

Is Political Risk Company-Specific?

The Market Side of the *Yukos* Affair*

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Abstract

The *Yukos* affair, a state-led assault on controlling shareholders of a private Russian oil company, demonstrated the shaky nature of property rights in emerging markets. As it appeared, the market was more effective in determining the underlying causes than business and political analysts. While some rating agencies first predicted no threat to company creditors, the stock market correctly predicted that (i) political ambitions of the *Yukos* CEO and other majority shareholders would prove damaging to their business; and (ii) arrests of *Yukos*' top managers for unrelated criminal charges was a signal of across-the-board toughening of the state policy towards big business. Among private companies, the risk appeared especially high for non-transparent companies, oil companies, and companies privatized via the infamous loans-for-shares auctions. Surprisingly, transparent state-owned companies were also very sensitive to *Yukos* events. This evidence suggests that investors considered the risks of a company losing its value due to the political ambitions of its top management, but were also concerned with tax and privatization reviews for private companies and inefficient government interference for state-owned ones.

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1. Introduction

When considering an investment into a firm, do investors need to pay attention to political ambitions of the CEO? Indeed, political risk is a salient feature of emerging markets.¹ Traditionally, scholars have focused on the impact of political events on financial performance and risk at the country level (e.g., Chan and Wei, 1996; Johnson, Kaufmann, and Zoido-Lobaton, 1998; Kim and Mei, 2001; Azam, Bates, and Biais, 2005).² Recently, a new literature has emerged that investigates the link between politics and finance at the company level by examining the value of political connections of individual companies (e.g., Johnson and Mitton, 2003; Fisman, 2001; Faccio, 2005; Phillips-Patrick 1989; Bailey and Chung, 1995; Chen, Fan, and Wang, 2004; Cheung et al., 2005). We contribute to the literature on the nature of company-specific political risk with an analysis of the *Yukos* affair, a highly publicized story of state-led assault on a private Russian company owned by a small group of politically ambitious individuals.

While most of the Russian and world media, including leading rating agencies and business analysts, were focused on broad political consequences immediately after the attack, the market correctly interpreted the events as a starting point of an across-the-board increase in state involvement. Formally, the initial criminal charges brought against major shareholders and top managers of *Yukos* had nothing to do with the company. Standard & Poor's, a leading international rating agency, left *Yukos*' credit ratings (BB/Stable; ruAA+) unchanged in the days following its CEO's jailing. The agency's statement that circulated after Mikhail Khodorkovsky's arrest – four months after the arrest of the company's CFO Platon Lebedev – said: "The positive operational and financial indices of the company and its high liquidity protect creditors from the negative effects of these developments." Even after this second arrest, Alfa-bank, the largest private bank in Russia, asserted a positive outlook both for *Yukos* and the Russian stock market (Alfa-bank, November 2003). Yet, the market capitalization of *Yukos* decreased dramatically after its managers were arrested and various state agencies started to investigate the company and its employees. Moreover, stocks of other Russian companies also reacted negatively to *Yukos* events, and the degree of stock price reaction varied a lot across the companies. These company-

¹ Political risk usually includes risks of nationalization or expropriation, changes in currency and exchange controls, regulation and tax regimes; and general instability.

² Other studies of political risk include Ekern (1971); Eaton and Turnovsky (1983); Alesina and Tabellini (1989); Cutler, Poterba, and Summers (1989); Erb, Harvey, and Viskanta (1996); Clark (1997); Mei and Guo (2002); Vuchelen (2003); Amihud and Wohl (2004); and Durnev and Fauver (2007).

specific market reactions allowed us to identify different types of enterprises vulnerable to political risk in Russia.

We investigate the nature of political risk faced by Russian firms via their stock market behavior in 2003, during the first months of the *Yukos* affair. How did investors interpret these events? The prevailing view (see a brief overview in Section 2) was that the attack on *Yukos*' owners was meant to discourage their active involvement in politics and would not affect other companies (the "individual politics" hypothesis). However, we show that the market correctly reflected that the state agencies' actions against *Yukos* would have consequences for the whole business community.

Even with the understanding that the arrests of the two *Yukos* managers gave a signal of a dramatic change in the Kremlin's policy, investors might have had varying expectations of what would happen next. For example, the *Yukos* affair could be the first step in a campaign to strip oligarchs, big Russian businessmen, of their political influence (the "oligarch" hypothesis). Alternatively, *Yukos* events could imply an increase in the probability of imposing a stricter tax regime for natural resource companies, especially those in the oil industry (the "oil rent" hypothesis). Or, the criminal investigation of *Yukos* managers might have indicated the government's intention to review the tax avoidance strategies actively used by Russian companies in 2000-2003 (e.g., Desai, Dyck, and Zingales, 2004) and the privatization abuses of 1990s, probably opening the road for re-nationalization (the "tax review" and "privatization review" hypotheses, respectively). The common thread in these stories was the strengthening of the Kremlin's control over the business community and the possibility of *selective* government intervention, which could seriously damage any private company.

For state enterprises, the potential impact of *Yukos* events was less obvious. According to the "visible hand" hypothesis, the government would be more actively involved in their affairs and this interference could be beneficial or detrimental depending on the efficiency of the company's management.

At the early stages of the affair, when the tactics of the state had not yet been settled – until December 2003 it did not seem plausible that the main line of attack would be prosecution for tax avoidance in the past – various ministries and individual government officials were involved. Our data set includes 47 events defined as publications in which *Yukos* was mentioned along with one of the state agencies during a period from January 2003 to November 2003. The typical events in our data set are threats to revoke oil field licenses, anti-monopoly investigations, and personal charges for misdoings in past privatization deals or for tax evasion (see Appendix 1).

In the first part of the paper, we analyze how news involving *Yukos* along with different types of state agencies affected the company's stock price, using the market model as a

benchmark. We find that *Yukos*' returns were mostly driven by employee-related charges by law enforcement agencies rather than charges against the company, which is consistent with the "individual politics" hypothesis. These results are robust and not driven by a few major events, such as the arrests of *Yukos*' top managers and shareholders.

Then, we examine which companies were more sensitive to the signals provided by state agencies' actions against *Yukos*. Using a sample of the 25 most liquid Russian common stocks, we run pooled cross-sectional regressions of stock returns during the event dates on the company-specific political risk exposures, interacted with *Yukos*' returns. Among private companies, *Yukos* events involving law enforcement agencies had the strongest impact on non-transparent companies and those privatized via the infamous loans-for-shares auctions. In addition, *Yukos* events involving regulatory agencies had an oil-industry-wide impact. Apparently, investors foresaw that less transparent private companies were more likely to receive *back-dated* tax claims, whereas oil companies would have to pay more taxes in the *future*. The "oligarch" story is not supported by the data.

Surprisingly, transparent government-owned companies were also very sensitive to *Yukos* events. Probably, investors were afraid that these companies could be forced to join those state enterprises that provide massive non-tax benefits to the state bureaucracy (Gehlbach, 2003). Overall, this implies that the "individual politics" story cannot fully explain the state agencies' actions and that investors seriously considered the risks that the Kremlin's new policy implied for Russian companies.

Finally, we investigate in detail two other large Russian companies, *Lukoil* and *Gazprom*, to delineate the stock price reaction with respect to their own company-related news involving state agencies and to *Yukos*-related news. We find that stock returns of *Lukoil*, a private oil company, were affected both by its own negative events due to law enforcement agencies and by *Yukos* events due to other agencies. This could be due to the risks of oil rent, tax, and privatization review. In contrast, stock returns of *Gazprom*, a state-controlled gas monopolist, rose in response to the involvement of regulatory agencies that could discipline the company's management and to negative *Yukos* company-related events, which is consistent with investors foreseeing possible re-nationalization of *Yukos*' assets via state companies in the oil and gas sector.

Our work is directly related to the recent studies of political connections of big businessmen in Russia (Desai, Dyck, and Zingales, 2004; Frye, 2004; Guriev and Rachinsky, 2005; Hoff and Stiglitz, 2004; Sonin, 2003, Durnev and Fauver, 2007) and elsewhere (e.g., Acemoglu, 2005; Desai and Moel, 2004; Hellman, 1998; Morck, Stangeland, and Yeung, 2000; Morck, Wolfenzon, and Yeung, 2004; Rajan and Zingales, 2003). The closest paper to ours is Fisman (2001), which examines how political connections of Indonesian companies affected their

stock market performance in 1995. He finds that Indonesian firms with close ties to the Suharto regime lost more value in response to news of Suharto's health problems than those less politically connected. Johnson and Mitton (2003) study an interaction between cronyism and capital controls in Malaysia at the time of the Asian crisis. They demonstrate that many firms with political connections lost valuable subsidies during the first phase of the crisis; however, some of them restored their subsidies after the government imposed capital controls in September 1998. Durnev and Fauver (2007) explore consequences of predatory policy by governments in emerging markets.

Faccio (2005) examines the value of corporate connections with political officials using a comprehensive cross-country set of firms. She finds a significant increase in market capitalization when the company's directors or large shareholders enter politics, but not when politicians become involved in business. Faccio, Masulis, and McConnell (2005) document that politically connected companies are more likely to be bailed out than other firms. Chen et al. (2004) report that post-IPO underperformance of Chinese companies is largely attributable to the presence of politically connected CEOs. Using historical data from the German stock market, Ferguson and Voth (2005) find that firms with close links to the NSDAP reacted favorably to Hitler's seizure of power in 1933.

The specifics of our paper in relation to this literature is twofold. Firstly, we investigate in detail the negative side of political risk, i.e., the potential damage from the actions of state agencies for different types of companies. This damage may result not only from direct expropriation, but also from changes in taxation, regulation, etc. Secondly, we identify the key characteristics of the companies that make them vulnerable to the potential attack by the state. This differs from the traditional approach, which examines whether the observed measure of company's political connections can explain its reaction to a certain event. In contrast, we do not have a good measure of the company's political risk exposure except for the government ownership (it is believed that every private company must be politically connected to stay afloat), but rather infer it from market reaction. Thus method may be applied out of the Russian context to identify the actual susceptibility to political risk of a given company in a period of instability, as perceived by the market.

The rest of the paper is organized as follows. In Sections 2 and 3, we discuss the chronology of major *Yukos* events since its creation in 1993 and our empirical hypotheses. Section 4 describes the data. In section 5, we employ time series analysis to investigate which type of *Yukos* events had the strongest impact on the company's stock price. In section 6, we use a pooled regression approach to examine factors that could explain the differences in other companies' stock price reaction to *Yukos* events. Section 7 presents a detailed time series analysis

of the stock price behaviour of *Lukoil* and *Gazprom* in response to their own events and *Yukos* events involving state agencies. Section 8 concludes.

2. The *Yukos* Story

The story of *Yukos* has recently been reported in a number of policy texts (e.g., Aron, 2003; Hill, 2004) and newspaper articles (we use the most trusted media sources such as the *Economist*, *New York Times*, *Financial Times*, *Wall Street Journal*, and *Washington Post*). We provide the basic facts without going into much detail and try to establish the event sequence for our empirical investigation.

Yukos was created by the Russian government to integrate a number of parts of the former oil industry in April 1993, and it was subsequently privatized through one of the infamous loans-for-shares auctions.³ Freeland (2000) (see also Hoffman, 2002) provides a comprehensive and colorful description of the privatization auctions; anecdotal evidence of extreme forms of corruption in these auctions is overwhelming (e.g. Black, Kraakman, and Tarassova, 2000; Goldman, 2003; see, however, Shleifer and Treisman, 2000, on the impossibility of another course of economic reforms). Since polls of public opinion in Russia have consistently demonstrated that a majority of population does not accept the privatization results in full, any state-led attack on a former state-owned company might be interpreted as an attempt to review the privatization results.

Until the moment when *Yukos*' core shareholder group accumulated an absolute majority of shares, the fate of the minority shareholders, including foreign institutional investors, had been miserable. (See Black, Kraakman, and Tarassova, 2000, for an extended analysis and many legal details of abuses of *Yukos*' minority shareholders after the 1998 default; Hoffman, 2000, on possible criminal involvements of core *Yukos* shareholders; Desai, Dyck, and Zingales, 2004, on tax avoidance by *Yukos* and other Russian oil majors; Durnev and Fauver, 2007, on the potential riskiness of such strategies.) Since 1999, however, *Yukos* has often been ahead of other large Russian companies in developing new standards of corporate governance and transparency. In 1999, *Yukos* became the first large Russian company to report by international accounting standards. The company's 2002 annual report was audited by *PriceWaterhouseCoopers*. In 2000, *Yukos* paid its almost 60,000 shareholders \$300 million in dividends (\$500 million in 2001 and \$700 million in 2002), the first Russian oil company to do so. In August 2001, the *New York Times* reported "Mr. Khodorkovsky has concentrated on recasting *Yukos* to look more like a company that investors can trust."

³ The company's name is an acronym of the names of two state-owned companies that were parts of the merger: *Yuganskneftegaz* and *KuybyshevOrgSintez*.

The growth rate of *Yukos*' output was 17% in 2001, 19% in 2002, and 20% in 2003. Between 1998 and beginning of 2003, the company's market equity capitalization had grown more than tenfold. In September 2002, *Fortune* magazine ranked Mikhail Khodorkovsky, the CEO and a major shareholder of *Yukos*, first in its list of the "Global 40 Richest Under 40." In a paper claiming at least partial success for Russia's economic reforms, Shleifer and Treisman (2005) use post-1998 *Yukos* as a success story and note that "in 2002, *Yukos* invested \$1.26 billion in property, plant, and equipment," refuting the argument that oligarchs were just stripping assets from the company (see also Guriev and Rachinsky, 2005). Although the impressive growth of the company's value in 1998-2003 was partly due to historically high oil prices, it was faster than that of any other major oil company in the world. At the time of the assault, *Yukos* was the largest oil company in Russia and second only to *Gazprom* among all Russian companies, judging by market equity capitalization (see Table 1).

Events that started a new page in *Yukos*' history and attracted attention world-wide were the arrests of two major shareholders and founders of the company, Platon Lebedev and Mikhail Khodorkovsky. Lebedev, a major shareholder and director of *Menatep*, a holding and investment company that owned 61% of *Yukos*' common stocks, was arrested on July 2, 2003, and charged with embezzling state assets in the 1994 privatization of Russia's largest phosphate extraction and enrichment plant, *Apatit*. Khodorkovsky, the CEO and the largest shareholder of *Yukos*, was arrested on October 25, 2003, and charged with tax evasion, fraud, forgery, and embezzlement (all charges unrelated to *Yukos*). Subsequently, the state prosecutor's office has issued additional charges against Khodorkovsky and Lebedev, including tax evasion, abuse of trust, and failure to comply with a court order; their petitions for bail have been repeatedly denied.

Since July 2003, a number of law enforcement and regulatory agencies undertook unfriendly actions against the company (see Appendix 1 for the list of major *Yukos* events initiated by state agencies). There was also a coordinated attack on *Yukos*' core shareholders in the media, most prominently in the televised news. On December 2, 2003, the Ministry of Taxation informed the prosecutor's office that *Yukos* had concealed at least \$5 billion in taxes in 1998-2001. (In fact, on all the previous tax-related charges, *Yukos* had already won all the trials and the Ministry had publicly agreed that there were no overdue taxes.) This was the first official statement accusing the company of violating the tax code. Since then, the amount of back-dated taxes and fines due to the allegedly illegal exploitation of regional tax-incentive schemes had been steadily rising, eventually reaching \$27.5 billion.

On the surface, there seems to be a similarity between high-profile cases of public companies such as *Enron*, *WorldCom*, and *Parmalat*, where news about the government-led investigations had a significant impact on share prices. However, these cases are starkly different.

First, the political side of investigations into *Enron* and *WorldCom* affairs was at maximum marginal compared to the *Yukos* case (and possibly non-existent at all). Second, investigation announcements in the case of *Enron* and *WorldCom* caused drops in share prices, since they communicated mostly negative information about the real state of affairs in the companies. In the case of *Yukos*, there was no negative information hidden from the investors' sight; the bad news was the government assault as such.

A more relevant analogy can be drawn with the history of the *Standard Oil* break-up and other anti-trust investigations. (Bittlingmayer, 1992 analyses stock returns in anti-trust cases; Glaeser et al., 2003 draw parallels between large business conglomerates of the Gilded Age and modern Russian companies.) However, this analogy might be misleading as well. The primary concern of the U.S. government was restoring efficiency that was harmed by the monopoly position of the *Standard Oil* and similar companies. In contrast, although it was indeed a giant company, *Yukos* still faced stiff competition both at home, where the remaining four largest oil companies are almost as big, and abroad, where it had to compete with multinational majors such as *Royal Dutch/Shell*, *Chevron*, *BP*, etc. On the political side, some similarity stems from the fact that both the prosecution of *Standard Oil* and the attack on *Yukos* were directed by popular politicians and enjoyed significant support of the public at large.⁴

3. Empirical Hypotheses

In the early stages of the *Yukos* affair, there was no clear explanation of the cause of the events happening to the company and what they would imply for the fate of *Yukos* and other Russian firms. The media were cautious: "At first, investors shrugged off the series of raids on the periphery of the empire of Russia's richest man, Mikhail B. Khodorkovsky, as just a passing unpleasantness. Now, as the wrangle drags into its fourth week, investors are starting to worry" (*New York Times*, July 31, 2003).

As the affair escalated, investors started to consider the state agencies' actions against *Yukos* as a signal of changes in the Kremlin's economic policy towards the business community. Several stories circulated in the market at that time, ranging from a personal feud between President Putin and *Yukos*' CEO Khodorkovsky, a battle between the evil of dictatorship and the angel of democracy and a clash between the supporters of a stronger role for the state and advocates of the free market economy, to an institutional response to the subversion of

⁴ Back in 1903, economist Gilbert Holland Montague, writing in the *Quarterly Journal of Economics* (Montague 1903) concludes his evaluation: "The present position of the Standard Oil Company is one abundant of prosperity and power" (see also DeLong, 1998).

institutions by the rich during the first decade of reforms (Glaeser, Sheinkman, and Shleifer, 2003). Each story would predict a specific market reaction to *Yukos* events (see Table 2).

The political story suggests that the attack on *Yukos*' key figures, who had allegedly been financing both left-wing and right-wing parties on a regular basis, could be a part of President Putin's strategy to eliminate any substantial political opposition to his rule, which was especially important before the upcoming elections to the Duma, the lower house of Russia's parliament. This explanation of the *Yukos* events was the most popular at the time, as evidenced by numerous statements from the mass media. For example, *the New York Times* editorialized on August 13, 2003: "the Kremlin's strong-arm tactics have little to do with battling economic crime and a lot to do with power and the coming elections in Russia." Among evaluations of the merits of the charges after Khodorkovsky's arrest, the following one was typical: "The charges of fraud and income tax evasion appear to be little more than a crude campaign to punish Khodorkovsky and his partners" (*Washington Post*, November 2, 2003). The subsequent developments did not refute this position: "The arrest was widely seen as a Kremlin-backed campaign to clip the political ambitions of Russia's richest man, who at one point considered running against President Vladimir V. Putin" (*New York Times*, April 12, 2004). The "individual politics" hypothesis implies that the *Yukos* affair would be confined to the company (its owners would be deprived from financial resources) and would not have negative consequences for other Russian companies.

With the "individual politics" hypothesis rejected by the data, a question arises about the government motives underlying the *Yukos* affair. One explanation of the *Yukos* events rests on the Kremlin's intention to curb the influence of the "oligarchs," a group of very wealthy and politically influential businessmen. Starting from the financing of Yeltsin's re-election campaign in 1996, the oligarchs virtually "privatized the state," as many senior officials and legislators were effectively on the payroll of one or another of the leading business groups (e.g., Frye, 2004; Hoff and Stiglitz, 2004). The attack on *Yukos*' owners could be just the first step in a new campaign against the business empires built by oligarchs during Yeltsin era: "the crackdown on Mikhail Khodorkovsky has many causes, not least Kremlin intrigue and public anger at the wealth of the oligarchs" (*Financial Times*, July 31, 2003). The "oligarch" hypothesis predicts that companies belonging to these empires were set to lose value in response to negative *Yukos* events.

Another broad explanation of *Yukos* events highlights the Putin administration's plans to extract more oil rents in a period of rising oil prices. The attack on the owners of *Yukos*, the largest oil producer, reduced their political and economic influence and increased the probability of oil export tariffs being raised. (The pro-Putin *Unity* party actively used the oil rent slogan in its

election campaign and indeed raised the marginal oil export tariff to 90% after gaining the majority of Duma seats in December 2003.) The “oil rent” hypothesis suggests that oil companies would react negatively to the actions of state agencies against *Yukos*. In this case, the arrests have to be interpreted as warning signals to other oil majors who lobbied for low tariffs. An alternative “competition” hypothesis predicts that oil companies would profit from the weakening of their competitor and react positively to negative developments with *Yukos*.

There was also a tax-related story stating that *Yukos* was investigated (and ultimately charged) for the tax minimization policies it used in the past. Largely inefficient and vague tax legislation left numerous loopholes that were used by many companies. (Dyck, Desai, and Zingales, 2005, provide a detailed analysis of tax minimization schemes used by *Sibneft*, one of major Russian oil companies.) The “tax review” (“tax skeletons”) hypothesis predicts that companies actively using tax minimization schemes in the past, which were typically non-transparent, would be more likely to become a target for the government’s investigations.⁵

Yet another explanation is that the new political elite brought to the government by the dramatic rise of President Putin was eager to revisit the shady privatization of the 1990s and reestablish state control over the “crown jewels” of Russian industry. The most notorious privatization happened in 1996, before the presidential elections in which Gennady Zyuganov, a leader of the communist party, had a strong chance of ousting the incumbent president Boris Yeltsin. At a time of looming economic crisis, President Yeltsin badly needed additional budget revenues and political support from Russian business before the elections. Probably, this motivated the government’s decision to attract loans from several Russian private banks, using large state-owned equity stakes in leading Russian natural resources companies as collateral. Then, companies that were granted the right to provide loans organized the loans-for-shares auctions; in all cases, a company affiliated with the organizer won an auction at a low price (Freeland, 2002). Since the loans were not to be repaid, the auctions’ winners soon became the major shareholders of the former state enterprises. Among them were *Yukos* and five other companies including *NorilskNickel* and *Surgutneftegaz* (see Table 1). According to the “privatization review” hypothesis, companies privatized via shady schemes such as loans-for-shares auctions would be sensitive to *Yukos* events.

⁵ Looking back from 2007, when *Yukos* was sold to the state-controlled *Gazprom* and *Rosneft* companies in bankruptcy auctions to repay its \$27 billion back tax claim, it is easy to conclude that the “tax skeletons” hypothesis should have been a prevailing explanation. However, in 2003, the period which we study, the theme of past tax avoidance by major oil companies was not prevalent. By 2002, *Yukos* had officially settled all its tax disputes with the tax service.

The hypotheses formulated above indicate a strengthening of the Kremlin's control over the Russian business community, which could have different implications for the stock prices of *Yukos* and other private companies. The impact of the new government policy on *state-owned* companies could be twofold. On the one hand, more attention from its major owner can be beneficial for a company, clarifying the often murky policies used by the incumbent managers and increasing its efficiency and stock price. On the other hand, the interference of government officials could damage those state enterprises that had already been efficiently managed and force them to join the ones that provided massive non-tax benefits to the state bureaucracy (Gehlbach, 2003). Thus, the “visible hand” hypothesis predicts a positive impact of *Yukos* events on the stock prices of the inefficient state-owned companies and a negative impact on efficiently managed state-owned companies.

4. Description of the data

The events analyzed in our study were selected by searching the archives of RBC News, as well as *Kommersant* and *Vedomosti*⁶ articles, by the keywords “*Yukos*” and the name of one of the *law enforcement* agencies (Prosecutor's Office, Ministry of Internal Affairs, Federal Security Service, and Ministry of Taxation) or *non-law-enforcement* state agencies (Ministry of Natural Resources, Ministry of Anti-Monopoly Policy, Russian Federal Property Fund, and State Auditing Chamber). News was classified as an event when it was initiated by the authorities and not by the company. In total, this procedure identified 10 positive and 37 negative *Yukos*-related events during the period from January to November 2003; most of them happened after the arrest of the company's CFO Platon Lebedev on July 3, 2003. Typical negative events are penalties, threats to revoke licenses for non-fulfillment of the conditions of agreements, and charges of involvement in past shady privatization deals (unrelated to *Yukos*) or personal tax evasion. Several positive events follow the negative ones, reducing their impact – for example, by lowering the fine or removing the charges.

In order to study the specifics of market reactions to different types of *Yukos* events, we divide all negative events into three groups: 16 employee-related events⁷ initiated by law

⁶ RBC (RosBusinessConsulting) is a leading Russian provider of business information. *Kommersant* and *Vedomosti* (a joint project of the *Wall Street Journal* and *Financial Times*) are two leading Russian business newspapers. When the newspaper article referred to the event with a lag, we adjusted the date of the event accordingly.

⁷ These are news reports affecting a person who is a *Yukos* employee or shareholder rather than the company. During the sample period, several *Yukos* employees including internal economic security officer Alexei Pichugin, CFO Platon Lebedev, CEO Mikhail Khodorkovsky, and *Yukos*-Moscow CEO Vassily Shakhnovsky were levied charges formally unrelated to the company. At least 8 persons were arrested and held for months without bail.

enforcement agencies, 16 company-related events involving law enforcement agencies, and 12 company-related events involving non-law-enforcement agencies.⁸ We do not make a similar decomposition for positive events, since their number is too small and since most of them (8 out of 10) are initiated by non-law-enforcement agencies.

Our analysis of stock market reactions to *Yukos* events is based on daily dividend-adjusted returns of the most liquid Russian stocks.⁹ We use the S&P/RUX as a market index.¹⁰ The sample period is from January 1, 2003 to November 27, 2003, including 227 trading days. We deliberately chose the end of November 2003 as the terminal date. This is motivated by the fact that on December 3, 2003, the Ministry of Taxation made the first official statement alleging that *Yukos* had evaded taxes and owed a certain amount to the state, which directly affected the value of the company. During the sample period, *Yukos* was involved in another dramatic event – a failed merger with another Russian oil company, *Sibneft*. The merger was officially announced in April 22, 2003; *Sibneft* announced the break-up of the deal in November 28, 2003. The exclusion of the merger announcement date from the sample does not affect the results.

In the cross-sectional analysis, we use a number of variables to proxy for company-specific exposures to political risk. First, the company's total common stock ownership stake of the federal and regional governments at the end of 2002 differentiates between private and state-owned companies. Second, the Transparency and Disclosure (T&D) score by Standard & Poor's, as of August 13, 2002, measures the degree of the company's informational transparency with respect to the ownership structure, financial and operational statements, and board of directors and management. The T&D score is inversely related to the likelihood of using tax minimization schemes and risk of tax review for private companies;¹¹ for state-owned companies, it is more

⁸ The last two groups intersect, as there are 7 negative company-related events involving both types of agencies. There are no employee-related events initiated by non-law-enforcement agencies.

⁹ We used daily close prices at the MICEX ("Moscow Interbank Currency Exchange") for most of the stocks. For four stocks (*MTS*, *VimpelCom*, *Golden Telecom*, and *Wimm-Bill-Dann*) that were primarily traded on the NYSE, we used the corresponding ADR close prices.

¹⁰ The S&P/RUX index is computed by the RTS-Interfax agency in cooperation with Standard & Poor's. It is a market-capitalization-weighted index of the Russian companies traded in the RTS ("Russian Trading System") Stock Exchange and Moscow Stock Exchange. At the end of 2003, the S&P/RUX index comprised 57 stocks.

¹¹ We decided not to use the direct measures of tax payments because of the imprecision and bias in the financial data prepared by Russian accounting standards. For example, according to a July 2003 Merrill Lynch report, the distribution of taxes paid by the Russian oil companies was highly dispersed. *Yukos* was among the largest taxpayers per barrel of oil (\$7.50 per barrel, compared to \$8.30 for *Lukoil*, \$7.20 for *TNK*, and \$5.60 for *Sibneft*), yet along with *Sibneft* it had the lowest effective tax rate (the ratio of taxes to taxable income) of 12% (cf. 17% for *TNK*

likely to be higher in case of an efficient management. Third, the oil industry dummy distinguishes the group of oil companies, which are most susceptible to the change in the “oil rent” taxation policy. Fourth, the fraction of shares sold at loans-for-shares auctions reflects the vulnerability of private companies with respect to the risk of privatization review. Finally, we use the oligarch dummy for companies classified in Guriev and Rachinsky (2005) as those controlled by the oligarchs. Several other variables including industry dummies, a dummy equal to 1 for stocks with ADRs traded at NYSE, and the log of the company’s market equity capitalization were used as controls.

Our final sample includes 25 common stocks of large Russian companies that were actively traded during the sample period and had T&D scores. Table 1 presents their descriptive statistics. Even though the five largest companies come from the oil and gas sector, other industries such as utilities (6 companies), telecoms (5 companies), machinery, and metallurgy (both with 2 companies) are also well represented. The government-owned companies are concentrated in utilities and telecoms; besides those, the federal government effectively controls the gas monopolist *Gazprom* with a 38% stake and the largest retail bank *Sberbank* with a 64% stake. The T&D scores range from 0.14 for *Avtovaz*, which is a private auto-making company, and 0.17 for *Rostovenergo*, a state-owned utility company, to 0.77 for the leading private mobile operator *MTS*. On average, the T&D scores are higher for private companies than for the government-owned ones (0.4 and 0.3, respectively).

Figure 1 shows the dynamics of the market index and *Yukos*’ stock price during the sample period (both normalized to 100 in the outset of the period). It is clear from the figure that *Yukos*’ stock was on par with the market index until the arrests of the company’s CFO Platon Lebedev and CEO Mikhail Khodorkovsky, which led to sharp falls in *Yukos*’ stock price by 4% in July 3, 2003, and by 14% in October 27, 2003, respectively. Interestingly, the first arrest had almost no effect on other stocks. Based on our conversations with the financial analysts, the prevailing opinion at the time was that the action would not have drastic consequences even for *Yukos* (and even less for other companies) and would finish soon. However, the second arrest was perceived by many as having crossed a borderline indicating a serious change in the government’s policy towards *Yukos* and, in general, towards the whole business community in Russia. As a result, the market index fell by 9.6%, whereas the firm-specific reaction varied from a more than 10% stock price decline for *Sibneft*, *Rostelecom*, *Avtovaz*, and *Sverdlovenergo* to a slightly positive change for *MTS*, *Wimm-Bill-Dann*, and *Golden Telecom* (see the last column in Table 1).

and 32% for *Lukoil*). The seeming inconsistency between the two tax measures is apparently due to the difference in costs and, most importantly, in the degree of use of regional (so-called “internal offshore”) tax-incentive schemes.

Table 3 reports summary statistics of the market index and *Yukos*' returns, which allow us to draw some preliminary conclusions. During the sample period, the Russian stock market was characterized by high return and volatility: an average return of 0.18% and standard deviation of 1.93% in daily terms. *Yukos*' stock had a slightly lower return (0.13%) and much higher volatility (2.98%). Days with *Yukos* events were even more volatile: positive news events were associated with very high returns, while negative news brought prices down. This effect applied both to *Yukos* and to the market index, demonstrating that *Yukos* events had an overall market impact. The reaction of other companies to *Yukos* events is further analyzed in section 5.

We conduct a preliminary analysis of the impact of government-related news on *Yukos*' returns using a control portfolio, which is a value-weighted portfolio of four other large Russian oil companies: *Lukoil*, *Sibneft*, *Tatneft*, and *Surgutneftegaz* (see Table 1).¹² During the sample period, the control portfolio had an average daily return of 0.14% p.a., which rose to 1.71% and fell to -0.9% during the days with positive and negative *Yukos*-related events, respectively (see Table 3). However, these swings were less pronounced than those for *Yukos*, as its average abnormal return (defined as the difference between *Yukos*' return and control portfolio's return; see, e.g., Campbell, Lo, and MacKinlay, 1997), was close to zero during the whole sample period, increased to 1.01% in response to positive news and decreased to -1.06% after negative news. *Yukos*' stock price sensitivity to political news was the highest with respect to the employee-related news initiated by law enforcement agencies (an abnormal return of -1.07%), which again demonstrates the political nature of risk faced by the company, incorporated by investors in its stock price. A more elaborate analysis of *Yukos*' stock price behavior is in the next section.

5. The reaction of *Yukos*' stock price to the actions of state agencies

In the current section, we investigate the reaction of *Yukos*' stock price to the actions of state agencies, using time series analysis and employing the market model as a benchmark. The basic model is as follows:

$$R_{Y,t} = \alpha_0 + \alpha_1 \text{Pos}_t + \alpha_2 \text{Neg}_t + \beta R_{M,t} + \varepsilon_t, \quad (1)$$

¹² The portfolio weights are proportional to the market capitalization of the oil companies, as of December 30, 2002.

where $R_{Y,t}$ and $R_{M,t}$ are returns of *Yukos* and the market index¹³ on day t ; Pos and Neg are dummy variables equal to 1 in the case of positive and negative events, respectively; ε_t is the error term. As was demonstrated in the previous section, *Yukos* events had a market-wide impact, influencing not only *Yukos*' own return, but also returns of other Russian stocks. This model allows us to measure the impact of different types of *Yukos*-related news on company's returns, controlling for the market risk.¹⁴ In all subsequent regressions, we compute Newey-West heteroscedasticity- and autocorrelation-consistent standard errors.

The estimation results (see column 3 of Table 4) reinforce the conclusions made in the previous section. Both negative and positive events are associated with highly significant daily abnormal returns in the order of -1.35% and 1.12%, respectively.

To check the robustness of our findings to the presence of major events such as top managers' arrests, we add to regression (1) a dummy variable *Arrest* equal to one for the trading days when the market received news about the arrests of *Yukos*' top managers and shareholders, Platon Lebedev and Mikhail Khodorkovsky (July 3 and October 27, 2003). The estimation results demonstrate that our general findings are robust and not driven by a few major events, such as the arrests of *Yukos*' top managers. Other negative events led to an average daily abnormal return of -1.1%, while arrests produced a further 5.5% decline in price (see column 4 in Table 4).

To study the specifics of market reaction to different types of news, we define two additional dummy variables: *Pers* equals 1 when the news affected a *person* (a *Yukos*' employee or shareholder rather than the company) and *Comp* is equal to 1 if the charges were directed against the *company*. To separate the impact of different types of state agencies, we introduce two more dummies: *Law* and *Other* are equal to 1 if a law enforcement agency or other (non-law-enforcement) agency was mentioned in the news, respectively. Since we do not have many positive events, we study the interaction effects between the additional dummy variables and *NegD*. The regression is as follows:

$$R_{Y,t} = \alpha_0 + \alpha_1 Pos_t + \alpha_4 Neg_t Pers_t Law_t + \alpha_5 Neg_t Comp_t Law_t + \alpha_6 Neg_t Comp_t Other_t + \beta R_{M,t} + \varepsilon_t \quad (2)$$

For these three types of events, only the negative employee-related news initiated by law enforcement agencies have a significant effect, driving down the level of *Yukos*' returns by 1.1%

¹³ We use a self-constructed capitalization-weighted index of 57 most liquid Russian stocks excluding *Yukos* as the market index. Using a standard market index such as S&P/RUX or RTSI including *Yukos* could potentially lead to erroneous correlation between the changes in stock price of *Yukos* and its market beta. However, all our results remain the same irrespectively of the market index used.

¹⁴ In the earlier version of the paper, we allowed the market beta to vary depending on different types of *Yukos* events. This had no material effect on the impact of news on abnormal returns.

(see the last column in Table 4). The fact that company-related charges have no significant impact on *Yukos*' stock price might seem puzzling at the first sight. Apparently, investors interpret personal charges, even though formally unrelated to *Yukos*, as a signal about the future of the company. This evidence is consistent with the "politics" hypothesis, according to which the actions of state agencies against *Yukos*' shareholders, driven by political motives, could ultimately lead to the expropriation of the company. Another possible explanation for the decline in *Yukos*' price in response to the charges against its top managers could be the loss in their specific managerial skills that could be very valuable for the company. However, this is inconsistent with a very positive market reaction to the news about the resignation of *Yukos* CEO Mikhail Khodorkovsky on November 3, 2003, which led to 13% rise in *Yukos*' stock price and 6% growth of the market index.

6. The reaction of other companies' stock prices to *Yukos* events

In this section, we investigate whether there are systematic differences in the firm-specific stock price reactions to *Yukos* events related to companies' exposures to political risk. We run pooled cross-sectional regressions of stock returns during the event days on proxies for the company's political risk exposure, as well as *Yukos*' returns interacted with the proxies:

$$R_{i,t} = a \cdot \text{RISK}_i + (b \cdot \text{RISK}_i) R_{Y,t} + \varepsilon_{i,t} \quad (3)$$

where $R_{i,t}$ is company i 's return on event day t ,¹⁵ $\varepsilon_{i,t}$ is the error term, and $\text{RISK} = (\text{const}, \text{Gvt}, \text{TD}, \text{Gvt} \cdot \text{TD}, \text{Oil}, \text{LS}, \text{Olig})$ is the vector of company-specific political risk exposures. Here, Gvt_i and TD_i denote the government's common stock ownership and T&D score of company i , Oil and Olig are the oil industry and oligarch dummies, respectively, and LS is the fraction of company's shares sold at the loans-for-shares auctions. As we will see, the impact of the T&D score is opposite for private and government-owned companies; this difference is captured by the coefficient on the interaction effect between Gvt and TD .

In this model, we allow the coefficients on political risk exposures to differ across the events; in particular, companies' stock returns may be more sensitive to events characterized by higher *Yukos*' return, $R_{Y,t}$.¹⁶ The regression is estimated for different subsets of events: positive, negative, negative employee-related, negative company-related due to law enforcement agencies, negative company-related due to non-law-enforcement agencies, and finally major negative (with *Yukos*' return below -2%; there were 17 events of this type).

¹⁵ If the company's stock was not traded in a given day, the observation was excluded from the regression.

¹⁶ This approach is similar to that by Fisman (2001), who examined the effect of the political variables interacted with return on the market index on individual stock returns in Indonesia. We obtain similar results when we use the market return instead of *Yukos*' return as a measure of the importance of an event.

Table 5 reports the results of model (3) excluding the oligarch dummy, which was insignificant in all specifications. We find that Russian companies' stock returns during the *Yukos* event dates can be explained by some of their political risk exposures; moreover, the degree of stock price reaction depends on the absolute value of *Yukos*' return and on the specific type of *Yukos* event. This is contrary to the "individual politics" hypothesis and supports the view that investors perceived developments with *Yukos* as a signal about changes in government policy. Our main inference is based on the estimation results for the subset of all negative events (column 4). The coefficients on all interaction terms except for the one including the oil industry dummy are highly significant.

It appears that a company's transparency affects its sensitivity to *Yukos* events oppositely in the case of private and state-owned firms. For private companies, the effect of a 1% fall in *Yukos*' stock price is lower for higher levels of transparency, which is in line with the "tax review" hypothesis. For example, if we compare the least and the most transparent private companies, *Avtovaz* and *MTS*, a 1% fall in *Yukos*' price leads to an additional 0.55% fall in the stock price for the former and practically no fall for the latter. On the contrary, higher transparency in the government-owned companies is associated with higher sensitivity to *Yukos*' return: 0.7% for *Rostelecom* compared to 0.46% for *Rostovenergo*. Thus, the worst *Yukos* events have the strongest impact on transparent government-owned companies: a -5% shock in *Yukos*' return implies an approximately 2.7% fall in stock price for *Rostelecom*. The less transparent state-controlled companies (e.g., *Rostovenergo* and other regional utilities) or private companies (e.g., *Avtovaz*) fall by around 1.9%, whereas transparent private companies (e.g., *Wimm-Bill-Dann*) are least affected, with a mere 0.2% decrease in price in response to this shock.

This evidence is consistent with the "visible hand" and "tax review" hypotheses. It seems that investors consider the more interventionist policy of the government as a risk factor for efficiently managed state enterprises and less transparent private companies. It should be noted that this effect is mostly driven by market reaction to negative employee-related events involving law enforcement agencies (see column 5 of table 5). The fact that personal charges formally unrelated to the company have such a strong impact not only on *Yukos*' but also on other companies' stock prices is puzzling and provides a hint to the political nature of the whole affair.

On top of these effects, companies with a large stake sold via loans-for-shares auctions (e.g., around 40% for *Surgutneftegaz*) suffer an additional 0.34% decline in price in response to a 1% fall in *Yukos*' stock price. As a result, these companies are among the most sensitive to worst *Yukos* events; for example, the model predicts *Surgutneftegaz*' stock price to drop by 2.7% after a -5% shock in *Yukos*' return. This is in line with the "privatization review" hypothesis. This effect

is pronounced for both employee- and company-related negative events initiated by law enforcement agencies (columns 5 and 6 of Table 5).

Company-related negative events initiated by non-law-enforcement agencies affect oil companies, whose stock prices decline by an additional 0.28% in response to a 1% fall in *Yukos*' stock price. This clearly supports the "oil rent" hypothesis (column 7 of Table 5).

We performed a number of robustness checks. In particular, we estimated model (4) using a subset of major negative *Yukos* events (with returns below -2%; see the last column of Table 5), using a longer sample period including the year 2002, and controlling for fixed time effects. This did not materially change our results. We also estimated the model (4) with additional control variables. Such variables as other industry dummies, the ADR dummy equal to 1 for stocks with ADRs traded at NYSE, and the company's size measured as the log of the market value of its equity turned out mostly insignificant and had no effect on our main results.

7. The reaction of *Lukoil* and *Gazprom* stock prices to their own and *Yukos* events

In this section, we conduct time series analysis of the political risk of two other major Russian companies, *Gazprom* and *Lukoil*, which had, respectively, the largest and third-largest market equity capitalization at the end of 2002 (see Table 1). This approach helps us to refine the analysis of how the most important Russian stocks reacted to *Yukos* events, since we can now explicitly control for the impact of their own events involving the government. This is important, since strong results demonstrated in the previous section could be due to the state agencies undertaking similar actions against *Yukos* and other Russian companies.

After the prosecution of *Yukos*, *Lukoil* became the largest oil producer in Russia. It is a private company, although the government had held a minor (7.6%) stake until September 29, 2004, when this stake was sold to *ConocoPhillips*. As discussed in section 2, *Lukoil* could be negatively affected by *Yukos* events along the lines of the "tax review," "oil rent," and "privatization review" hypotheses. At the same time, it could profit from the weakening of its major competitor in accordance with the "competition" hypothesis.

Gazprom holds a virtual monopoly in the Russian gas market. At the time of the affair, the state owned a major (38%) stake in *Gazprom*, which allowed the government effectively to control the company. As a result, *Gazprom* frequently provides support for government policy at home (by keeping gas tariffs low) and abroad (by selling gas at low prices to friendly neighbouring countries), even though that comes at the expense of minority shareholders. The company is often criticized for the lack of transparency and relatively inefficient management. *The Economist* (June 20, 2005) elaborated on *Gazprom*: "The gas giant has been likened more to a state ministry than a profit-motivated corporation" and pointed to "wasteful tax-payment

schemes, seeming nonchalance about unpaid bills, disproportionately high wage costs and suspiciously costly pipeline projects.” According to the “visible hand” hypothesis, the impact of more interventionist government policy on *Gazprom* could be either positive or negative, depending on the quality of the current company’s management relative to that of the bureaucrats. In addition, *Gazprom* could exploit its closeness to the state to profit from a potential *Yukos* break-up.

We gathered sets of positive and negative events for *Gazprom* and *Lukoil* using the same procedure as for *Yukos*. Since there were only a few company-related events in 2003, the analysis in this section is based on a sample period, which was extended to include year 2002 (January 1, 2002, to November 27, 2003). Our data set comprises 26 events (including 6 positive) for *Gazprom* and 35 events (11 positive) for *Lukoil*. The extended set of *Yukos* events includes 11 positive and 42 negative events.

We study the political risk of the two companies along two lines. First of all, we partly replicate the preceding time series analysis for *Yukos* (models (1) and (2)), looking at the impact of company (*Lukoil* or *Gazprom*) events on respective stock returns. Since there were practically no employee-related events for these companies, we only make a distinction between events initiated by law enforcement agencies and those involving other state agencies in model (2).

Secondly, we investigate whether *Yukos* events had an impact on the stock market performance of *Lukoil* and *Gazprom*, controlling for the effect of their own news. The following two regressions include dummies both for *Lukoil* (or *Gazprom*) events and *Yukos* events. In the regression

$$R_{i,t} = \alpha_0 + \alpha_1 \text{Pos}_t + \alpha_2 \text{Neg}_t + \alpha_7 \text{Pos}Y_t + \alpha_8 \text{Neg}Y_t + \beta R_{M,t} + \varepsilon_t, \quad (4)$$

$R_{i,t}$ is return of *Lukoil* or *Gazprom* on day t , $R_{M,t}$ is the return on S&P/RUX market index on day t , the event dummies are defined as before, and ‘Y’ denotes variables referring to *Yukos*. Here, the coefficients α_1 and α_2 measure the company’s reaction to its own news, whereas α_7 and α_8 represent the impact of *Yukos* events.

We extend this model separating the impact of different types of negative events:

$$R_t = \alpha_0 + \alpha_1 \text{Pos}_t + \alpha_5 \text{Neg}_t \text{Law}_t + \alpha_6 \text{Neg}_t \text{Other}_t + \alpha_7 \text{Pos}Y_t + (\alpha_9 \text{Pers}Y_t \text{Law}Y_t + \alpha_{10} \text{Comp}Y_t \text{Law}Y_t + \alpha_{11} \text{Comp}Y_t \text{Other}Y_t) \text{Neg}Y_t + \beta R_{M,t} + \varepsilon_t \quad (5)$$

where the event dummies are defined along similar lines as above.

Tables 6 and 7 present results of the regression analysis for *Lukoil* and *Gazprom*, respectively. For *Lukoil*, negative company-related events implied a significant daily abnormal return of -0.5%, which, similarly to *Yukos*, was mostly due to the effect of news involving law enforcement agencies. It seems that the market seriously considered the possibility of yet another case against a private oil company. Separating the impact of different types of *Yukos* events, we

observe that *Yukos* news involving non-law-enforcement agencies negatively affected *Lukoil*'s returns, driving them down by 1.02% on average (the last column in Table 6). The sensitivity of *Lukoil* to the actions of such agencies as the Ministry of Natural Resources against *Yukos* is consistent with the "oil rent" hypothesis and results in the previous section. Indeed, *Lukoil* is quite transparent and has a relatively clean privatization history (a minor 5% stake was sold via loans-for-shares auction); therefore, it is less prone to the tax and privatization review risks.

The nature of political risk for *Gazprom* is very different. On the one hand, positive news events involving state agencies had a marginally significant positive impact on *Gazprom*, driving its stock price up by 1.4% on average. On the other hand, negative news involving non-law-enforcement state agencies also led to positive abnormal daily returns in the order of 0.7%, which are very significant. This is in line with the "visible hand" hypothesis, according to which the inefficient management of *Gazprom* is disciplined when the respective authorities such as Ministry of Natural Resources, Ministry of Anti-Monopoly Policy, and State Auditing Chamber turn their attention to the company. Negative *Yukos* company-related events due to law enforcement agencies imply a marginally significant *increase* in *Gazprom*'s stock price by 0.65%. This may be explained by the "visible hand" hypothesis or by the view that *Gazprom* could profit from the break-up of *Yukos*.

8. Conclusion

The *Yukos* affair provides an excellent opportunity to investigate the nature of the political risk. In 2003, during the early stage of the *Yukos* affair, the state agencies' actions had a negative impact not only on *Yukos*' but also on other Russian companies' stock prices. Apparently, investors interpreted *Yukos* events not only as a politically motivated attack on the company's owners, but also as a signal about the change in the government policy towards the whole business community. Stock prices of those private companies that belonged to the oil industry, were non-transparent, and/or privatized via loans-for-shares auctions were most sensitive to *Yukos* events. This indicates that investors seriously considered the risk of expropriation of these companies through the use of such political instruments as selective tax enforcement.¹⁷ However, the market did not interpret the *Yukos* affair as the beginning of a campaign against oligarchs. In accordance with the "visible hand" hypothesis, the more interventionist government policy was

¹⁷ In the beginning of 2005, Standard & Poor's motivated an increasing gap between Russian sovereign and corporate credit ratings as follows: "The *Yukos* affair creates a dangerous precedent and illustrates potential risks of the selective government interference, weak protection of property rights, and insufficient independence of courts" ("Russia's Rating: Country Risk Is Rising," *Vedomosti* February 15, 2005).

well-perceived for non-transparent state-owned companies, such as *Gazprom*, and had detrimental effect on stock prices of transparent ones.

Did the investors' perception of political risk subsequently materialize? The events that happened during the subsequent two years were largely consistent with our findings. The government levied on *Yukos* and its subsidiaries a series of fines eventually amounting to around \$28 billion for the purportedly illegal exploitation of regional tax-incentive schemes, bringing the company on the brink of bankruptcy. In December 2004, *Yukos*' major production unit, *Yuganskneftegaz*, was forcibly sold via auction at a price far below market value and eventually ended up in the hands of a state-owned oil company. (Interestingly, within a few months after the auction, most tax offences against *Yuganskneftegaz*, now owned by the state, were called off.) By August 2007, the remains of *Yukos* were acquired by subsidiaries of state-controlled *Rosneft* and *Gazprom* via a series of bankruptcy auctions in which the winners faced only the token competition.

Since the beginning of the *Yukos* affair, several private and state-controlled companies received large back-dated tax offences.¹⁸ The most notorious one was against *Vimpelcom*, a transparent private mobile operator,¹⁹ which caused a plunge in the company's stock price by 23% and in the market index by 6%. On the good side, budget revenues have increased substantially. First, many large companies abandoned "gray" tax minimization schemes used in the past, which led to an increase in their effective tax rates. Second, after the pro-Putin *Unity* party won an absolute majority of seats in December 2003 parliament elections, the Duma dramatically raised the export tariff on oil, making the marginal rate close to 90%. On the bad side, the fear of expropriation led to the recommencement of capital flight and a slowdown in economic growth, despite ever-rising oil prices, which is consistent with cross-country evidence by Bohn and Deacon (2000) and Lensink, Hermes, and Murinde (2000). We observed creeping re-nationalization of strategic companies that started with the acquisition of *Yuganskneftegaz* by

¹⁸ The largest cases involved private oil companies *Sibneft* and *TNK-BP*, shipping company *Volgotanker*, state-controlled energy monopoly *RAO UES* and regional telecom operator *Dalsvyaz*, as well as several oil refineries controlled by regional governments (e.g., *MNPZ*, *Ufaneftehim*). The tax charges were often eventually settled with smaller amounts (e.g., the initial \$1 billion tax charge against *Sibneft* for 2001-2002 was subsequently reduced to \$300 million).

¹⁹ On December 8, 2004, *Vimpelcom* received the Ministry of Taxation's demand to pay a \$90 million tax bill and \$67 million in fines for 2001 (the company's sales were equal to \$423 million for that year). Yet, the drop in *Vimpelcom*'s market capitalization - \$3.8 billion - was more than 20 times the amount of tax charges. The interference of the Norwegian government, a major shareholder of *Telenor* controlling 25% of *Vimpelcom*, helped to reduce the total amount of tax charges to \$17.6 million.

the state-controlled *Rosneft* and continued with the acquisition of *Sibneft*, one of the largest private oil companies, by *Gazprom*.

What are the implications of the *Yukos* affair for emerging markets? Our findings imply that potential investors should consider firm-specific political risk as a critical element of their asset management strategy. Political ambitions of firm's managers – even those that are not directly related to the company's business activity – might be a source of such firm-specific risk. It is also important to check the privatization background of the company: firms that have been privatized through dubious schemes were more vulnerable to *Yukos*' news than others. Political risk associated with a firm may involve tax review, so, less surprisingly, tax payment record needs to be a special concern. In addition, investors should be aware of potential changes in tax and regulation regime for the whole industries, especially those profiting from favorable economic conditions, such as the oil industry in Russia in 2000s.

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Appendix A. Major *Yukos* events in 2002-2003

Date	News	<i>Yukos</i> ' return, %
24.06.2002	St. Petersburg Prosecutor's Office examined the possibility of a criminal case for illegal operations with <i>KTsBK</i> stocks (auctions of the <i>KTsBK</i> stocks affected the interests of M. Khodorkovsky's structures, since 51% of <i>KTsBK</i> stocks served as a collateral for a bank in the <i>Menatep-Yukos</i> group).	-5.8
26.06.2003	<i>Yukos</i> ' internal economic security officer A. Pichugin was accused of a double murder.	-2.36
03.07.2003	It became known that <i>Yukos</i> CFO and major shareholder P. Lebedev was arrested on charges of embezzling state assets in the 1994 privatization of <i>Apatit</i> . The Basmany court of Moscow sanctioned Lebedev's arrest.	-4.67
04.07.2003	The Prosecutor General's Office summoned for questioning two other co-owners of <i>Yukos</i> , M. Khodorkovsky and L. Nevzlin. The Ministry of Anti-Monopoly Policy postponed the resolution of the merger between <i>Yukos</i> and <i>Sibneft</i> . The Federal Security Service conducted a search in <i>M-Reestr</i> , a registrar for <i>Yukos</i> and <i>Apatit</i> .	-2.03
09.07.2003	The Prosecutor General's Office declared it would start investigations on the request of <i>Rosneft</i> that charged <i>Yukos</i> with theft of 19% stocks from the company <i>Eniseyneftegaz</i> .	-4.77
11.07.2003	The Prosecutor General's Office investigators of <i>Apatit</i> case conducted a search of <i>Yukos</i> .	-5.22
16.07.2003	The Prosecutor General's Office filed a request for tax audit of <i>Yukos</i> to the Ministry of Tax Collection.	-8.34
23.07.2003	The Prosecutor's Office brought new materials in the case of P. Lebedev to the court. According to the investigators, P. Lebedev inflicted more than \$400 million in damages on the state.	-2.51
13.08.2003	Minister of Anti-Monopoly Policy Yuzhanov promised to make a verdict on the merger between <i>Yukos</i> and <i>Sibneft</i> by the end of the week and mentioned there should be no obstacles.	4.24
15.08.2003	The Ministry of Anti-Monopoly Policy approved the merger between <i>Yukos</i> and <i>Sibneft</i> .	2.27
21.10.2003	The Prosecutor General's Office said it intended to bring charges against several <i>Yukos</i> managers. The Ministry of Internal Affairs conducted an investigation of the <i>Menatep</i> bank in St. Petersburg.	-4.57
22.10.2003	The Prosecutor General's Office made a request to the Ministry of Natural Resources, the Ministry of Energy, the Ministry of Tax Collection, and State Customs Committee to examine violations in <i>Yukos</i> ' activities.	-7.12
27.10.2003	<i>Yukos</i> ' CEO M. Khodorkovsky was arrested on October 25.	-14.65
29.10.2003	The Prosecutor General's Office disputed in the court the legality of the election of President of <i>Yukos-Moscow</i> V. Shakhnovsky as a member of the Federation Council.	-2.74
30.10.2003	The Prosecutor General's Office froze 53% of <i>Yukos</i> ' common equity shares deposited in the investment bank <i>Trust</i> .	-12.62
31.10.2003	The Prosecutor General's Office reported that it had called off the arrest on behalf of <i>Yukos</i> ' shares frozen on October 30.	8.83
04.11.2003	Deputy Yudin said that <i>Yukos</i> controlled oil industry legislation in the Duma and declared that "actions of the company's owners inflicted a large	-4.94

	economic and political damage to the state.”	
05.11.2003	Vitaly Artyukhov, the Minister of Natural Resources, nearly threatened to nationalize <i>Yukos'</i> oil fields.	-5.13
20.11.2003	By the order of the Prosecutor General's Office, the investment bank <i>Trust</i> defroze 4.5% of <i>Yukos'</i> shares.	8.19

Table 1. Descriptive statistics of selected Russian companies

For each of the 25 Russian companies in the sample, the table reports the company's industry, market equity capitalization, total common stock ownership stake of federal and regional governments (both as of the end of 2002), the Transparency and Disclosure (T&D) score by Standard & Poor's (as of August 13, 2002), the fraction of company's shares sold at the loans-for-shares auctions, and return during the first trading day after *Yukos* CEO Mikhail Khodorkovsky's arrest (October 27, 2003).

Company	Industry	Market cap, \$ mln	Government stake, %	T&D	LS, %	Return on 27.10.2003
Gazprom	Gas	17890	38	0.26	0	-6.61
Yukos	Oil	15484	0	0.52	45	-14.65
Lukoil	Oil	10334	8	0.44	5	-4.21
Sibneft	Oil	10011	0	0.39	51	-12.76
Surgutneftgaz	Oil	7177	0	0.34	40	-4.27
RAO UES	Utilities	5470	53	0.43	0	-6.62
MTS	Telecoms	3702	0	0.77	0	2.07
Sberbank	Banking	2780	64	0.28	0	-5.04
Norilskiy nikel	Metallurgy	2675	0	0.42	38	-2.85
Tatneft	Oil	1760	31	0.33	0	-6.27
VimpelCom	Telecoms	1291	0	0.49	0	-1.17
Severstal	Metallurgy	1058	0	0.25	0	Not traded
Rostelecom	Telecoms	1012	51	0.48	0	-10.77
Wimm-Bill-Dann	Food & beverages	790	0	0.73	0	3.42
Mosenergo	Utilities	726	54	0.39	0	-5.39
Avtovaz	Machinery	640	2	0.14	0	-12.40
Golden telecom	Telecoms	458	0	0.49	0	2.68
Aeroflot	Airlines	378	51	0.36	0	-9.83
Irkutskenergo	Utilities	370	40	0.3	0	-8.08
OMZ	Machinery	206	0	0.26	0	Not traded
Krasnoyarskenergo	Utilities	156	52	0.25	0	-3.70
Uralsviazinform	Telecoms	115	53	0.29	0	-7.29
Samaraenergo	Utilities	113	49	0.38	0	-4.09
Sverdlovenegero	Utilities	84	49	0.23	0	-14.24
Rostovenergo	Utilities	50	49	0.17	0	-2.71

Table 2. Description of hypotheses

Each hypothesis specifies the stock price reaction of the selected group of Russian companies to negative *Yukos* events.

Hypothesis	Reaction	Companies	Proxy
Individual politics	none	All (except for Yukos)	
Oligarch	-	Controlled by oligarchs	Oligarch dummy = 1
Oil rent	-	Oil industry	Oil industry dummy = 1
Competition	+	Oil industry	Oil industry dummy = 1
Tax review	-	Non-transparent private	Low government ownership & low T&D score
Privatization review	-	Privatized via 'loans-for-shares' auctions	Percentage of shares sold at 'loans-for-shares' auctions
Visible hand	-	Transparent state-controlled	High government ownership & high T&D score
Visible hand	+	Non-transparent state-controlled	High government ownership & low T&D score

Table 3. Summary statistics

This table shows the mean and standard deviation of daily returns on the market index (S&P/RUX), *Yukos* shares, normal and abnormal returns during the overall sample period (January 1, 2003 to November 27, 2003), days with positive events, days with negative events, days with employee-related events, days with company-related events involving law enforcement agencies, and days with company-related events involving non-law-enforcement agencies. The normal return is the return of the value-weighted control portfolio of *Lukoil*, *Sibneft*, *Tatneft*, and *Surgutneftegaz*, the four largest Russian oil companies (besides *Yukos*). The abnormal return is the difference between *Yukos*' return and control portfolio's return. The final row reports the number of events of the corresponding type.

		Overall	Positive events	Negative events			
				All	Pers-Law	Comp-Law	Comp-Other
S&P/RUX	Mean	0.18	1.06	-0.65	-1.39	-0.17	0.37
	<i>St.dev.</i>	1.93	1.82	2.99	3.56	2.66	2.24
Yukos	Mean	0.13	2.72	-1.95	-2.74	-1.21	-0.93
	<i>St.dev.</i>	2.98	3.47	4.01	4.71	3.49	3.34
Normal return	Mean	0.14	1.71	-0.90	-1.67	-0.62	0.13
	<i>St.dev.</i>	2.38	2.57	3.17	3.59	2.98	2.47
Abnormal return	Mean	-0.01	1.01	-1.06	-1.07	-0.59	-1.06
	<i>St.dev.</i>	1.70	1.46	1.84	2.19	1.49	1.69

Table 4. Reaction of *Yukos*' stock to the actions of state agencies

This table presents results of the regressions (1) to (3) of daily *Yukos* returns on market returns (*Rm*) and event dummies during the period from January 1, 2003 to November 27, 2003. The event dummies are defined as follows: *Pos* and *Neg* are equal to 1 in the case of positive and negative events, respectively; *Arrest* is equal to 1 during the days surrounding the arrests of *Yukos*' top managers and shareholders; *Pers* and *Comp* are equal to 1 when the news affects *Yukos*' employees and the company, respectively; *Law* and *Other* are equal to 1 if a law enforcement agency or other (non-law-enforcement) agency, respectively, was mentioned in the news. The *t*-statistics are corrected for heteroscedasticity and autocorrelation (with 5 lags).

		Model 1	Model 2	Model 3
Const	Coef	-0.02	0.00	-0.08
	<i>t-stat</i>	-0.12	-0.03	-0.59
Pos	Coef	1.12	1.15	1.17
	<i>t-stat</i>	2.23	2.32	2.32
Neg	Coef	-1.35	-1.08	
	<i>t-stat</i>	-3.98	-3.75	
Neg*Arrest	Coef		-5.54	
	<i>t-stat</i>		-4.80	
Neg*Pers*Law	Coef			-1.09
	<i>t-stat</i>			-2.06
Neg*Comp*Law	Coef			-0.62
	<i>t-stat</i>			-1.08
Neg*Comp*Other	Coef			-0.76
	<i>t-stat</i>			-1.01
Rm	Coef	1.37	1.33	1.38
	<i>t-stat</i>	11.47	12.30	10.93
# observations		227	227	227
Adjusted R²		0.627	0.654	0.613

Table 5. Reaction of other Russian stocks to *Yukos* events

This table presents the results of the pooled cross-sectional regression (4) of stock returns during the event days on the company-specific political risk proxies as well as *Yukos*' returns interacted with the proxies during the period from January 1, 2003 to November 27, 2003. Gvt_i and TD_i denote the government's common stock ownership and T&D score of company i , respectively. Columns 3 to 8 report results of the regression estimated on different subsets of the events: positive, negative, negative employee-related, negative company-related with law enforcement agencies, negative company-related with non-law-enforcement agencies, and major negative (with *Yukos*' return below -2%). The t -statistics are heteroscedasticity-adjusted.

		Positive events	Negative events				
			All	Pers-Law	Comp-Law	Comp-Other	Major
Const	Coef	-2.40	1.15	1.42	1.09	1.40	2.98
	<i>t-stat</i>	-2.51	2.55	2.34	1.61	2.11	2.74
Gvt	Coef	7.15	-2.07	-3.74	-1.13	-4.29	-10.09
	<i>t-stat</i>	2.04	-1.30	-1.63	-0.45	-1.60	-3.02
TD	Coef	3.07	-1.78	-3.17	-1.21	-2.25	-4.86
	<i>t-stat</i>	2.15	-2.17	-2.57	-0.96	-2.09	-2.70
Gvt*TD	Coef	-12.90	6.21	11.64	2.14	13.69	26.49
	<i>t-stat</i>	-1.51	1.56	2.00	0.34	2.07	3.39
Oil	Coef	0.51	-0.17	-0.17	-0.17	-0.52	-0.50
	<i>t-stat</i>	1.15	-0.67	-0.43	-0.45	-1.29	-0.99
LS	Coef	1.79	0.84	0.56	-0.15	2.55	-0.93
	<i>t-stat</i>	1.24	1.15	0.56	-0.14	2.06	-0.67
Ry	Coef	0.71	0.69	0.90	0.51	0.46	0.91
	<i>t-stat</i>	3.56	5.17	6.85	2.78	1.87	5.49
Ry*Gvt	Coef	-0.54	-0.71	-1.33	0.08	-0.34	-1.65
	<i>t-stat</i>	-0.76	-1.62	-2.70	0.09	-0.37	-3.02
Ry*TD	Coef	-0.49	-0.93	-1.42	-0.40	-0.68	-1.36
	<i>t-stat</i>	-1.46	-4.08	-6.77	-1.10	-1.80	-5.00
Ry*Gvt*TD	Coef	1.61	3.36	4.89	1.18	3.01	5.85
	<i>t-stat</i>	0.84	3.21	4.09	0.53	1.40	4.53
Ry*Oil	Coef	0.01	0.08	0.04	0.09	0.28	0.05
	<i>t-stat</i>	0.14	1.02	0.38	0.84	2.39	0.52
Ry*LS	Coef	0.47	0.86	0.90	0.78	0.40	0.68
	<i>t-stat</i>	1.37	3.35	2.46	2.66	1.08	2.20
# observations		214	788	345	340	257	366
Adjusted R²		0.33	0.38	0.46	0.29	0.25	0.45

Table 6. *Lukoil's* stock price behavior in response to its own and to *Yukos* events

This table presents results of the regressions (1), (5), and (6) of daily *Lukoil* returns on market returns (*Rm*) and event variables during the period from January 1, 2002 to November 27, 2003. The event dummies are defined as follows: *Pos* and *Neg* are equal to 1 in the case of positive and negative events, respectively; *Law* and *Other* that are equal to 1 if a law enforcement agency or other (non-law-enforcement) agency, respectively, was mentioned in the news. 'Y' denotes variables referring to *Yukos*; *Pers* and *Comp* are equal to 1 when the news affects *Yukos*' employees and the company, respectively. The *t*-statistics are corrected for heteroscedasticity and autocorrelation (with 5 lags).

Model		1	2	3	4
Const	Coef	0.01	0.01	0.03	0.02
	<i>t-stat</i>	0.16	0.13	0.39	0.31
Pos	Coef	-0.29	-0.29	-0.34	-0.40
	<i>t-stat</i>	-0.50	-0.49	-0.61	-0.71
Neg	Coef	-0.50		-0.49	
	<i>t-stat</i>	-1.99		-1.97	
Neg*Law	Coef		-0.52		-0.55
	<i>t-stat</i>		-1.64		-1.72
Neg*Other	Coef		-0.41		-0.38
	<i>t-stat</i>		-1.31		-1.18
PosY	Coef			0.24	0.25
	<i>t-stat</i>			0.58	0.60
NegY	Coef			-0.23	
	<i>t-stat</i>			-0.92	
NegY*PersY*LawY	Coef				0.29
	<i>t-stat</i>				0.80
NegY*CompY*LawY	Coef				0.09
	<i>t-stat</i>				0.22
NegY*CompY*OtherY	Coef				-1.02
	<i>t-stat</i>				-2.16
Rm	Coef	0.94	0.94	0.93	0.94
	<i>t-stat</i>	21.10	20.90	21.12	22.31
# observations		475	475	475	475
Adjusted R²		0.635	0.634	0.634	0.637

Table 7. *Gazprom*'s stock price behavior in response to its own and to *Yukos* events

This table presents results of the regressions (1), (5), and (6) of daily *Gazprom* returns on market returns (R_m) and event variables during the period from January 1, 2002 to November 27, 2003. The event dummies are defined as follows: *Pos* and *Neg* are equal to 1 in the case of positive and negative events, respectively; *Law* and *Other* are equal to 1 if a law enforcement agency or other (non-law-enforcement) agency, respectively, was mentioned in the news. 'Y' denotes variables referring to *Yukos*; *Pers* and *Comp* are equal to 1 when the news affects *Yukos*' employees and the company, respectively. The *t*-statistics are corrected for heteroscedasticity and autocorrelation (with 5 lags).

Model		1	2	3	4
Const	Coef	0.02	0.02	0.00	0.00
	<i>t-stat</i>	0.25	0.24	-0.05	0.05
Pos	Coef	1.43	1.43	1.44	1.41
	<i>t-stat</i>	1.73	1.73	1.73	1.75
Neg	Coef	0.18		0.17	
	<i>t-stat</i>	0.46		0.41	
Neg*Law	Coef		-0.62		-0.54
	<i>t-stat</i>		-0.81		-0.68
Neg*Other	Coef		0.73		0.74
	<i>t-stat</i>		2.54		2.47
PosY	Coef			-0.28	-0.34
	<i>t-stat</i>			-0.57	-0.68
NegY	Coef			0.35	
	<i>t-stat</i>			1.09	
NegY*PersY*LawY	Coef				0.49
	<i>t-stat</i>				0.90
NegY*CompY*LawY	Coef				0.65
	<i>t-stat</i>				1.89
NegY*CompY*OtherY	Coef				-0.67
	<i>t-stat</i>				-1.61
Rm	Coef	0.96	0.96	0.97	0.97
	<i>t-stat</i>	17.18	17.15	17.03	17.56
# observations		475	475	475	475
Adjusted R²		0.56	0.562	0.56	0.563

Figure 1. The dynamics of *Yukos* and market index in 2003

This graph shows the dynamics of daily values of *Yukos* stock and the market index during the period from January 1, 2003 to November 27, 2003 (both normalized to 100 at the outset of the period). The dates of positive events are marked as yellow triangles on the top of the graph, and the dates of negative events are marked as red diamonds on the bottom of the graph.

