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# **Unintended consequences of changing accounting standards: the case of fair value accounting and mandatory dividends**

## **1. Introduction**

Accounting standards form one of the institutions through which countries influence exchange processes in their economy (Wysocki, 2011). Changes in accounting standards, such as increasing the use of fair value accounting, aim to improve transparency of financial reporting, thus enabling stakeholders to make better informed decisions (Barth, 2006). Other institutions which may be used to improve the position of stakeholders are laws, contracts, corporate governance codes and enforcement. What happens if these institutions interact when they are changed with the aim of improving stakeholders' positions?

In this paper, we analyze a case where the introduction of fair value accounting interacted with legal rules aimed at protecting preferred shareholders in a way which resulted in an elimination of dividends for all shareholders. In April 2007, Russian energy conglomerate UES reported a quarterly net income of 722 billion ruble or 21.5 billion euro over the last quarter of fiscal 2006, whereas total fiscal 2005 net income was 20 billion ruble.<sup>1</sup> This was the highest quarterly profit in world history. The increase in net income was largely due to a revaluation of financial investments: starting in fiscal 2006, listed UES subsidiaries were valued at their market prices and the associated fair value adjustments were reported in income. UES had a very good corporate governance record, and had paid dividends consistently in the previous 13 years. However, following this record profit, UES omitted dividends for all types of shareholders over 2006, including preferred shareholders who by law were entitled to a dividend payout of two percent of net income under Russian Accounting Standards (RAS). By not paying out any dividends, also not to ordinary shareholders, UES could legally omit preferred dividends. Thus, for all shareholders, a very large increase in income led to a reduction of dividends to zero.

The legal regulations and the accounting standards surrounding this episode are aimed at improving the position of minority shareholders (La Porta *et al.*, 2000, p. 356, Leuz *et al.*, 2003). In reaction to corporate governance abuses where firms chose their own definition of income as a distribution base, Russian law was changed in 2003 to mandate the use of net income following RAS as the basis for calculating preferred dividends. Similar to IFRS, Russian accounting standards call for the use of market values in valuing financial investments, thus increasing transparency in financial reporting while reducing managerial discretion by requiring the use of observable market prices in valuing financial investments (Landsman, 2007). However, these institutional arrangements aimed at protecting minority shareholders interacted in the UES case to leave them worse off.

The interaction of institutions occurred in the determination of the dividend base. Linking dividend payouts to income that includes fair value adjustments may interact with existing firm dividend policy for several reasons. First, fair value adjustments incorporate changes in market prices in income, which are transitory and are not indicative of future changes in market prices (Penman, 2007). Second, the dividend decision is made on par with investment decisions (Brav *et al.*, 2005). Paying out a dividend based on an upward fair value adjustment that is not supported by future cash flows reduces investment efficiency and leads to an underinvestment problem (John and Kalay, 1982, Leuz, 1998, Ramalingegowda *et al.*, 2013). If mark-to-market accounting is applied to assets held until maturity or used in operations, interim price fluctuations will not necessarily result in actual cash flows. Our case description provides some support that transitory nature of fair value adjustments and interaction with the investment policy were important considerations in justifying the dividend decision. As market price fluctuations can be material, we predict that the requirement to base dividends on income that includes fair value adjustments may lead to unintended consequences. While the nature of unintended consequences depends on the specifics of the

institutional setting, our case description suggests that certain group of shareholders might be left worse off because of changes in the dividend policy.

The institutional feature of income-based preferred dividends allows us to calculate the amount of dividends that outsiders miss out on. The contractual preferred dividend of 14.3 billion RUB results in a total dividend payout ratio of 52% and a dividend yield of 28%. This is a substantial change from the existing dividend policy which involved a total payout ratio (sum of preferred and ordinary dividends) of 13% in 2005. However, UES management had no means of changing the basis for preferred dividends without the preferred shareholders' consent; the only option available was an overall dividend cut. To further support the role of interaction between fair value accounting and dividend regulation in the dividend cut, we show that the dividend cut was not a result of changing economic or business conditions and that management comments stressed concerns with distributing fair value adjustments, as predicted by the dividend policy literature. An event study indicates that the short-term and long-term market reaction to this dividend cut was negative, and more negative for preferred shareholders, which were also not compensated via capital gains or increased dividends in later years relative to ordinary shareholders.

Our analysis adds to two recent streams of literature. First, we contribute to the literature examining the institutional fit between accounting and regulation (Ball *et al.*, 2000, Ball *et al.*, 2003, Christensen *et al.*, 2013, Wysocki, 2011). While it is now well accepted that more transparent accounting standards will not benefit shareholders if there is misfit with local institutions (Ball, 2006, Wysocki, 2011), prior literature provides scant evidence as to whether institutional changes can *reduce* the effectiveness of the overall institutional system. We provide evidence that accounting rules and investor protection laws aimed to protect minority shareholders can leave them worse off.

Second, we contribute to the literature examining the use of fair value accounting in regulatory settings. Previous studies examined whether the use of fair value adjustments in regulatory capital affects behaviour of financial companies during financial crisis (Allen and Carletti, 2008, Bhat *et al.*, 2011, Kolasinski, 2011, Plantin *et al.*, 2008). We show that the use of fair value accounting in dividend regulation can affect dividend policies and lead to outcomes, which were not intended by the regulators. Our evidence is particularly relevant for countries currently using accounting income (Germany, Greece), retained income (E.U. Second Company Law Directive), or net assets (Australia, U.S.) in regulating dividend distributions.

The remainder of the paper proceeds as follows. Section 2 reviews the literature on the interaction between accounting and other institutions, and provides a framework for our analysis. The case is discussed in three sections. We describe the institutional setting of Russia in section 3 and discuss events preceding and concurring with the dividend omission in section 4. In section 5 we analyze the possible reasons and economic consequences of dividend omission. We conclude with a discussion in section 6.

## **2. Theory and analytical framework**

### *2.1 Accounting standards and other institutions*

Accounting standards form one of the institutions that arise to facilitate interaction between participants in an economy (Wysocki, 2011). Institutions provide the ‘rules of the game’ of economic exchange, through legal, political and social rules (North, 1990). A growing body of literature examines the interactions between changing accounting standards and other institutions (Ball *et al.*, 2003, Christensen *et al.*, 2013, Christensen *et al.*, 2009, Daske *et al.*, 2013). Accounting standards provide rules for reporting financial performance to outsiders such as shareholders (Leuz *et al.*, 2003). In this respect, accounting standards

improve the position of shareholders. There are other institutions aimed at protecting the position of shareholders, such as investor protection laws and corporate governance regulations, and empirical evidence suggests that these can reinforce each other (Christensen *et al.*, 2013, Wysocki, 2011). Ball *et al.* (2003) show that if investor rights and enforcement are weak, introducing transparent accounting standards does not lead to better information for outsiders' decision making. Christensen *et al.* (2013) find that the introduction of IFRS leads to reduction in information asymmetry only in countries that increased enforcement. Wysocki (2011, 323) concludes that institutional differences between countries will remain an important driver of actual reporting practices, and a uniform implementation of IFRS is still unlikely.

Other institutions may limit the effectiveness of accounting standards in achieving greater transparency, but can they also interact in such a way that the outcome negatively impacts stakeholders? There is limited evidence that this may occur. Brüggemann *et al.* (2013) argue that increasing information content of accounting rules may not be compatible with certain contractual arrangements. In this respect, Christensen *et al.* (2009) show that IFRS adoption leads to an increased likelihood of debt covenant violations and an increase in contracting costs. Chen and Tang (2009) report that after introduction of fair value accounting executive cash compensation was affected by fair value gains but not losses, which could be costly for shareholders.

## 2.2 *Fair value accounting and dividends*

Fair value accounting leads to more transparent information for investors' decision making, which decreases the information risk faced by outside investors, at least when fair values are based on observable market prices (Barth, 1994, Barth *et al.*, 1996, Eccher *et al.*, 1996, Riedl and Serafeim, 2011). Including fair value adjustments in income affects income properties as fair value adjustments are transitory in nature (Hann *et al.*, 2007, Hung and

Subramanyam, 2007). This is relevant for dividend policy: DeAngelo *et al.* (2008) summarize the empirical dividend literature and conclude that while persistent income is an important determinant of dividends, firms are reluctant to pay out dividends from transitory income components. Rather, dividend-paying firms report more persistent income (Skinner and Soltes, 2011), and dividend increases are found to be indicative of a permanently higher cash flow level (Guay and Harford, 2000). This result is consistent with Jagannathan *et al.* (2000) who find that permanent, but not transitory income components affect dividend changes.

Furthermore, the firms jointly decide on dividends and investments (Brav *et al.*, 2005). Including transitory components in income leads to income changes which are not necessarily descriptive of future cash flows (Penman, 2007, Plantin *et al.*, 2008). This is especially the case when fair value accounting is applied to long-term (operating) assets with no intent to sell. Paying out a dividend based on income that is not representative of future cash flows reduces investment efficiency and leads to an underinvestment problem (John and Kalay, 1982, Leuz, 1998, Ramalingegowda *et al.*, 2013). This may explain why firms conservatively adjust their dividends in respect to income changes (Lintner, 1956) and why there is a demand for determination of income based on historical cost accruals in the dividend setting (Leuz, 1998).

The theoretical and empirical link between dividends and income (Brav *et al.*, 2005, Lintner, 1956) explains why a number of countries have established a legal link between reported income and dividends, requiring a defined part of corporate income to be distributed among (a group of) shareholders (e.g., Brazil, Chile, Colombia, Greece, and Russia). In the past, this income typically was reported on historical basis, with little role of fair value accounting. With the increased use of fair value accounting, transitory income components are included in the distribution base. Extant literature shows that unregulated but well governed firms exclude transitory income when deciding upon the dividend level (Jagannathan *et al.*,

2000). This tension between legal requirements and common business practice is likely to be resolved in a way that will change dividend policy; that is, the status quo that was achieved by the dividend regulation is going to be changed upon introduction of the fair value accounting. Of course, the parties can re-negotiate the terms on which dividends are paid depending on allowed institutional flexibility and the stakes involved. However, the sole existence of the laws guaranteeing minimum dividends, which were driven by abuse cases, shows that re-negotiations are difficult and the previous status quo may not be easily attainable following institutional changes. This argument is similar to Li (2010) who shows that reporting transitory fair value adjustments in income may reduce efficiency of debt covenants and may even result in debt contracts not using accounting income measures anymore.

### *2.3 Framework for analysis*

The aim of our analysis is to assess the economic consequences of the interaction between fair value accounting and institutions protecting the rights of preferred shareholders by the means of minimum dividends. We do this through a case study of UES, which eliminated preferred and ordinary dividends after the introduction of fair value adjustments in income. UES entitles preferred shareholders to an amount of dividend based on reported income, and ties ordinary dividend to preferred dividends by only allowing ordinary dividends if the mandated preferred dividends have been paid. Table 1 reports the timeline of the events we discuss.

*- Insert Table 1 about here -*

We begin by discussing the events prior to the dividend omission, to establish whether the company tried to avoid the impact of changing accounting rules on the mandated preferred dividends. We next focus on the interaction of dividend regulation and fair value adjustments to evaluate how this contributed to the change in dividend policy. First, we analyze UES financial performance at the time of dividend omission to evaluate whether the change in

dividend policy was influenced by any contemporaneous changes in economic performance. This analysis is supplemented with a discussion of UES's justification of the dividend omission and its concerns with distributing fair value adjustments. Second, as shareholder returns are comprised of dividends and capital gains, we examine whether preferred shareholders were compensated via capital gains.

### **3. Case setting: changes in institutions aimed at improving investor protection**

#### *3.1 Investor protection through mandatory dividends*

While corporate governance in Russia is weak (e.g., Anonymous, 2009, Desai *et al.*, 2007, Shleifer and Vishny, 1997), the effectiveness of Russian government has increased over 2005–2008 according to World Bank Governance Indicators (Kaufmann *et al.*, 2010). In this period, Russia took several steps to improve the functioning of its financial markets both with respect to the institutional setting and accounting regulations. The Law on Stock Corporations regulates major corporate governance mechanisms (Annual General Meeting (AGM), Board of Directors) and guarantees the right of shareholders to receive a dividend (para. 31.2). The law mandates that the Board of Directors recommends the level of dividends, which is offered for the shareholders' approval at the AGM. The dividend payout cannot exceed the amount proposed by the board (para. 42.3). Because of high ownership concentration, boards in Russia are typically influenced by large shareholders, management and the government (Lazareva *et al.*, 2007). Since managers are frequently either controlling shareholders or are controlled by large shareholders, the main agency conflict is between large shareholders and minority shareholders rather than between management and shareholders. Such 'principal-principal' conflicts are typical for emerging economies (Young *et al.*, 2008).

Russian companies are allowed to issue ordinary and preferred shares. The latter have restricted voting rights, but they have veto power on major issues involving their shareholder rights, such as changes to the corporate charter concerning dividends and liquidation (Muravyev, 2009). By law, preferred shares of Russian firms may not represent more than 25% of share capital and thus represent minority shareholders. To protect preferred shareholders—who choose to give up a large part of their voting power—from expropriation by insiders the Law on Stock Corporations mandates a guaranteed dividend (cf. La Porta *et al.*, 1998, p. 1132).

A salient feature of preferred shares in Russia is the way in which preferred dividends are calculated. Unlike their European counterparts that pay out a certain percent of their par value (e.g., U.K.) or entitle preferred shareholders to a minimum dividend per share in the excess of ordinary dividend (e.g., Germany), Russian preferred dividends are linked to the level of reported income. The Law on Stock Corporations entitles preferred shareholders to a percentage of net income, with the percentage set in the corporate charter.<sup>2</sup> Furthermore, the dividends per preferred share must be at least as high as the dividends per ordinary share. If a company omits a preferred dividend payout or reduces it to a lower value, preferred shareholders gain all voting rights of the ordinary shareholders (which is similar to the German setting). Furthermore, no ordinary dividends may be paid unless the preferred shareholders receive their full preferred dividends.

Although the requirement to pay out a minimum dividend to preferred shareholders was introduced in 1992, firms still found room to limit the transfer of cash flows to preferred shareholders by adjusting their net income. This led to a further tightening of the legal rules, with the law prescribing what definition of net income should be used as the dividend base. This tightening of the rules coincided with the well-publicized case of Surgutneftegaz (SNG), a crude oil producer. SNG management was subtracting capital expenditures and some social

expenditures from income after taxes, thus substantially reducing the distribution base to preferred shareholders (*The New York Times*, July 3, 2004). Following legal action against SNG, the case obtained attention from the Russian Federal Securities Commission and the Parliamentary Commission for Investors Rights. As a result the government introduced an amendment to para. 42 of the Law on Stock Corporations, effective July 1, 2003, requiring companies to base the distribution of dividends to preferred shareholders on net income reported following Russian Accounting Standards. Complying with the new regulation, SNG raised the dividends to preferred shareholders from 0.096 RUB per share paid out in 2003 (almost the same as in 2002) to 0.160 RUB in 2004. Ordinary shareholders saw their dividend increase from 0.032 to 0.140 RUB per share in 2004.

### *3.2 Russian Accounting Standards and the use of fair value accounting*

The Regulation of March 16, 1998 N 223 ‘On Reforming the Russian Accounting Standards in accordance with the International Financial Reporting Standards’ presented a way to increase transparency of accounting and move Russian Accounting Standards (RAS) towards IFRS. In this regard, RAS 19/02 of December 10, 2002 ‘Accounting for financial investments’ is the Russian counterpart to IAS 39. It applies to all financial statements prepared in the fiscal year 2003 and thereafter.

Similar to IAS 39, RAS 19/02 requires extensive use of fair value accounting. Financial investments, defined to include investments in subsidiaries, have to be initially recognized at fair values. Subsequent measurement depends on the ability of an entity to assess the fair value of a financial instrument. Financial investments for which it is possible to determine their fair value by reference to a market should be subsequently re-valued at fair value. The assessment of fair value should take place at least annually and is allowed to be carried out on a monthly or quarterly basis. The unrealized changes in fair value are recognized in the income statement, usually at the line ‘other income’. While IAS 39 allows the use of valuation

models to determine fair value, RAS 19/02 mandates the use of observable market prices. However, the scope of RAS 19/02 is somewhat broader as the standard also applies to investments in subsidiaries. Finally, while IFRS mandates reporting fair value adjustments for some instruments as other comprehensive income (e.g., available-for-sale securities), any fair value gains or losses are recognized in income according to RAS 19/02.

#### **4. Case study: UES**

##### *4.1 Company information<sup>3</sup>*

UES was established in 1992 as the major electricity producer and distributor of Russia. Until 2008, the company owned 72% of the installed capacity of all power plants in Russia and 96% of the total length of all electricity lines. For 15 years, it generated at least 70% of Russia's electricity and a third of its heat. Of the total outstanding shares of UES, numbering 43 billion, 2.1 billion or about 5% were preferred shares. These had restricted voting rights, but they were entitled to 10% of net income per share. Thus, the total amount of preferred dividends is about two percent of net income ( $((0.05/0.25) \times 0.10 = 0.02)$ ). During the time period of the case (2005–2007), the Russian government was a controlling shareholder with 53% of share capital. State-controlled Gazprom was reported to hold 10.6% of UES ordinary shares (*RIA Novosti*, July 12, 2007). The other ordinary shareholders were international institutional and private investors via Global Depositary Receipts (GDR) and American Depositary Receipts (ADR) programmes (about 16%), two private companies that supply or use energy (SUEK, 6%; Norilsk Nickel, 3.5%), and Russian private and institutional investors (3%) (*RBK*, October 20, 2007). Of the preferred shares, 17.7% was owned by international investors via ADRs, 7% was held by the state, and the rest of the shares were widely dispersed among investors (*Kommersant*, December 8, 2006). There were no major reported changes in ownership around the time of the dividend decisions.

Starting in 2000, the economic growth in Russia led to an increase in energy consumption, and created a need for large-scale investments. To attract private investments, a reform of the electricity industry was started in 2003. As a part of this reform, UES's distribution infrastructure would be controlled by the government, while the power generating companies were to be spun off from the parent company. According to UES, the restructuring process was aimed at assuring that the government kept a controlling interest in key companies, while minority ordinary or preferred shareholders would be able to either participate in all spin-offs or have a viable 'exit' option. Specifically, both ordinary and preferred shareholders could choose to offer their shares for repurchase to the company instead of converting them into shares of subsidiaries. UES was terminated on July 1, 2008, while UES shares stopped trading in June 2008. Having a finite timeline allows us to assess the 'final' wealth status of different types of shareholders.

The company prepared quarterly reports and three sets of accounts on an annual basis. While reporting interim and annual financial statements of the parent company according to RAS was mandated by the law, UES additionally disclosed IFRS single (or unconsolidated) and group (or consolidated) accounts. Dividend payments were tied to RAS single accounts, which were also reported as a part of the annual report (see Table 2, Panel A). From 1993 to 2005, the company paid dividends on ordinary and preferred shares each year. The amount of preferred dividends was equal to the mandated payout of about two percent of net income, while ordinary dividends on a per share basis were substantially lower. Despite this fact, the discount on preferred shares was about 15–20% (Table 2, Panel B).

*- Insert Table 2 about here -*

UES had a good corporate governance reputation. In October 2007, PricewaterhouseCoopers assessed the level of UES disclosure of financial and non-financial information. UES complied with 114 out of 134 disclosure criteria derived from the list of

NYSE and LSE disclosure requirements and reports of best practice. The 2006 and 2007 annual reports of UES list several other awards and high rankings in the field of corporate governance (UES, 2006, UES, 2007).

#### *4.2 The revaluation decision*

In the fourth quarter of 2006, UES reported a large spike in income. Unconsolidated net income under RAS amounted to 722 billion RUB, the highest quarterly income in worldwide corporate history.<sup>4</sup> Most of this income was due to revaluation of financial investments in subsidiaries. While income before revaluations for the entire year 2006 equalled 27.4 billion RUB, fair value adjustments were 718 billion RUB. This was the first time the company applied the provisions of RAS 19/02 and revalued subsidiaries traded on the two major stock exchanges in Russia, the Russian Trading System (RTS) and the Moscow Interbank Currency Stock Exchange (MICEX), to their current market value. As a result, the financial investments reported on the balance sheet increased from 265 to 1,025 billion RUB. A further revaluation occurred in the fourth quarter of 2007, bringing financial investments to 1,272 billion RUB and affecting net results by 424 billion RUB.

The accounting policy of UES was to revalue its investments on an annual basis at the end of the reporting period. Despite the standard requiring revaluations of quoted financial investments from 2003 onwards, UES revalued its assets only in 2006. As the shares of subsidiaries were traded before 2006 and the market prices were observable (see Table 3 for the five largest subsidiaries), the requirements of the standard to carry out a revaluation were satisfied before 2006. According to the representative of minorities on the Board of Directors, who also headed the valuation and auditing committee, the revaluation of financial investments in 2006 was ‘... demanded by the auditor ... and the auditing committee supported this decision’ (*RBK Daily*, August 25 and 28, 2006). Our additional analysis points

to three reasons, which can explain why noncompliance became more costly for the auditor in 2006 relative to prior years.

First, noncompliance is costly if the involved amounts are material. Table 3 reports that 90% of the fair value adjustment reported in 2006 is attributable to an increase in the value of subsidiaries occurring during 2006. This increase reflects the overall performance of the Russian stock market, which gained 70% over 2006. Moreover, only 7 out of 44 subsidiaries listed by the end of 2006 were listed before 2006. Thus, a substantial increase in the market value of subsidiaries and the number of listed subsidiaries can explain why noncompliance became costly in 2006.

*- Insert Table 3 about here -*

Second, the deviation from the standard requirements became more costly due to an overall increase in compliance with RAS 19/02. Accounting data obtained from the Russian Trading System (RTS) show that 4.2% of firms revalued long-term investments in 2006 relative to 3.0% (2005), 3.5% (2004), and 2.9% (2003) in prior years. We find that 13 firms report a non-zero fair value adjustment for the first time in 2006 relative to 7 firms in 2005. Of the newly compliant firms in 2006, the firm with the largest revaluation reported a fair value adjustment in 2006 representing 37% of total assets. This firm (Acron) invested in quoted shares including a Russian blue chip stock in 2005 and 2006, but revalued these investments only in 2006. Our analysis of financial statements allows us to conclude that out of the total revaluation gain reported in 2006 about 47% (or about 17% of total assets) can be attributed to 2005.<sup>5</sup> The delayed revaluation is comparable in magnitude to the fair value adjustment that UES did not report in 2005 (20% of total assets). The extent of discretion is not unique to this regulatory setting: Hilton and O'Brien (2009) report on the case of the Canadian firm Inco Ltd., which did not revalue a quoted subsidiary for four years despite clear signs of impairment exceeding 2 billion USD, representing some 30% of total assets (Hilton and

O'Brien, 2009). However, the UES fair value adjustment in 2006 represented 196% of total assets, so orders of magnitude higher than in 2005.

Third, the auditor faced a number of legal pressures in Russia in 2006 (*The Wall Street Journal*, September 7, 2010). In February 2006, the Federal Tax Service filed charges against PricewaterhouseCoopers of evading taxes. If found guilty, the auditor risked losing its auditing license. As a result, any noncompliance in 2006 increased litigation and reputation costs for the auditor.<sup>6</sup>

Overall, our analysis of the press and case details suggests that the costs of noncompliance substantially increased in 2006 and the pressure from the auditor did not allow further deviation from the standard's requirements.

#### *4.3 The dividend omission: evidence on the interaction between regulations and accounting standards*

The decision to revalue financial investments in RAS single accounts in 2006 had consequences for dividend distributions, as preferred shareholders were entitled to two percent of net income. The mandatory preferred dividends calculated based on net income for 2006 equal 14.3 billion RUB, up from 402 million RUB in 2005. Relative to the ordinary dividends over 2005 of 2.4 billion RUB, this would imply a substantial increase in cash outflow to pay dividends.

The existing legal arrangements provided UES with several options to re-negotiate dividends with shareholders. Given the magnitude of the preferred dividend, any solution which would meaningfully reduce dividends would require changes in the mandated preferred dividends. UES proposed a change to the corporate charter which would base preferred dividends on income before revaluation of financial investments rather than net income (*Kommersant*, August 31, 2006). This proposal was put up for vote during an extraordinary shareholders' meeting on December 6, 2006. According to law provisions, 75% of preferred

shareholders needed to approve the changes to the corporate charter. Analysts expected the decision would not be approved (*Kommersant*, August 31, 2006), and indeed, less than 20% of preferred shareholders voted in favour of the proposal. The majority of preferred shareholders voted against reducing the dividend to which they were legally entitled.

Around the time of the extraordinary shareholders' meeting, UES estimated that preferred dividends would increase 23-fold relative to 2005 due to fair value adjustments (*RBK Daily*, December 8, 2006; *Kommersant*, December 8, 2006). This implied a substantial dividend over 2006, which preferred shareholders were 'asked' to forego. The implied preferred dividends were larger than the difference in price of ordinary and preferred shares: on December 6, 2006, the date of the shareholder meeting, preferred shares traded at 22.73 RUB, and ordinary shares at 25.88 RUB. The price difference of 3.15 RUB per share is lower than the preferred dividend of 4.46 RUB per share based on UES estimate reported at the time of the shareholder meeting, and the preferred dividend of 6.91 RUB per share based on net income reported in RAS financial statements. The voting pattern thus confirms the preference of preferred shareholders for higher dividends in favor of the voting disadvantage and the resulting discount of preferred shares relative to ordinary shares.

The company had a legal option of paying out a lower amount of preferred dividend than required by law (i.e., 2% of net income). As full dividends are not paid, preferred shareholders in this case are granted full voting rights. However, following this choice, UES managers would be ignoring the decision of the extraordinary shareholders' meeting that ultimately voted against using an alternative distribution base. Furthermore, this solution would put minority ordinary shareholders at the disadvantage, as the Law on Stock Corporations mandates that ordinary dividends cannot be paid before a company pays a full amount of preferred dividend. That is, choosing an alternative distribution base without the

shareholders' consent would lead to a disruption of dividend policy also for ordinary dividends.

After re-negotiations with preferred shareholders failed, management made a proposal to the Board of Directors to omit all dividends, including ordinary dividends. As the major shareholder, the Ministry for Economic Development made a formal announcement supporting a vote in favour of dividend omission. Backed by its major shareholder, on April 27, 2007 the Board of Directors offered a dividend omission for all share classes to the shareholders' meeting. Since any dividend payout is legally capped by the Board's recommendation, the institutional setting did not allow many possibilities for minority preferred shareholders to protest.

At the general assembly on June 26, 2007, all shareholders had a right to vote on the dividend proposal simultaneously. As a legal commentary in the business press suggested, investors had no other choice but to accept the proposal of the Board: '...if the Board of Directors recommends no dividends, the shareholders will approve it' (*RBK Daily*, March 20, 2008). Nevertheless, 12.5% of shareholders did not support the dividend omission. This was the highest rate of disapproval among all questions put for vote at the general assembly (Protocol of the Annual General Shareholder Assembly, June 26, 2007). UES also omitted a dividend payout for the fiscal year 2007. The Board of Directors recommended omitting dividends during the meeting on April 4, 2008. Following the 2007 precedent, the voting on the dividend proposal at the general meeting on May 28, 2008 followed the same pattern. However, the business press reported that UES minority investors voiced their discontent with the management's decision to eliminate the dividends during both annual meetings. Investors blamed the management of UES to be 'pathologically greedy' during the annual meeting in 2007 (*Gazeta*, June 27, 2007), and *RBK Daily* (May 29, 2008) reported that the dividend

omission was the most debated and critical question of the annual meeting in 2008, leading to many complaints from minority investors.

The application of fair value accounting to the financial assets of UES had a material impact on net income, and with this on the dividend base. This led to costly renegotiations. The fact UES proposed a dividend base which excluded fair value adjustments is consistent with the predictions of the dividend policy literature. However, as the regulatory setting was rigid, the outcome was the opposite to what was intended by the regulators: while the company reported a (pre-revaluation) income, the mandatory dividends that offer protection to receive a fraction of this income are set to zero.

## **5. Case analysis**

### *5.1 Scope of analysis*

Our case discussion shows how the regulatory requirement of basing preferred dividends on net income interacted with the implementation of fair value accounting. This section reports additional analyses that aim to further support our argument that change in dividend policy was the result of interaction between fair value accounting and dividend regulation, and to examine whether dividend omission affected shareholders' wealth. We first establish that the omission of dividends represents a strong deviation from the previous dividend policy without any corresponding change in the underlying economic performance of UES (section 5.2). We also report on UES management's comments in the annual report and in the business press, which stress concerns with using income that includes fair value adjustments as the dividend distribution base. In section 5.3, we ask whether the observed outcome affects shareholders' wealth and examine whether preferred shareholders were compensated via capital gains. Particularly, we examine the prices of preferred shares around the time of dividend omission, and compare returns to preferred shareholders with returns to ordinary

shareholders. We report short-window analyses, and long-window analyses until the last trading day of UES shares in June 2008.

## 5.2 *Analysis of dividend omission: did the underlying economic performance of UES justify the omission?*

A firm's dividend policy may change if the continuation of the policy does not satisfy regulatory requirements or if there are changes in the underlying economics. Panel A of Table 2 reports data from statutory parent-only accounts, which serve as the legal basis for dividend distributions reported in Panel B. UES paid out mandatory dividends at the mandated rate of 2% of net income since 1993, while ordinary dividends were an increasing fraction of net income (11.3% in 2005 vs 4.1% in 2001). Setting dividends to zero is a sharp deviation from the previous dividend policy for both ordinary and preferred shares. Was this justified by the underlying economic performance?

To examine the underlying economics, we use consolidated IFRS financial statements (see Table 2, Panel D). Firms make dividend decisions considering the performance of the whole group, as revealed by consolidated IFRS accounts (Brüggemann *et al.*, 2013). For example, Goncharov *et al.* (2009) show that consolidated accounts dominate dividend decisions in Germany, despite the legal requirement to use parent-only income as a basis for dividend distribution. This is consistent with prior dividend policy literature which uses consolidated accounts (DeAngelo *et al.*, 2006, Goergen *et al.*, 2005, La Porta *et al.*, 2000). Panel C of Table 2 reports an increase in IFRS net income from 24 to 150 billion RUB in 2006. The strong increase in 2006 net income is explained by the reversal of impairments of operating assets which were reported before 2005. However, operating income excluding effects of impairments also increased and equalled 93 billion RUB in 2006 relative to 71 billion RUB in 2005. In 2007, IFRS accounts again showed an increase in profitability (not

tabulated). Based on the analysis of UES profitability, there is no reason to expect a lower dividend.

The liquidity of the group was also stable in 2006 (see Table 2, Panel D). The cash balance increased in 2006 to 54 billion RUB and was higher than the level of the cash balance over the period 2001–2004. UES reported strong positive operating cash flows in 2006 and in prior years. If UES paid out 11.3% of parent-only net income before revaluations as ordinary dividends (similar to 2005), this would amount to 3.1 billion RUB in 2006. This is comparable to a total dividend of 2.8 billion RUB in 2005 which was paid despite lower cash balance. The amount of cash necessary to support a preferred dividend of 528 million RUB in 2006 (the amount of preferred dividends based on net income before revaluations) is only 1.0% of the cash balance. Thus, the financial condition would enable a continuation of the existing dividend policy, consistent with UES's first proposal of basing preferred dividends on income before revaluations.

As maintaining the dividend level is on par with investment decisions (Brav *et al.*, 2005), we examine changes in sales growth as a proxy for investment opportunities and free cash flows (FCF) as a measure of current investments. We measure FCF as the sum of operating cash flows and investing cash flows. The sales growth in 2006 is somewhat higher than in 2005, but is less than the four-year average. FCFs are negative in 2006 and 2007, indicating that funds generated by operating activities are not sufficient to cover investments. The sign and the magnitude of FCFs are explained by the investment program and increasing investments in generating capacity, as discussed in section 4.1. The company financed increasing investments by offering shares in subsidiaries to private investors (UES, 2006, p. 71). For example, the company generated 12.3 billion RUB from selling shares in subsidiaries over 2006, which were reported under cash flow from financing activities. Major proceeds from share issues were expected over the following years and the company increased long-

term debt financing in 2006 to allow for an earlier start of the investment program. While new borrowings somewhat increased the leverage in 2006 and 2007, its overall level does not seem exceptionally high.

We find no evidence that economic circumstances changed and justified a downward deviation from the previous dividend policy. At the same time, comments by UES management suggest that a decision to distribute the mandated dividends would not be compatible with the company's investment policy, and that management had concerns with distributing fair value adjustments.

UES reported that a high dividend payout would impede the investment program (*RBK Daily*, May 29, 2008; *Rosbalt*, April 27, 2007). The Minister of Economic Development, who was also member of the Board of Directors at UES was quoted saying '[w]hen the country suffers from the energy deficit, why [should we] pay out dividends, and then spend money from the federal budget?' (*RIA Novosti*, April 13, 2007). These arguments are supported by company's negative free cash flows, and distributing high dividends would require either cuts to investment program or borrowing extra funds, which reduces investment efficiency.

To confirm the link between the dividends and the investment program, we examine whether UES undertook successful investments in 2006 and in the following years. Consistent with the investment program, we expect to observe an increase in the installed electricity production capacity and in the electricity output. Table 2, Panel C reports descriptive statistics supporting these predictions. Particularly, UES financial statements report an increase in the installed electricity capacity in 2006 and 2007 (the last year for which these data are available). Furthermore, the increase in installed capacity over 2007 is higher than in all prior years. Panel C further tabulates Worldbank data on Russian aggregate electricity output. The aggregate electricity output and the UES installed capacity are highly correlated (Spearman correlation of 0.81,  $n = 7$ ), reflecting the monopoly position of UES. Aggregate electricity

output also increased in 2006 and 2007. Overall, investments in new electricity production grew by 3.0% over 2006–2008 relative to 2.3% in 2003–2005. We next examine whether UES investments (proxied by the change in installed capacity) are value increasing. We regress UES annual stock returns on changes in installed capacity over the year, as well as a trend variable to control for higher returns during our case period relative to earlier years. While the power of this test is weak due to the limited data availability (years 2001–2007,  $n = 7$ ), we find a positive and statistically significant coefficient on the change in installed capacity (coef. = 0.578; robust t-stat. = 3.89; adj.  $R^2 = 16\%$ ). This analysis supports the interpretation that investors perceive UES investments as value increasing.

UES managers also highlighted on multiple occasions that fair value adjustments are not representative of future cash flows. In the 2006 annual report, UES (2006) repeatedly labelled the revaluations ‘paper profits’ (on page 9 (twice), 35, 106, and 117) because they were not ‘supported by any actual cash flows’ (page 34). Likewise, a UES press release on April 1, 2008 referred to income before fair value adjustments as profits ‘supported by actual cash flows’. The UES CEO stated ‘that dividends should be paid out of real, not ‘paper’ profit’ (*RIA Novosti*, December 7, 2006), which was supported by the Board in the annual report: ‘We believe that dividend payment from the paper profit would not be advisable’ (UES, 2006, p. 9). These arguments were paralleled in the business press, when describing the spike in income (e.g., *Nezavisimaya Gazeta*, June 27, 2007; *Gazeta*, June 27, 2007; *RBK Daily*, May 29, 2008). While *Vremya i Den’gi* (April 4, 2007) labelled the 2006 result a ‘world record in paper profit’, *RBK Daily* (May 29, 2008) reported that the ‘largest part [of 2007 net income] is ‘paper’ profit’. Similarly, a financial analyst suggested that the ‘... huge ‘paper’ profit [is] due to floating of the subsidiaries’ (*Gazeta*, April 4, 2007). Overall, the arguments provided by UES stakeholders suggest that the interaction between fair value accounting and legal

dividends and the concerns with using income that includes fair value adjustments as a dividend base, rather than some economic factors, explain the dividend omission.

### 5.3 *Shareholder returns around the dividend omission*

Changes in dividend policy will affect the wealth of shareholders only if dividend changes contain information or coincide with events that affect shareholders wealth. For example, managers may grant some concessions to preferred shareholders, which can lead to positive capital gains to preferred shareholders and compensate for the dividend omission. Importantly, omitting guaranteed dividends to preferred shareholders has consequences for the voting rights. Under Russian law, once the decision to omit a payout is taken, and until the full amount of guaranteed payouts occurs, preferred shareholders gain the same voting rights as ordinary shareholders. This institutional feature predicts an increase in the price of preferred shares relative to ordinary shares (Goetzmann *et al.*, 2002), which was also expected by analysts (*RBK Daily*, December 8, 2006). We use three analyses to evaluate whether shareholders were compensated via capital gains. First, we evaluate the market reaction to the dividend omission. Second, we evaluate the development of the voting premium, the difference in the price of preferred and ordinary shares. Third, we evaluate the result of the dissolution of UES.

*First*, we perform an event-study analysis of the reaction to the dividend announcement. Similar to Aharony and Swary (1980), we base our discussion on a 60-days window to allow for dissemination of information, to account for low trading liquidity, and to include the time of the annual shareholders' meeting, which confirmed the dividend omission. Table 4 reports cumulative returns for preferred shares centered at the date of the dividend omission on April 27, 2007. We use raw returns and abnormal returns. Based on the extant literature, we estimate abnormal returns using the market model and regress daily UES share returns on the daily returns of the RTS stock market index (representing the largest Russian

stocks). We estimate the market model parameters (the slope on market returns and the intercept) using the 180-day period preceding the event window. Scholes and Williams (1977) show that when shares are thinly traded and are volatile, the ordinary least squares estimates of the market model are biased and are inconsistent. As thin trading is likely to be a concern with UES shares, we use consistent parameter estimates as proposed by Scholes and Williams (1977).<sup>7</sup> Specifically, we estimate an OLS regression of UES daily returns on current stock market reruns, one-day-ahead stock market return and lagged stock market return:

$$RET_t^{UES} = \alpha_0 + \beta_{t-1}RET_{t-1}^M + \beta_tRET_t^M + \beta_{t+1}RET_{t+1}^M + e_t, \quad (1)$$

where  $RET$  is the daily return,  $M$  indicates the RTS stock market index,  $UES$  indicates returns on UES preferred or ordinary shares, and  $t$  is the time subscript indicating daily returns. Using the coefficients from this model, we obtain a consistent estimator of UES's true beta coefficient as:

$$\beta_t^{UES} = \frac{(\beta_{t-1} + \beta_t + \beta_{t+1})}{1 + 2\rho_M}, \quad (2)$$

where  $\rho_M$  is the autocorrelation coefficient of the RTS returns. Finally, the consistent intercept of the market model is estimated using returns on UES shares, stock market returns, and the efficient estimate of the UES beta:

$$\alpha_t^{UES} = \frac{1}{T-2} \sum_{t=2}^{T-1} RET_t^{UES} - \beta_t^{UES} \frac{1}{T-2} \sum_{t=2}^{T-1} RET_t^M, \quad (3)$$

where  $T$  is the length of the estimation period (i.e. 180 days). We use the consistent estimates of the intercept and the slope coefficient (the beta) to obtain abnormal daily returns over the period of  $(-60; +60)$  trading days.

Comparing the 60-day pre- and post-announcement windows, we find a difference in cumulative raw returns for preferred shareholders of  $-29.4\%$ , so post-announcement returns are substantially lower than the pre-announcement returns. Similar, abnormal returns were negative after the announcement, with the difference between pre- and post-announcement abnormal returns being  $-25.7\%$ . Results are qualitatively similar when we extend our analysis

to the last trading day of UES shares (bottom of Table 4). While we find that the market reaction was also negative for ordinary shareholders, there was a stronger decrease in the preferred share price (−29.4% vs. −15.7%). Overall, this evidence suggests that preferred shareholders' wealth was affected by the dividend omission, as they were not compensated via capital gains. Instead, there was a negative market reaction as predicted by the agency theory of dividends (DeAngelo *et al.*, 2006, Pinkowitz *et al.*, 2006). That is, investors value cash outside of company managers' reach higher than cash kept in the company. Agency costs affected the wealth of minority ordinary and minority preferred shareholders, but more so for minority preferred shareholders who are entitled to a greater cash distribution.

- *Insert Table 4 about here* -

*Second*, we evaluate the voting premium—the difference in price of ordinary and preferred shares—because voting rights have value and providing full voting rights to preferred shareholders after the dividend omission is predicted to decrease the voting premium to zero (Zingales, 1994). While the voting premium did decrease shortly before the announcement, the 60-day post-announcement average is 15.5%, which is higher than the average premium in 2003–2005 (see Table 2, bottom row of Panel B).<sup>8</sup> The continuing existence of a voting premium after the omission may be the result of corporate governance issues, but also of lower liquidity of preferred shares relative to ordinary shares (Goetzmann *et al.*, 2002) and uncertainty about future dividends and the status of preferred shares. The average 2006 daily trading volume as percent of market capitalization of UES ordinary shares was 0.026%, while it was only 0.013% for preferred shares. This liquidity difference of 50% remained virtually unchanged in 2007 relative to 2006, and implied a liquidity discount on preferred shares. Furthermore, the voting disadvantage could have been reestablished if UES had returned to paying dividends in 2007. Regardless of the reason for the remaining voting premium, we note that a full elimination of the voting premium would bring the preferred

shareholders a capital gain of 3.15 RUB per share, which is lower than the preferred dividend per share of 6.91 RUB instead of 0.25 RUB (based on income before revaluation). Thus, preferred shareholders had no possibility of fully recovering the omitted preferred dividends through capital gains. This reflects the one-off nature of fair value adjustments: the value of ordinary shares will be linked to sustainable dividend levels, not the incidental high fair value dividends.

We conclude that the voting premium analysis confirms the results of the event study and shows that preferred shareholders were not compensated via other channels. In turn, ordinary shares are trading at a higher premium to preferred shares after the dividend omission, which is consistent with a larger negative impact of dividend omission on the wealth of preferred shareholders.

*Third*, we examine the result of the termination of UES. Ordinary and preferred shareholders could choose to offer their shares for repurchase to the company or convert them into shares of subsidiaries when UES would be dissolved.<sup>9</sup> About 20% of preferred shareholders chose to offer their shares to the company. The repurchase prices were set at a level proposed by an independent appraiser (Deloitte & Touche) on June 1, 2007 and approved by the Board of Directors on July 27, 2007 (Decision of the Board of Directors N256). Ordinary shares were repurchased with a premium of 9.2% relative to preferred shares, which is comparable to the magnitude of the voting premium on that date. The conversion option entitled ordinary and preferred shareholders to a proportionate share in the subsidiaries. Preferred shareholders received on average about 9% less of the subsidiaries' shares, consistent with the conversion rate set by the Board of Directors. For example, a holder of 100 ordinary shares of UES received 34 ordinary shares of subsidiary company Mosenergo, while a holder of 100 preferred shares received 31 ordinary shares of Mosenergo. In addition, preferred shareholders received preferred shares in two specific holding

companies, while the ordinary shareholders received ordinary shares in these entities. Thus, when choosing a conversion option, preferred shareholders continued to have a disadvantage relative to ordinary shareholders.<sup>10</sup>

We do not find any evidence that the dividend omission affected the setting of the buy-back prices or of the conversion rate. That is, preferred shareholders were not compensated for the dividend omission at a later date. To the contrary, the discount implied by the buy-back prices and the conversion option neglects the fact that both shares had similar voting rights after the dividend omission. Our analysis suggests that ordinary shareholders received a greater proportion of wealth relative to preferred shareholders when UES was terminated.

## **6. Discussion and conclusion**

We analyze the case of UES, a Russian energy producer with a long history of stable dividend pay-outs, which in 2006 reported the largest quarterly income in world corporate history, but discontinued its dividends for ordinary and preferred shareholders. This happened even though the latter were entitled to a legally mandated dividend of a fixed percentage of net income. The income was largely the result of fair value adjustments, and was exceptional relative to recent performance: it represented a 35-fold increase on the previous year's net income. It implied a preferred dividend payment of 14.3 billion RUB, compared to 402 million RUB in 2005, but no dividends were paid. The dividend omission was not compensated by capital gains for preferred shareholders relative to ordinary shareholders. Thus, preferred shareholders were worse off after the record profit.

The negative impact on preferred shareholders' wealth was not the result of corporate governance *abuses*—all actions taken by UES management were legal. We suggest this case is about the interaction between two institutions that were recently changed to improve minority shareholder protection: accounting standards and dividend regulation. Accounting

standards aim at improving reporting quality and transparency. They should enable outsiders to make better decisions, and thus help in mitigating agency costs. Similarly, mandated dividends aim at protecting minority shareholders by linking preferred dividends to reported income. As reported in section 3.1, the impetus for this law came from the case of oil firm SNG, which used an adjusted (much lower) earnings number as the basis for determining preferred dividends. Consistent with the effectiveness of this law provision on a stand-alone basis, SNG increased its dividends to shareholders. However, in the UES case an accounting standard requiring application of fair value accounting in measuring income interacted with a legal rule mandating the use of this income number as the basis for preferred dividends, leading to a decline in preferred shareholders' wealth.

The income spike in 2006 was largely due to fair value gains on financial investments and implied a six-fold increase in the total dividend payout, attributable to the requirement to pay preferred dividends over the net income after fair value adjustments. Though this payout in all likelihood would not lead to serious financial problems, extant literature suggests that firms aim for a stable dividend development that allows maintaining investments (e.g., Brav *et al.*, 2005). A large increase in dividends, which is required because of a fair value revaluation rather than an increase in operating results, does not fit this trend. Although special dividends of a large size are not uncommon, they typically are the result of a managerial process rather than from applying accounting regulations. For example, in 1999, consumer goods company Unilever paid out a special dividend of 5 billion British pounds on top of the regular dividend of 0.8 billion pounds. This amount represented the proceeds of the sales of a subsidiary in 1997. Unilever took two years to decide on paying out these proceeds as dividends, not being able to find suitable takeover targets during this time (Unilever, 1998); *Financial Times*, February 24, 1999).<sup>11</sup>

Finally, the details of this case are specific to UES, which is the nature of a case study. To what extent did other characteristics of this case play a role in the dividend decision? Above, we have argued that the transitory nature of fair value adjustments and the corporate investment policy justified the dividend decision. We further argue that corporate governance characteristics of the case such as weak investor protection or law enforcement are not the drivers of this decision: UES had a good corporate governance track record, it had a consistent dividend history, it did not break any laws, it did not rely on special treatment from the state, the regulators, or any other insiders, and there is no evidence that the preferred dividend cash flows which were not paid out were used for perquisite consumption or tunnelled to insiders. We therefore argue that the case is about the unintended negative consequences of interaction between institutional arrangements aimed at protecting outsiders.

Our evidence is especially relevant for national regulators who use accounting numbers as a legal base for distributions. When dividends are based on income, fair value adjustments can lead to distributions which are not supported by the underlying performance or investment planning. A dividend reduction to address these effects can, however, lead to an increase in agency costs: in countries with weak institutions regarding investor protection, cash inside the firm is valued less than cash in the hands of investors (Pinkowitz *et al.*, 2006). This is relevant for Brazil, Chile, Columbia, and Venezuela that similarly require a part of net income to be distributed among (minority) shareholders (La Porta *et al.*, 2000), for Greece that requires dividends to be based on net income, but recommends firms to exclude fair value adjustments when determining the dividend base, and for German firms that are required to offer 50% of parent income for distribution. If fair-value based IFRS is adopted for these accounts, national regulations may be incompatible and the interaction may lead to unintended consequences. Our analysis may be also extended to countries that use retained income (E.U. Second Company Law Directive), or net assets (Australia, U.S.) in regulating dividends. According to

the Second Company Law Directive, E.U. Member States may introduce mechanisms that limit the distribution of unrealised income. However, 10 out of 17 E.U. countries using IFRS accounts in dividend regulation do not require modifications for unrealized gains and losses (KPMG, 2008). In these countries, fair value adjustments can increase the value of retained income or net assets. Distributing dividends in such cases may be not prudent and impact companies' investments.

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<sup>1</sup> Based on the official exchange rate of the Russian Central Bank on December 30, 2006.

<sup>2</sup> The law mandates that a company assigns a fixed percent of net income to the dividend distribution pool to be distributed to preferred shares representing no more than 25% of equity capital (top statutory amount). If preferred shares represent less than the top statutory amount, the company adjusts the payout ratio downwards to account for this fact. This implies that the amount of dividends due to preferred shareholders is calculated as follows: Preferred dividends = ((Number of preferred shares/Total number of shares outstanding)/0.25)\*Dividend payout ratio\*Net income. The dividend payout ratio is set by the corporate charter and is typically at 10%, as is the case at UES.

<sup>3</sup> Company information is retrieved from the firm's annual reports for 2006 and 2007, also available at <http://www.rao-ees.ru/en/invest/reporting/show.cgi?content.htm>, last accessed on March 10, 2014.

<sup>4</sup> The reported amount equals 27.4 billion USD, and is higher than the interim result of ExxonMobil in Q2 2008 (11.7 billion USD)—reported by business press to be the highest quarterly result in the U.S. history—and the interim result of Royal Dutch Shell also in Q2 2008 (11.6 billion USD).

<sup>5</sup> Acron's RAS financial statements do not explain why the company chose to forego the revaluation in 2005, and do not provide any details on the amount of appreciation attributable to prior years or the list of company's investments. However, the company's IFRS financial statements report the list of investments and the revaluation adjustment in each year. We note that the total value of investments from RAS financial statements

does not equal to its counterpart in IFRS financial statements, due to measurement differences between RAS and IFRS financial statements. However, these measurement differences are minor (about 1%).

<sup>6</sup> We note that Acron was also audited by PricewaterhouseCoopers.

<sup>7</sup> Results based on OLS estimates of the market model parameters are qualitatively similar.

<sup>8</sup> As a robustness check, we estimate abnormal changes in the voting premium by estimating model (1) using returns on preferred shares as the dependent variable and after substituting market returns for returns on ordinary shares as independent variables. This analysis confirms that the voting premium did not decline after the dividend announcement.

<sup>9</sup> In November 2006, two subsidiaries were already spun off through a procedure comparable to issuing stock dividends: shareholders received shares in the two subsidiaries.

<sup>10</sup> We also examined whether preferred shareholders were granted higher dividends after UES was dissolved. UES preferred shareholders received preferred shares in IDGC Holding and RAO Energy Systems of East and could not choose for ordinary shares. We find that both companies did not pay preferred or ordinary dividends in 2008 and 2009, pointing to fair value gains as a main driver of reported profits.

<sup>11</sup> Wruck (1994) describes the case of a company that took on extra debt to pay out a large cash dividend, but this was linked with a fundamental change in the strategy and organization of the company, involving new management control systems down to the shop floor level, again implying a careful strategic decision.

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**Table 1.** Case study timeline

December 10, 2002	RAS 19/02 introduced, requiring use of fair value accounting for financial investments.
July 1, 2003	Preferred dividends must be based on net income under RAS.
September 22, 2006	The UES Board of Directors approves the conditions of the first stage of reorganization.
December 6, 2006	Extraordinary shareholders' meeting to change basis for preferred dividends to net income before revaluation, proposal rejected by preferred shareholders.
December 8, 2006	Business press reports UES estimates of the effect of fair value adjustments on net income and preferred dividends.
April 2, 2007	UES discloses net income for fiscal 2006, including fair value adjustments.
April 27, 2007	UES Board of Directors proposed dividend omission for all share classes.
June 26, 2007	Shareholders' meeting accepts proposal to omit all dividends.
July 27, 2007	Termination proposal; Board of Directors sets conversion options.
October 27, 2007	Shareholders' meeting accepts termination proposal.
April 1, 2008	UES reports fair value gains and net income over 2007.
April 4, 2008	UES Board of Directors proposes dividend omission for all share classes.
May 28, 2008	Shareholders' meeting accepts proposal to omit all dividends for fiscal 2007.
July 1, 2008	UES is terminated.

**Table 2.** Financial performance of UES*Panel A. Selected items from RAS single accounts (in mil. RUB)*

	2007	2006	2005	2004	2003	2002	2001
Income from sales	17,344	33,507	22,368	24,246	30,813	32,371	25,950
Revaluation gain on long-term financial investments	424,045	717,657	-	-	-	-	-
Net income	452,827	745,088	20,898	24,069	24,605	31,427	12,777
LT financial investments	1,271,851	1,024,638	265,329	238,319	218,035	223,613	112,958

*Panel B. Dividends (in mil. RUB) and market data*

	2007	2006	2005	2004	2003	2002	2001
Declared dividends to common shareholders	0	0	2,356	2,294	1,925	1,383	1,067
Declared dividends to preferred shareholders	0	0	402	463	474	605	246
Implied preferred dividend based on reported net income	8,718	14,344					
Implied preferred dividend based on income before fair value adjustments	554	528					
Average voting premium (in %)	14.25	15.49	12.25	11.94	12.94	23.85	86.88

*Panel C. Investments and electricity production*

	2007	2006	2005	2004	2003	2002	2001
UES change in installed power plant capacity (mil. kW)	2.0	1.5	1.3	-0.2	1.0	-0.6	1.1
Total electricity production in Russia (kWh*10 <sup>10</sup> )	101.3	99.4	95.1	93.0	91.4	88.9	88.9

*Panel D. Economic performance of UES at the time of dividend omission based on consolidated IFRS accounts (in mil. RUB)*

	2006	2005	2001–2004
Operating income	282,269	71,201	43,433
Net income	149,518	23,974	40,288
Cash balance	54,101	37,125	24,986
Cash flow from operations	74,606	92,511	52,082
Free cash flow	-62,961	-15,425	2,141
Growth in sales	17.03%	12.51%	23.36%
Leverage	0.20	0.15	0.08

Data reported in the table are from the annual reports of UES for various years. Panel A reports income based on statutory single accounts. Net income from single accounts is the legal distribution base for preferred dividends. Income from sales corresponds to operating income. Investments in subsidiaries are reported as long-term financial investments and are revalued at fair value in 2006 and in 2007. Panel B reports declared and implied preferred dividends. Implied preferred dividends are calculated by multiplying net income or net income before fair value adjustments by the statutory payout ratio. The voting premium is calculated as the difference between the price of a common share and the price of a preferred share divided by the price of a preferred share. Panel C reports on the change in installed power plant capacity based on the data from UES annual reports for different years. Total electricity production in Russia is obtained from the Worldbank World Development Indicators database. Panel D reports on changes in economic performance of UES based on data from consolidated IFRS accounts. Free cash flow is the sum of cash flow from operations and cash flow from investing activities, growth in sales is percentage change in sales, leverage is the sum of long-term debt and short-term debt divided by book equity.

**Table 3.** Revaluation and trading of UES subsidiaries in 2005 and 2006

Company	Adjustment to the book value	Thereof due to change in market value in 2006	Share turnover (in th)		Number of trading days		UES share in a subsidiary (%)
	(mil. RUB)	(mil. RUB)	2006	2005	2006	2005	
Mosenergo	69,946	16,540	30,079.2	15,536.7	34	81	50.9
OGK-5	77,019	42,914	254,386.3	9,350.0	101	5	75.0
Sverdlovenergo	10,764	10,919	1,458.9	546.9	18	8	49.0
Kuzbassenergo	21,564	21,736	145,654.7	220,551.5	36	39	49.0
Kubanenergo	6,201	6,862	6.5	8.0	5	2	49.0
Total of 5 subsidiaries	185,494	98,971					
Total of all revalued subsidiaries	717,657	645,690					

Data are obtained from Datastream and the annual report of UES for 2006. Information is presented for five UES subsidiaries with the highest amount of revaluation that were listed prior to 2006.

**Table 4.** Analysis of returns to UES's preferred and common shareholders

Trading days	Cumulative raw returns		Cumulative abnormal returns		Voting premium
	Returns to preferred shares	Returns to ordinary shares	Returns to preferred shares	Returns to ordinary shares	
<i>Short-window returns</i>					
(-60,-1)	0.2732	0.1971	0.0726	-0.0035	0.1592
(-30,-1)	0.1572	0.1069	0.0160	-0.0343	0.1386
(-10,-1)	0.0396	-0.0405	0.0209	-0.0592	0.0791
(-5,-1)	-0.0462	0.0235	-0.0736	-0.0039	0.0696
(0,+5)	-0.0645	-0.0139	-0.0495	0.0012	0.1448
(0,+10)	-0.0891	-0.0430	-0.0339	0.0122	0.1286
(0,+30)	-0.0397	-0.0147	-0.0185	0.0065	0.1447
(0,+60)	-0.0208	0.0401	-0.1841	-0.1232	0.1548
Diff.: (0,+60) vs. (-60,-1)	-0.2940	-0.1570	-0.2567	-0.1197	-0.0045
<i>Long-window returns</i>					
(0,+180)	-0.0465	-0.0609	-0.5221	-0.5366	0.1341
(0, last trading day)	-0.2356	-0.1673	-1.0331	-0.9648	0.1394

The table reports market reaction to the announcement of dividend omission on April 27, 2007 ('day 0'). Cumulative abnormal returns are calculated using residuals from the regression of daily returns to ordinary or preferred shareholders on daily returns of the market index RTS. The parameters of the models are estimated using 180 daily returns over the period (-240,-61), and are adjusted for thin trading and volatility as suggested by Scholes and Williams (1977). Voting premium is the average daily difference between the price of a common share and the price of a preferred share divided by the price of a preferred share. The data are from Datastream.