostly stole *state goods*. Since the law in the FSU is in shambles, there is nothing discouraging people from stealing from the state and from each other. Indeed, it is becoming so widespread that citizens of Russia are being forced to lock their houses and apartments more than was common previously (Goldman 222). These stolen goods are then sold for a profit through illegal networks.

In post-reform China, illegal distributions and illegal sales of state agricultural goods are still major problems. In China, the government is the sole legal buyer of cotton. Nevertheless, the peasants sell as much of their cotton as possible on the black market where they can get up to three times the state price (Kahn). To combat problems like these, China introduced a dual pricing system in the mid 1970's. But, complete price liberalization has not yet been achieved. If official prices do not differ from the market prices, there is little incentive to divert goods to the second economy.

2.4 Corrupt Activity: Bookkeeping

The accuracy of information reported to the government has always been, and continues to be, questionable in both the pre-reform and post-reform eras. The absence of bookkeeping firms exacerbated this problem. In the command economies, it was difficult to design incentive schemes that would align the interests of both managers and central planners. As a result, managers often manipulated the state enterprise books to maximize bonuses while still meeting minimum output targets.

In fact, the abuses were so extensive in pre-reform China that many of the state firms kept two sets of books; one false and one real. Soviet and Chinese enterprises did not report excess output production to the state because output targets for the next plan period would then be even higher. Therefore, rather than hand over any surpluses that had accumulated during the plan period to the state, firms distributed the goods to the workers as "bonuses." These bonuses, typically distributed in-kind, were usually entered in the books as purchases of equipment (Zafanulli 724). The "bonuses" kept output targets at easily attainable levels and served as a means of keeping employees happy.

These abuses also took place outside the enterprise level. In the Soviet Union, drivers of state motor vehicles were entitled to special gasoline coupons (Alexeev, "Underground Market" 1.4). The drivers received higher bonuses by

inflating the mileage that they had actually accumulated. This mileage padding provided official drivers with excess gasoline coupons which were then sold to private car owners at a profit.

In the post-reform economies of the FSU and China, these abuses persist. The gradual introduction of hard budget constraints and taxes are changing business practices. Today, firms are not only pressured to make a profit, but they are also heavily taxed. Firms are now falsifying the books by "forgetting" to include certain sales and lying about their annual profit levels in order to evade income taxes. According to Silk, in 1985 audits conducted in seven Chinese provinces revealed that seventy percent of all factories paid no taxes (27).

2.5 Mafia and Smuggling: Troublesome Forms of Corruption in Post-reform Economies

The biggest concern facing Russia in the post-reform era is the powerful, widespread control and manipulation of the economy by the mafia. Leitzel explains, "the old system was destroyed and the new system was not created to replace it, allowing the mafia to fill in the power vacuum (40)." In fact, Kisunko goes so far as to estimate that the mafia in Russia currently controls 70-80% of all business activity. Whether or not this figure is completely accurate, it is safe to say that protection rackets and violence are part of the daily business life throughout most of the FSU.

As the former Socialist system in Russia continues in disarray and the power of the government remains ineffectual, the control of the mafia is bound to continue. Throughout the 1990's the mafia has been expanding their influence over the banking industry. For example, it is believed by many economists that most of the banks in the FSU are guilty of fraudulent activity. Kisunko estimates that 33-50% of Russian banks are controlled by organized criminal groups.

The power of the mafia also extends beyond the boundaries of the FSU. Since the late 1980's, for example, Russians have flocked to China to buy cheap consumer goods for resale in the FSU. The Russian mafias have not let this opportunity pass them by: every individual, upon arrival in Beijing, is taxed \$100 per visit by a representative of the Russian mafia. Attempts to avoid paying the mafia's demands incur threats of physical violence and possible death (Goldman 226).

In post-reform China, on the other hand, the most significant change in the occurrences of corruption is in the level of smuggling activity. In 1991, even the Public Security Bureau chief of Huizhou was investigated after authorities found large quantities of imported liquors, cigarettes and currency in his home (Blass 35). It has also been discovered that local officials will often "lease shop space and stalls" at exorbitant prices to individuals selling smuggled goods; in return, authorities allow this black market commerce to continue without interruption. The electronics industry, in particular, is vulnerable to such activity because of the high consumer demand and the government's extremely high tariffs. Officials estimate that 90% of the VCR's sold in China are smuggled into the country (Blass 35).

Today, local officials do not adhere to all of the directives issued by the state. Especially in the southern regions, smuggling is becoming an integral part of the

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local industry. For example, in May 1994, the state government waged a campaign against the sale of counterfeit goods in Baigou; however, these orders were not followed with much enthusiasm. The police in Baigou are not concerned with the rise of smuggling. Everyone in Baigou is doing nicely out of the local industry - including the police, who are part-owners of some of the businesses that participate in smuggling activities ("Gangsterville").

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On a different level, legitimate businesses participate in the smuggling industry by knowingly sidestepping existing law. For example, in the 1980's, coal could only be exported through companies under the control of the Ministry of Foreign Trade. To avoid the government regulations, coal producers signed contracts for quantities of humic acid. Humic acid is an organic by-product of coal, but yet it was not under state control. The coal mines would pack coal in 50kg sacks and sell it under the name of humic acid (Zafanulli 722).

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3. Effects of Reform on Corruption

The previous discussion on the forms of corruption, in the pre-reform and post-reform periods of the Soviet Union and China, laid the foundation necessary to determine the effects of reform on corruption. Clearly, some of the activities are changing in significance, form, and/or prevalence. These new forms of corruption can be explained by each country's approach to reform, given their aforementioned structural differences.

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The Soviet Union and China pursued two different reform strategies. The Soviet Union pursued a path of "shock therapy." The changes in policies and mechanisms were made relatively quickly and were implemented over a short period of time. China took a diametrically different approach to reform. Their approach entailed the slow and careful implementation of reforms in successive stages that spanned many years.

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A key difference between Russia's and China's strategies lies in their respective approaches to privatization. The Soviet Union's economy was centered on the dominating state industrial sector. Thus, private business activity could not be introduced without redefining the industrial sector. The state sector was simply too big to ignore. In China the state was relatively small. Thus, China had the ability to delay the privatization of the state factors of production until other market structures were in place. To date, economic growth in China has not come from its privatization efforts in the state sector, but rather from the opening of new businesses made possible by China's enforcement of private property rights (Goldman 205).

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Interdependence of firms is another key factor in evaluating approaches to reform. In the USSR, there was a high degree of interdependence which made experimentation and reform implementation much riskier and much more difficult. Interdependence was much lower in China than in the USSR; each region in China was and still is relatively self-sufficient. As a result, reform experiments, with either good or bad consequences, have had only localized effects. This principle has enabled the economy to implement reforms with a higher chance of success. Temporary regional adjustments do not slow down the normal functioning of the whole economy.

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If an experiment fails, only one region must bear the costs.

3.1 Effects of Reform: The Former Soviet Union

In the FSU shock reforms have stripped the state of its power and changed the dynamics of the marketplace. Although the pre-reform economy was not efficient, there was certain a degree of organization and order to corruption. Corrupt activities were commonplace and expected. Everyone had specific roles within the corrupt economy, but reform has altered this organized system of corruption. Rapid reforms have resulted in a lack of a clear power base which is creating a breeding ground for mafia activity.

The mafia discourages legal private business. Many people fear both the mafia and their excessively high "protection" demands. Often businesses voluntarily restrain their production capacity in an attempt to operate underground, thereby avoiding excessive mafia rents. Eventually, however, these enterprises are driven out of business either because their production is at a level too low to be sustainable or because the mafia discovers them and requires payment. Many other potential businesses are never even started for the same reasons. Quite simply, people are afraid of dealing with the mafia.

A second reason for the lack of new private enterprise development is the tax structure. The private sector is so heavily taxed that it is simply not profitable for one to move from the subsidized industrial sector into the private sector. Consequently, businesses either chose to enter the market or they conceal their private economic activity. Concealment not only allows one to evade taxes, but also does not attract the attention of racketeers.

The powerful control of the mafia also plays a role in widespread tax evasion. Businesses can not afford to pay taxes on top of mafia payments. Thus, individuals evade tax collection so that they can afford to pay their local mafia. Tax evasion then leads to higher tax rates which, in turn, pushes more businesses underground and repeats the cycle.

Another effect of reform and of mafia presence is the growing encroachment on foreign business. As Goldman explains, as central power becomes weak and ineffectual, the mafia can extend its reach to foreign businesses. Companies must rely more on private internal security forces for protection. The nightmare of an American manufacturer of cigarettes illustrates this point:

Having decided to open up a market in Kazakhstan, the company arranged for a protective unit of former Russian military personnel to accompany its train full of cigarettes from the border to Almy Ata. Armed guards were stationed on each boxcar. The train ultimately reached its destination but not before the mafia made three attempts with machine guns to raid the train (Goldman 226).

Finally, an increase in the prevalence and ease of money laundering is another effect of reform. First, privatization enables large sums of money originating from criminal sources to be transferred into assets, thereby hiding the origin of the funds. Second, according to some estimates, about one half of foreign investment in

Russia is financed with money that originated from criminal activity within Russian borders (Kisunko). For example, the mafia often transfers its "illegal funds" to foreign bank accounts which provide greater stability than domestic banks. At a later date, this money is reinvested in Russia.

3.2 Effects of Reform: China

In China, decentralization and the evolving market structure fuel the growing smuggling industry. Localism has given greater autonomy to the provinces. Customs regulation is now a local industry as opposed to a state industry but tariffs remain high. Smugglers avoid these punishing custom duties, by providing the border officials with lucrative "side payments."

In the post-reform era, China has also opened free markets within the country. This is an extremely important requirement for smuggling. Free markets provide smugglers clear channels in which to dispense their goods. Looser controls mean that once goods are inside the country, they can be distributed without encountering insurmountable obstacles. And, of course the profits, the primary impetus for smuggling, make it all worthwhile.

Smuggling saves both the buyers and sellers money. An example of a 33-inch Panasonic televisions in 1993 quantifies this concept. The televisions that were smuggled (and thus avoided tariffs) cost between Rmb 17,900 and 18,200; whereas, legitimate domestic retailers listed it for Rmb 25,600² (Blass 35).

In addition, agricultural reform is gradually lifting the regulations on the rural labor force whose opportunity costs were below the earnings available in the industrial private sector. As a result, many Chinese are looking to enter the private sector. China's labor immobility laws, however, make it virtually impossible for these agricultural workers to legally migrate and find the type of employment they seek³. With few available options, these laborers move into the smuggling industry.

Finally, due to the expanded role of taxation in government financing, tax evasion is becoming more widespread. Only since the early 1980's have enterprises and some individuals in China been required to pay income taxes. Before the reform, enterprises handed all profits over to the State, who then allocated the funds according to central plans. The current losses incurred by the State through non-payment of taxes is considerable. An investigation in July 1982 revealed that the "violation of economic and financial discipline during the past two years had cost the State a total of 4.5 billion yuan (qtd. in Zafanoli)⁴.

² It must be noted that this model was frequently not available at most retail shops.

³ According to Ignatius, in China participation in the official labor market requires a residency permit and opportunities to change jobs normally require government approval.

⁴ Xinhua, December 14, 1982 (report on the budget by Wang Bingqian)

4. The Effects of Corruption of the Welfare of Society

The overall effects of corruption on an economy must be addressed in a complete examination of corruption. For the pre-reform economies of the Soviet Union and China, corruption did, indeed, improve social welfare. In the post-reform period, however, the effects of corruption on the economies of both countries are not as clear cut in the aggregate. Nonetheless, Leitzel's point of view that current corruption is a "necessary evil" is not without foundation ("Mafiosi" 28).

Although the term "corruption" most often carries negative connotations, it is unreasonable to conclude that it had only negative effects on the growth, efficiency, and stability of the economy. Regardless of how one views the moral nature of corrupt activity, the fact remains that corruption was one perfectly viable solution for overcoming structural inconsistencies and inefficiencies. In fact it could be argued that if one had eliminated corruption from the system, the economy would not have been able to function.

In the centrally planned-economy there was no feedback system. Information was channelled to only certain sectors of the economy. If goods were low in quality or were not in high demand, this information did not always reach the planning authorities. The state produced whatever it wanted to produce, regardless of what was most beneficial for the consumer. Corruption, however, helped to fulfill demands that were not being met under the state's central plan by effectively equating supply with demand across many markets. The reallocation of inputs represented Pareto improvement over the planned allocation.

Bribery was often used to "adjust" state allocations. A bribe facilitated the flow of goods and services in the economy that might otherwise have been plagued by bottlenecks (Myers 204). Without this illegal activity, obtaining the necessary inputs was unlikely and, thus, production could not be guaranteed. But, if an enterprise met the centrally planned output targets, the extent of consumer good shortages was decreased.

It was also commonplace to use connections, both *guanxi* and *blat*, to obtain needed materials and inputs that were in short supply. A Chinese village peasants explained:

I'd file a false report at the county resources department claiming the production team desperately needed, say, cement. Best of all was to declare that the team needed more storage house for the state's grain, or needed cement for building concrete drying yards for the grain. Actually our team had enough storage space, etc. But through my *guanxi* I'd get the material to build private residences. Without resorting to these illegal means there was no way to build a house in the village. Materials were simply too scarce (Chan 463).

These activities enabled individuals to gain access to goods and/or materials that were otherwise unattainable.

Another systemic feature of the centrally-planned economy was the inflexibility of the wage system. State wages were set below the market clearing wage

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with few exceptions. Since managers had very little authority to adjust the state determined wage, they had to find other means of "bidding" for scarce labor resources. The theft of goods and time from the work place was a mutually beneficial solution to this problem. Clearly, corruption enhanced social welfare in the aggregate.

The systemic features that were at the root of corruption in the pre-reform Soviet Union and China no longer exist to the same degree. In the pre-reform period, a variety of corrupt measures were present, all of which helped correct for plan inconsistencies, wage inflexibility, and supply uncertainties. The purpose and necessity of corruption has changed in the current post-reform economies

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In post-reform Russia, the mafia situation is complex. Mafia presence provides society a service by their contract enforcement powers. Thus, the mafia has prevented production from collapsing. However, the mafia extracts a large tax. The rents that the mafia extracts can be seen as a pseudo-tax. This pseudo-tax is a marginal welfare cost of mafia presence.

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In post-reform China, the high levels of smuggling activity can also be seen to benefit society. In many ways, smuggling has unwittingly introduced market forces into China. Domestic producers are being forced into competition with foreign made producers. This competition with foreign made goods has slowly both increased the quality of domestic goods and lowered prices.

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5. *Corruption: Is there a way out?*

Although corruption continues to play a large role in the economies of the FSU and China, there are ways in which to break free of the corruption cycle. It is not clear what the effects of the following measures may be, but they offer opportunities to reduce the scope of corruption.

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In post-reform Russia, the mafia is probably the greatest force impeding the long term development of the economy. In order to achieve a more market oriented economy, the power of the mafia must be lessened. Two possibilities for achieving this goal present themselves.

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First, the FSU Russia should continue to loosen remaining state controls on the economy. The mafia's scope of power is dependent upon the existence of government monopolies and the illegality of private enterprises (Leitzel 45). The difficulty of competing with state controlled businesses forces many private enterprises to seek services provided by the mafia.

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Second, a loosening of state controls must also be accompanied by reform of the police and legal system. The FSU's private business sector is plagued by the inability to legally enforce business contracts. Laws are conflicting and the police department is saturated with corruption. The government needs to clarify the law and develop new legislation for private activity beyond the infant stages. Additionally, police salaries should be increased so as to decrease the incentives for corrupt activity.

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China's immediate concern should be confronting the rapidly increasing smuggling industry. One way to decrease the incentives for illegal trafficking is to decrease import barriers and tariffs. Currently, the state loses much revenue from

failed customs collections. Decreasing import tariffs will encourage more goods to flow across the borders through legal channels, and thus raise customs revenue⁵.

These reforms must be coupled with adaptations in the incentives for officials, discussed earlier. The current system disallows sending portions of the tariffs to the local governments; but, the local authorities are in charge of collection. All collections are expected to go directly to the state. China should place customs control back in the hands of the state. Additionally, the wages of state customs officials should be sufficiently high, in order to discourage the acceptance of bribes that might threaten job security.

6. *Conclusions*

This paper has provided a detailed explanation of institutional corruption in pre-reform and post-reform China and Russia. Disparate pre-reform conditions did not cause major difference in the types of corrupt activity. The forms and types of corruption in the Soviet Union and China have been changed by the current movements away from command economies towards market economies. The necessity for corruption, however, has not been eliminated.

The reform movements of the two goliath socialist economies will not be completed until Western principles and institutions are created and become established. If corruption continues to go on unfettered, criminal activity is bound to have long-lasting unhealthy effect on the respective economies. Fundamentals must be established such as a uniform and fair code of contract law, an honest and efficient banking system, property right protection, and incentives for hard work and risk taking.

These principles and institutions must be nurtured and protected by a government which enthusiastically polices and enforces these principles. Only then, will the ubiquitous corruption no longer be necessary. Corruption will begin to lose its luster as the necessary catalyst in the former command economies of the Soviet Union and China. Corruption will no longer be expected... corruption will no longer be accepted... then, corruption will no longer be common place.

⁵ In other words, lower tariffs would lower smugglers' cost savings and thus, encourage more goods to flow through legal channels. A significant increase in volume coupled by a less significant tariff decrease would result in the high border collections.

Bibliography

- Alexeev, Michael V. "Underground Market for Gasoline in the USSR." Berkeley-Duke Occasional Papers On the Second Economy in the USSR. Paper No. 9, April 1987.
- Alexeev, Michael V. and Ali Sayer. "The Second Economy Market for Foreign Made Goods in the USSR." Berkeley-Duke Occasional Papers On the Second Economy in the USSR. Paper No. 11, December 1987.
- Baum, Julian. "Attitude Problem: Taiwan Government Fails to Confront Drug Crisis." Far Eastern Economic Review. 2 Mar. 1995: 30.
- "Black Market Holds Hope for Revival." Far Eastern Economic Review. 25 Aug. 1988: 13-14.
- Blass, Anthony. "Smugglers' Outpost." Far Eastern Economic Review. 24 June 1993: 34-5.
- Chan, Anita and J. Unger. "Grey and Black: The Hidden Economy of Rural China." Pacific Affairs. Hong Kong: March 1982: 452-471.
- Chen, Kathy. "China Is Faulted By U.S. Group On Piracy Pact." WSJ. 14 Oct. 1995.
- "China is Experimenting with Floating-rate Currency." WSJ. 24 Feb. 1986.
- "Chinese Capitalists get rich in Black Market for Dollars." Chicago Tribune. 12 Sept. 1985.
- "Chinese Clamp Down on Black Market." Chicago Tribune. 18 Aug. 1987.
- "Comrade or Embezzler?" Euromoney. April 1986: 41-2.
- Feuchtwang, Stephan, Athar Hussain, and Thierry Pairault. Transforming China's Economy in the Eighties. 2 vols. London: Zed Books, Ltd., 1988.
- Fung, K.K. "Surplus Seeking and Rent Seeking Through Back-Door Deals in Mainland China." American Journal of Economics and Sociology. July 1987: 297-317.
- Forster, Keith. "The 1982 Campaign Against Economic Crime in China." The Australian Journal of Chinese Affairs. Vol. 14, 1985: 1-19.

- Gambetta, Diego. The Sicilian Mafia. Cambridge, MA: 1993.
- "Gangsterville." The Economist. 11 June 1994: 30.
- Goldman, Marshall. Lost Opportunity: Why Economic Reforms in Russia Have Not Worked. New York: W.W. Norton & Co., 1994.
- Gomulka, Stanislaw, Yong-Chool Ha, and Cae-One Kim, eds. Economic Reforms in the Socialist World. Armonk, NY: M.E. Sharpe, Inc., 1989.
- Gregory, P.R. and R.C. Stuart. Soviet and Post-Soviet Economic Structure and Performance. 5th ed. New York: Harper Collins, 1994.
- . Comparative Economic Systems. 4th ed. Boston: Houghton Mifflin Company, 1992.
- Ignatius, Adi. "Black Market for Jobs Blossoms in Beijing." WSJ. 23 Sept. 1987.
- Kahn, Joseph. "Rebellion Grows in China's Cotton Fields." WSJ. 15 Nov. 1994.
- Kaye, Lincoln. "Discipline Restored." Far Eastern Economic Review. 9 Sept. 1993: 58.
- . "Currency Jitters." Far Eastern Economic Review. 4 March 1993: 36.
- . "Invisible Hand: China's Conversion." Far Eastern Economic Review. 4 June 1992: 69.
- Kisunko, Gregory. "Economic Crime in the Russian Federation." Draft.
- Leitzel, Jim. Russian Economic Reform. New York: Routledge, 1995.
- Leitzel, Jim, C. Gaddy, and M. Alexeev. "Mafiosi and Matrioshki." The Brookings Review. Winter 1995: 26-29.
- Lintner, Bertil. "The Busy Border." Far Eastern Economic Review. 8 June 1989.
- Liu, Alan P. "The Politics of Corruption in the People's Republic of China." The American Political Science Review. Vol. 77, 1983: 602-621.
- Lubove, Seth. "As the Worms Turn." Forbes. 19 March 1990: 76-83.
- Mann, Jim. "China Rousting Street Money-Changers." Times. 19 March 1985.

McKinnon, Ronald. The Order of Economic Liberalization. 2nd ed. Baltimore: The John Hopkins University Press, 1993.

Myers, James T. "Modernization and 'Unhealthy Tendencies'". Comparative Politics. January 1989: 193-211.

Naughton, Barry. "China's Economic Success."

Nee, Victor and F.W. Young. "Peasant Entrepreneurs in China's 'Second Economy': An Institutional Analysis." Economic Development and Cultural Change. 1991: 292-310.

Pyle, William. "Private Car Ownership and Second Economy Activity." Berkeley-Duke Occasional Papers On the Second Economy in the USSR. Paper No. 37, December 1993.

Qian, Y. and C. Xu. "Why China's Economic Reforms Differ: The M-Form Hierarchy and Entry/Expansion of the Non-State Sector." London: School of Economics, 1992.

Xin, Ren. "The Second Economy in Socialist China." The Second Economy in Marxist States. Ed. Maria Los. New York: St. Martin's Press, 1990.

Sachs, Jeffrey and Wing Thye Woo. "Reform in China and Russia." Economic Policy. Great Britain: April 1994. 101-145.

Sands, Barbara N. "Decentralizing an Economy: The Role of Bureaucratic Corruption in China's Economic Reforms." Public Choice. Vol 65, 1990: 85-91.

Schleifer, A. and R.W. Vishney. "Corruption." Quarterly Journal of Economics. Aug. 1993: 597-617.

Shelley, Louise I. "The Second Economy in the Soviet Union." The Second Economy in Marxist States. Ed. Maria Los. New York: St. Martin's Press, 1990.

Silk, Mitchell. "Economic Crime in China." The China Business Review. Jan-Feb 1988: 25-29.

Smith, Craig. "China Becomes Industrial Nations' Most Favored Dump." WSJ. 15 Oct. 1995.

Smith, Craig and M.W. Brauchli. "Boom and Gloom: Despite Rapid Growth of China's Economy, Many are Suffering." WSJ.

Trembl, Vladimir. "Drinking and Alcohol Abuse in the USSR in the 1980s." Soviet Social Problems. Eds. Jones, Anthony, Walter Connor, and David Powel. Westview Press: 1991.

---. "Study of Employee Theft of Materials from Places of Employment." Berkeley-Duke Occasional Papers On the Second Economy in the USSR. Paper No. 20, June 1990.

Yang, D.J. "Ho, Ho, Ho Chi Minh! Capitalism is No Sin." Business Week. 26 Sept. 1988: 40-1.

Yin, Jason Z. and William A. Stoeber. "Testing the Causes of Discontinuities in the Black Market Exchange Rate in China." World Development. Vol. 22, No. 9 (1994): 1413-24.

Zafanulli, Wojtek. "A Brief Outline of China's Second Economy." Asian Survey. 7 July 1985: 715-736.