Research Article

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Impact of war in Ukraine on annual reports of European listed companies

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Abstract

This survey provides an overview of the impact of the war in Ukraine on companies, as reported in the 2022 annual reports of 100 large listed European companies. Almost half of the population reported to have withdrawn from or being in the process of withdrawing from the Russian market. Again almost half of the population reported significant losses with a total reported loss of EUR 71.3bn, mainly due to impairments, losses on sale and provisions caused by exiting Russian operations. The indirect effects of the war, such as lost revenues, could not be assessed but are likely higher. Sectors most impacted are automobile, food, beverage and tobacco and energy sectors. However, by using alternative performance measures most of the reported losses were excluded from key performance indicators and when assessing management remuneration. We also found the surveyed companies reporting significant donations and other help to Ukrainian citizens.

Relevance to practice

The results of this study show the financial impact, the impact on annual reports and the related auditor reports, but also the behavioural consequences of severe adverse events like the war in Ukraine. These results could be used by preparers, auditors, users and regulators when preparing to report on possible future events.

Keywords

Ukraine, war, financial statements, auditor report, annual report, IFRS

1. Introduction

On 24 February 2022, in a further escalation of the Russian-Ukrainian conflict, Russian troops entered the Ukraine. This led to a series of events, including a humanitarian crisis for fleeing Ukrainian civilians; military and other support for Ukraine from European and other countries; sanctions imposed on the Russian state, Russian individuals and trade with Russia; disruption of energy and food supplies as well as general supply chain disruption and related volatility of energy and food prices. These events affected businesses across the globe and Europe in particular. In this article we will explore the impact these events had on the annual reports, including the management report and the financial statements of large listed

European companies as well as the auditor reports issued on these financial statements. The purpose of this research is not only to explore the impact of the war on the financial performance and position of European companies, but also to research the behaviour of management and their auditors in providing transparency around the impact.

1.1. Research population

We considered that European companies are more likely to be affected by the war in Ukraine than non-European companies. We also considered that large listed companies are more likely to be affected than smaller,



non-listed companies. We therefore included the top 100 companies in terms of free float market capitalisation as of April 2023 of the STOXX Europe 600 that apply International Financial Reporting Standards (IFRS). A list of companies surveyed can be found in the Appendix 1. For calendar year-end companies we surveyed the 2022 annual reports. For non-calendar year-end companies we surveyed the annual report with a reporting date closing after 24 February 2022 (so for companies with a 30 April or 30 June year-end we took the 2021/22 reports rather than the 2022/23 reports). We made that decision to make sure we captured the impact of the war from the start. For companies with a balance sheet date shortly after 24 February 2022 (31 March 2022 and 30 April 2022), we did check whether the annual report 2022/23 provided any further relevant information about the impact of the war.

1.2. Terminology used

Russia consistently refers to its military activities in Ukraine as a 'Special Military Operation' and considers it illegal to refer to these activities as 'war' or 'invasion'. Shortly after Russian troops entered Ukraine on 24 February 2022 we saw some reluctance by companies using terms like invasion or aggression of Russia in order to protect any employees or agents located in Russia against repercussions by the Russian government. We researched the terminology used in the annual reports of the 100 European listed companies and classified them in terms of whether the company explicitly identified Russia as the aggressor, or whether more neutral terms were used. Examples we found of the former are terms used like 'invasion'; 'war on Ukraine by Russia'; 'Russia's war of aggression against Ukraine'; 'Russia's attack on Ukraine' and 'Russian government's brutal and senseless invasion of Ukraine'. Examples we found on the latter include 'conflict between Russia and Ukraine'; 'war in Ukraine'; 'geopolitical situation in Ukraine'; 'crisis in Ukraine'; and 'confrontation'. No company used the official Russian term 'special military operation'.

We performed further analysis of the terminology used. Only 15 companies consistently used the same terminology throughout the annual report. All 15 used neutral terms such as 'conflict between Russia and Ukraine' or 'war in Ukraine', which suggests a deliberate attempt not to identify one party as the aggressor. Two companies did not include any reference to the war in Ukraine in the annual report. The remaining 83 companies used between 2 and 6 different terms to refer to the war in Ukraine. Sometimes the use of different terminology was linked to different sections of the annual report where apparently different authors had drafted the text of each section without further editing for consistency. In other cases, it seemed like a random use of terminology.

Second, we found that more than half of the companies (58%) used terminology that identified Russia as the aggressor where the rest remained more neutral. We tried to find a relationship between the terminology used and any exposure to Russia to see whether such exposure would

deter companies from antagonising the Russian government. Companies with assets or sales in Russia were slightly more guarded in identifying Russia as the aggressor (56%) versus companies that did not have any sales or assets in Russia (67%). We did not find a relationship between country of headquarter of the company and terminology used, which is probably caused by the fact that these are virtually all Western European headquartered companies, which countries all side with Ukraine. However, we found a strong relationship between terminology used and the sector companies are operating in. Using the ICB industry codes we found that 91% of the companies in the banking sector (code 3010) and 100% of the stock exchange operators (code 3020) and companies in the energy (code 6010) and utilities (code 6510) sector used terminology indicating Russia as aggressor in this war. On the other hand, all companies in the construction sector (code 5010) used neutral terminology. In the remaining sectors companies were mixed in terminology used.

In this article we will consistently use the term 'war in Ukraine' as that is the most widely (84%) used term in the annual reports of the surveyed companies.

1.3. Structure of this research

Section 2 describes the direct impact of the war in Ukraine on the financial performance and financial position of companies, as reported in the management report and the financial statements. These comprise loss of control over subsidiaries, loss of joint control over joint arrangements, loss of significant influence over associates, recognition of impairment losses of intangibles and property plant and equipment, additional expected credit losses, recognition of provisions for risks and (insurance) liabilities, and additional expenses incurred, all directly related to the war. Section 3 describes other consequences such as sanctions, impact on employees and communities and how management has helped these, impact on alternative performance measures and management remuneration, all as reported in the management report. In section 4 the findings in the auditor reports are analysed. The article closes with some overall conclusions in section 5.

1.4. Limitations of this research

Companies surveyed tend to be globally operating companies that are from time to time confronted by geopolitical unrests in the world. That means we only included in our research references to the war in Ukraine when a company specifically mentioned Russia, Ukraine or Belarus or where it was clear from the context.

Although in our research we report on the impact of the war in Ukraine on companies, as included in their annual reports, this does not mean that this provides the whole picture of the consequences of the war in Ukraine. Such an analysis would require comparing the actual performance with a hypothetical performance in a universe where there was no war in Ukraine. So, although we can capture actual impairments recognised or provisions taken as a result

of the war in Ukraine, this does not mean that without the war in Ukraine other amounts would have been the same as it is unknown what revenue and costs would have been without the war. We can only speculate on the net effect as on the one hand prices may have been lower, reducing revenue and expenses, but on the other hand volumes may have been higher without the trade restrictions.

2. Impact of war in Ukraine on financial performance and position

2.1. Responses of companies to the war in Ukraine

The events in February 2022 do not stand on their own. Tensions between Russia and Ukraine date back before and were already exacerbated by the invasion of Crimea by Russia in 2014. This did not significantly affect business between Europe and Russia, evidenced by the dependence of European countries on Russian oil and gas that even increased until the events in February 2022. What made an essential difference in February 2022 when Russian troops entered Ukraine is that the Western world condemned the Russian invasion and started with sanctions against Russian individuals and companies. In retaliation the Russian regime issued countersanctions. In our survey 71% of the companies reported sanctions specific to Russia and Belarus. Of the remaining 29% most of the companies indicated to have no sales or assets in Russia or that the war in Ukraine had no material impact on the company. The combination of the war and sanctions made it more difficult for businesses to continue operating in Russia (and Belarus as its ally). At the same time the war in Ukraine physically hampered business in and with Ukraine, so some companies with operations in Ukraine were forced to close businesses and help their employees.

On top of the sanctions came political and social pressure on companies to withdraw from Russia. Shortly after the Russian troops had entered Ukraine and Western responses followed, some companies announced their withdrawal from Russia. Yale School of Management maintains a database of more than 1,000 companies that announced their intentions with business in Russia¹. The researchers continuously update the database and categorise those announcements. Table 1 contains an overview of the Yale classification of the 100 companies surveyed

Table 1. Announcements in respect of company's Russian operations in response to war in Ukraine (source: Yale School of Management, visited website lastly at 31 August 2023).

Yale School of Management category	#	%
Withdrawal	26	26%
Scaling back	10	10%
Suspension	20	20%
Buying time	17	17%
Digging in	3	3%
No announcements yet / unclear	24	24%
Total	100	100%

in this article. It shows that as per the date we closed this article (31 August 2023) 76 of the companies had made a public announcement according to the Yale database. Of the 76, 26 (34%) companies had publicly announced withdrawing from Russia. The other 50 companies indicated to reduce or suspend their activities, to wait and see or to deliberately retain their activities in Russia. The latter could have humanitarian reasons such as supply of food and medicines. Of the 24 companies that had not made an announcement (yet) according to the Yale database, we found in the annual report that 17 had no sales or assets in Russia. Five more companies indicated the war in Ukraine did not have a material impact. The remaining two companies reported to have seized operations in Russia, so should have been considered part of the 'withdrawal' group.

We analysed whether and how these announcements had actually resulted in actions and how they were reflected in the financial statements. In Table 2 the results are summarised. It seems like more companies have exited or are in the process of exiting Russia than announced according to data from Yale. On the other hand, fewer companies than announced have suspended operations. And 41 companies with sales or assets in Russia have no reported intention to leave Russia or stop sales in Russia. Some of these companies explicitly state that they comply with sanctions, so have stopped some sales, for example in the defense or construction sectors.

Interestingly two companies report an intention to sell or even having a preliminary agreement to sell, with no reclassification to 'held for sale' and for which they expect the sale will lead to a further significant loss without recognising this as an impairment. In both cases the criteria for held for sale classification have apparently not been met and the value in use is considered to be significantly higher than the price they expect to receive upon sale. In both cases the reason why no impairment or provision for onerous contracts was recognised is not explained.

We found three companies that have withdrawn or are in the process of withdrawing from Russia, but apparently want to retain the option to return. Two negotiated a repurchase option of the investment they sold (one explicitly mentioned the repurchase option is based upon fair value). One company sold its operations in Russia but retained the right to a franchise agreement with the buyer when circumstances change. A repurchase option of the shares (including voting rights) constitutes what IFRS 10 refers to as potential voting rights. Such potential voting rights need to be considered when assessing whether control is retained. None of the companies disclose why control has still been transferred. This could be due to the fact that the repurchase option is not currently exercisable or not substantive (IFRS 10.B47). If control is not retained, the repurchase option is a derivative scoped within IFRS 9 and measured at fair value.

Of the 17 companies that had reported the intention to exit Russia and had not already seized or suspended operations by the balance sheet date, 9 classified non-current assets as 'held for sale'. Classification as held for sale is required if the carrying amount will be recovered

principally through a sale transaction rather than through continuing use (IFRS 5 par. 6). For this to be the case the asset must be available for immediate sale in its present condition and its sale must be highly probable (IFRS 5, par. 7). Par. 8 of IFRS 5 clarifies what it takes for the sale to be highly probable. Amongst others the sale should be expected to qualify for recognition as a completed sale within one year. The assessment of whether operations in Russia meet the criteria to be reclassified to 'held for sale' in accordance with IFRS 5 is judgemental, even if a (preliminary) agreement has been signed. This is due to the regulatory approval by Russian authorities which is uncertain, as well as the condition that the sale must be expected to be closed within one year. This may explain the divergence found in companies reclassifying their operations to 'held for sale' or not. We did not find an explanation in the financial statements of why the criteria had or had not been met.

Table 2. Actual measures in respect of Russian operations as reported in annual reports.

Action as reported	#	%
Seized operations in and with Russia	24	27%
(Of which presented as discontinued operations)	(1)	
(Of which option to repurchase based upon fair value)	(1)	
Agreement to sell operations in Russia, subject to regulatory approval	6	7%
(Of which classified as held for Sale)	(5)	
(Of which option to repurchase or start right to franchise again)	(2)	
Intention to sell operations in Russia	7	8%
(Of which classified as held for Sale)	(4)	
Russian operations have been written off, but not classified as held for sale, no mention of intention to sell	4	4%
Suspended operations in and with Russia	7	8%
No reported exit	41	46%
# of companies with operations/sales in Russia	89	100%
No assets or activities in Russia	11	
Total	100	

2.2. Market reactions

In the wake of the events on 24 February 2022 academic research into the financial and economic consequences of the war in Ukraine confirmed the significant negative impact on stock markets and the banking industry, amongst others. Ahmed et al. (2023b) found a significant negative average abnormal return of the STOXX Europe 600 share prices around 21 February 2022, the date of Russia's declaration of its recognition of two independent states in eastern Ukraine. This led to (additional) sanctions against Russia and was shortly after followed by Russian troops entering Ukraine. They also found negative and significant cumulative abnormal returns with 21 February 2022 as the event date, indicating the prolonged negative effect on European equity markets. Boubaker et al. (2023) focused on share prices in the banking industry globally and found a significant negative effect on equities throughout the globe, and Europe in particular, and that shares of banks fell more than overall equity markets. They used 24 February 2022 as the event date to calculate abnormal returns and just like Ahmed et al. found this effect to be persistent when the war continued. Interestingly, both Ahmed et al. as well as Boubaker et al. point to the imposed sanctions as the main reason for the significant and prolonged negative effect, rather than the immediate losses caused by the war. This is understandable, as those sanctions, if persisting, have a long-term negative impact on future cash flows of the companies involved. Ahmed et al. (2023a) focused on the link between the ESG score of companies and their exposure to Russia and the timing of the announcement to withdraw from Russian. It confirmed the significant loss of shareholder value due to the war in Ukraine and that "investing in more highly rated ESG firms did not offer protection against war-induced market declines". Their findings further reveal that "more highly rated ESG firms were not less likely to operate in Russia nor more likely to meaningfully inform investors about such activities" and that "many firms scrambled to announce the suspension or divestment of their Russian operations, but those firms that are alleged to be more socially responsible were neither quicker, nor more likely, to announce such actions".

2.3. Annual reporting implications – literature

The developments in Ukraine and the related sanctions on Russia and the countersanctions from Russian side resulted in uncertainties and the need for transparency around the impact on the financial position and performance of the companies, particularly in Europe, as reported in the management report and financial statements. There is no specific guidance on the accounting for the war in Ukraine, but the IFRS standards provide sufficient guidance to reflect the consequences. To help preparers and users, publications were issued by the large networks with reminders of IFRS accounting issues, specifically focused on the war in Ukraine.2 The importance of transparency around the impact of the war in Ukraine also led the European Securities and Markets Authority (ESMA) to include this in the 2022 European common enforcement priorities. ESMA "calls for caution regarding any separate presentation of the impacts of Russia's invasion of Ukraine in the profit or loss statement. Due to the pervasiveness of such impacts, a separate presentation may not faithfully represent an issuer's overall financial performance and may be misleading to users' understanding of the financial statements". Instead, the notes should include information about estimates and judgements made that should provide information that allows users to assess the impact. This is comparable to the ESMA call for caution against presenting separately the effects of Covid-19 during the pandemic and the Emerging Issues Task Force decision³ against extraordinary treatment for terrorist attack costs after the September 11 events. Also, ESMA included reminders about judgements around loss of control, joint control or significant influence, discontinued operations and impairments. We will address these in section 2.5.

2.4. Impact on reported net income

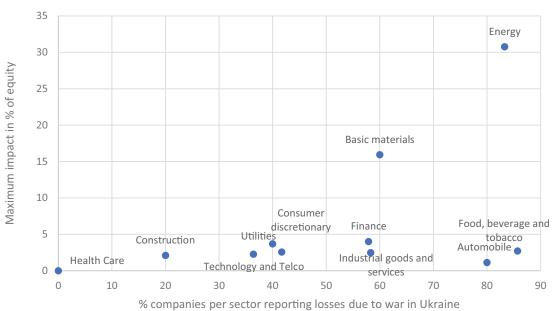
Companies can be impacted by the war in Ukraine in several ways. In this paragraph we will focus on the immediate impact of the war, as reflected by losses recognised in net income explicitly linked by the company to the war in Ukraine. These losses include impairments recognised on the (in)tangible assets or investments and receivables of the company and provisions recognised. The war in Ukraine also has indirect effects such as price increases of energy and food, reduced activities due to sanctions and in general a slowing down of economies worldwide. In this paragraph we will focus on the former, i.e. direct effects, but will come back to the indirect effects at the end. Of all companies surveyed, 49 (49%) reported a material impact on net income. The total amount of losses recognised by these 49 companies is EUR 71.3bn, or on average almost EUR 1.5bn per company. The amounts reported by individual companies in the total population ranged between zero and USD 25.5bn. Measured against equity these 49 companies on average reported losses of 2.54% of their equity. The percentage reported by individual companies in the total population ranged from 0% to 30.75% of reported equity as per balance sheet date.

the most heavily hit, despite the increase in prices of oil and gas. This is mainly due to the withdrawal from the Russian market, causing impairments and losses on sale of Russian entities and operations.

As discussed earlier the amounts mentioned above only include the losses recognised in net income where the company explicitly linked such loss to the war in Ukraine. In addition, the impact on economies worldwide has an indirect effect of reducing business activities, thereby reducing revenue and in the end net income of these same companies. Those effects are much more difficult to measure. We did not find companies attempting to do so. However, we did find one company that saw the loss of some specific revenue as due to the war in Ukraine. SAP4 reported: "In 2022, SAP's business was impacted by the war in Ukraine and SAP's decision to wind down its business operations in Russia and Belarus. Compared to the previous year, revenue was approximately €220 million lower." Other companies considered the impact of the war in Ukraine on revenue important enough to provide the user with adjusted comparatives such that growth rates excluded revenue from the region in both the current year and comparative year. This is further discussed in section 3.2.

Figure 1. Sector analysis impact war in Ukraine on equity.





We see significant differences between the various sectors. Figure 1 provides a sector analysis of the impact of the war in Ukraine on companies, measured by percentage of companies reporting losses due to the war and the maximum reported impact in percentage of equity within that sector. None of the ten health care companies reported any material impact of the war in Ukraine. On the other hand more than 80% of the companies in the automobile, food, beverage and tobacco and energy sectors reported material losses due to the war. In terms of the magnitude of the impact, the energy sector is clearly

Table 3 provides an overview of the nature of the items recognised as losses and reported as resulting from the war in Ukraine. By far the most important underlying cause for these losses is the withdrawal of business from Russia and the related impairment losses, losses on sales of Russian operations and provisions for termination of Russian employees and litigation in Russia. The second major underlying cause are credit losses on receivables on Russian entities and individuals and those that are dependent on Russian business. In addition, some companies lost revenues from contracts with Russian customers.

Table 3. Nature of losses recognised.

Nature and amount of losses recognised and reported as impact war	2022					
in Ukraine	# of loss items found	As a % of companies reporting losses	Amount of loss (in mEUR)	As % of total loss reported		
Impairment of goodwill	2	4%	19	0.03%		
Impairment of other intangibles	6	12%	165	0.23%		
Impairment of Property Plant and Equipment (incl. right of use assets)	18	37%	1,936	2.71%		
Impairment of inventory	10	20%	324	0.45%		
Impairment of investments in associates and joint ventures	8	16%	48,595	68,11%		
Impairment of held-for-sale assets and losses on disposal	14	29%	5,948	8,34%		
(Expected) credit losses on financial assets measured at amortised cost	14	29%	5,009	7.02%		
Fair value losses on derivatives, commodities and other financial instruments measured at fair value	6	12%	3,271	4.58%		
Provisions for litigation, onerous contracts and termination benefits	9	18%	524	0.73%		
Measurement of provisions for outstanding claims in property & casualty business	1	2%	400	0.56%		
Lost revenue	2	4%	220	0.31%		
Other additional expenses	6	12%	594	0.83%		
Unspecified (total is provided but no full breakdown)	10	20%	4,352	6.10%		
Total # of loss items found	106					
Total # of financial statements with recognised losses due to war in Ukraine (excl double-counting) and amount involved	49	100%	71,349	100%		
No material impact of war in Ukraine reported	51					
Total	100					

2.5. Detailed analysis of impact of war in Ukraine on financial statements

Before we dive into the details found, it is worth noticing that it is not always possible to make a meaningful distinction between the various types of impairment losses reported. Most companies that exited the Russian market went through a similar chain of events, which is to first consider potential impairment of owned assets, then to consider whether they should be classified as held for sale (or discontinued operation) and perform another impairment test, and finally to recognise a gain or loss on the actual sale. Depending on the phase in the process the company found itself in, it presented losses in each of the three buckets of losses. So even though below we distinguish between each of the three as they are presented by companies, they are effectively all part of the same economic loss.

Going concern assessment

Companies are required to assess the company's ability to continue as a going concern (IAS 1 par. 25). Extreme circumstances like a war and the related sanctions and impact on global markets may impact the company such that there is doubt about the ability of the company to continue as a going concern, or that the assessment of such required significant judgement. In those cases, disclosure is required. We found three companies that discussed the war in Ukraine as part of its going concern assessment. Two companies included this in the viability statement and one more in the going concern section of the financial statements. In all three cases management concluded that the war in Ukraine did not impact the ability of the company to continue as a going concern. Interestingly, one company reported no significant impact on net income

and the other two companies reported a relatively minor impact on net income. The companies that were most significantly impacted in terms of net income did not discuss the impact of the war on the going concern assessment.

Location of disclosure in the notes

The war in Ukraine can impact companies in multiple ways with an effect on various line items in the financial statements. It is important that the reader gets an overview of the aggregate impact and a break-down per line item. It was not always easy for the reader to assess the aggregate impact. A good example of how to disclose the impact can be found with Total Energies (2022, pages 424–425) providing an overview in the 'major judgements and accounting estimates' section of the financial statements. Another more concise example is Compagnie Financière Richemont (2022, page 85, see Figure 2), providing a brief overview with references to the specific notes for further detail.

Figure 2. Illustration of disclosure of aggregate impact of war in Ukraine, Compagnie Financière Richemont, Universal Registration Document 2022, p. 85.

(d) Suspension of commercial activities in Russia

In early March 2022, the Group suspended all commercial activities in Russia. The Group has considered the current uncertainty surrounding trading conditions in its estimates of the carrying value of assets related to these operations and has recorded write-downs and provisions as appropriate, in accordance with the relevant accounting standards, amounting to \in 168 million at 31 March 2022. Impairments related to Property, plant and equipment and Right of use assets are included in the disclosures in notes 6 and 9, respectively. The situation will be reassessed on an ongoing basis, as further information becomes available.

Impairment of goodwill and other intangibles

Two companies reported an impairment loss of goodwill, but one did not disclose the amount (only the total loss recognised due to the war in Ukraine). These two companies and four others reported impairments of other intangible assets. The total impairment loss on goodwill and other intangibles recognised by the 5 companies is EUR 184m. The largest amount recognised by an individual company was GBP 96m by Diageo on the brand Bell and goodwill related to Smirnov due to the winding down of the operations in Russia.

Impairment of property plant and equipment and right of use assets

Of the 18 companies that reported an impairment on property plant and equipment (PP&E) and right of use

Impairment of investments in associates and joint ventures

This is by far the most significant individual item causing losses due to the war in Ukraine. A total amount of EUR 48.6bn is recognised by 8 companies that reported an impairment of investments in associates and joint ventures. Not surprisingly most of the EUR 48.6bn was recognised by the oil & gas sector. BP reported losses on its investment in Rosneft of USD 25.5bn. Management concluded it no longer had significant influence, so reclassified its investment from an associate to a financial asset. In addition it decided to write down its investment to nil (see Figure 3). Total Energies reported an impairment of EUR 14.8bn on its investments in Novatek and Arctic LNG 2. Shell took a loss of USD 1.6bn on its investment in Sakhalin Energy Investment Company Ltd. Finally, Equinor recognised a USD 832m loss on its investments due to exiting Russia.

Figure 3. Illustration of loss of significant influence and judgement in assessing fair value, BP Annual Report 2022, p. 188.

Significant judgements and estimate: investment in Rosneft

On 27 February 2022, bp announced it will exit its shareholding in Rosneft and bp's two nominated Rosneft directors both stepped down from Rosneft's board. As a result, the significant judgement on significant influence over Rosneft was reassessed and a new significant estimate was identified for the fair value of bp's equity investment in Rosneft. From that date, bp accounts for its interest in Rosneft as a financial asset measured at fair value within 'Other investments'. Russia has implemented a number of counter-sanctions including restrictions on the divestment of Russian assets by foreign investors. Further, bp is not able to sell its Rosneft shares on the Moscow Stock Exchange and is unable to ascribe probabilities to possible outcomes of any exit process. As a result, it is considered that any measure of fair value, other than \$nil, would be subject to such high measurement uncertainty that no estimate would provide useful information even if it were accompanied by a description of the estimate made in producing it and an explanation of the uncertainties that affect the estimate. Accordingly, it is not currently possible to estimate any carrying value other than \$nil when determining the measurement of the interest in Rosneft as at 31 December 2022. Events or outcomes within the next financial year, that are different to those outlined above, could materially change the fair value of the investment.

(RoU) assets, 11 disclosed the amounts, which summed up to EUR 1.9bn. The others did not specify the impairment of PP&E and RoU assets, but only the total loss recognised due to the war in Ukraine, so the actual total amount of impairments of PP&E and RoU assets is higher. The largest ones were the impairment of cement plants and a grinding station in Russia by Holcim (CHF 580m) and USD 695m of assets owned or jointly owned in Russia by Shell. Equinor recognised a USD 251m impairment of its assets in Russia.

Impairment of inventory

Of the 10 companies that reported an impairment on inventory, 5 disclosed the amounts, which summed up to EUR 324m. The largest one is the impairment of inventories in Russia by Vestas Wind Energy of EUR 159m. The other 5 companies did not specify the amount of the impairment of inventory, but only the total loss recognised due to the war in Ukraine. Given the fact that the three companies in the automotive sector reported large losses including impairment of inventories, but did not specify what assets were impaired, it is likely that the total amount of inventories lost by the surveyed companies is significantly higher than the EUR 324m.

It should be noted that the actual loss on investments in associates and joint ventures is higher as some companies reported such losses as part of the impact of a sale or held for sale classification (see below).

Financial instruments

Fourteen companies reported credit losses of a total of EUR 5bn on loans and receivables and five companies reported some EUR 3.3bn losses recognised on derivatives and other financial instruments measured at fair value, all reported as due to the war in Ukraine. The credit losses are not just reported by the banks and insurance companies, but also the finance vehicle of an automotive company as well as industrial companies. The largest losses are reported as due to the deterioration of credit standing of counterparties in Russia or with exposure to Russia. The largest amount of credit losses is reported by Intesa Sanpaolo (EUR 1.3bn), Shell writing down USD 1.1bn on its loan to Nordstream2 and a credit loss reported by Unicredit of EUR 882m. When we turn to the loss in fair value, Glencore recorded USD 1.3bn loss on its investments in EN+ and Rosneft, Munich Re reported a loss of EUR 850m due to the writedown of Russian and Ukrainian bonds measured at fair value, and RWE reported a loss of EUR 748m on coal contracts accounted for as derivatives.

Loss on Held for sale and disposal of activities

Of the 14 companies that reported losses on activities (subsidiaries, joint ventures and associates) that were classified as held for sale/discontinued operation or were sold the amount of losses involved summed-up to EUR 5.9bn. Of this amount recognised in income, EUR 1.7bn comprised the reclassification of foreign currency translation accounts, so did not affect equity. One could argue these are not losses economically linked to the war in Ukraine as they were built up over time by the depreciation of the Russian Ruble and do not impact equity.

As noted earlier, the impairment losses and losses on sale of these activities should be considered together with the impairment losses reported above as they all have the same cause, i.e. the exit from Russia.

Provisions and contingencies

Various types of liabilities may arise from the war in Ukraine. Contracts may become onerous due to higher costs of energy and food, or the impracticability of fulfilling the performance obligations at the agreed place and time. Termination of activities in Russia may trigger termination benefit obligations and litigation, etc. Of the 9 companies that referred to provisions for liabilities due to the war in Ukraine, 8 provided the amounts involved. The total amount was EUR 524m. The largest single amount was recognised by Inditex that provided for personnel and lease termination obligations of EUR 129m⁵.

Mercedes Benz Group disclosed contingent liabilities for up to EUR 1bn due to the termination of activities in Russia.

Insurance liabilities

One insurance company (AXA) reported an increase of EUR 400m in property & casualty insurance liabilities due to the war in Ukraine, notably in Aviation.⁶

3. Other annual reporting implications of the war in Ukraine

3.1. Initiatives of the companies to help Ukrainian employees and citizens

We analysed the annual reports for any donations or other help that the surveyed companies provided to its Ukrainian employees or other citizens of Ukraine. We found 60% of the companies referring to help provided. The beneficiaries range from own employees, citizens in Ukraine, Ukrainian refugees in other countries to local organisations and international NGOs. The kind of help ranges from monetary amounts to donations in kind in all sorts of ways. As an illustration, Figure 4 contains a snapshot from the Universal Registration Document 2022 of Axa explaining the various ways they have helped Ukrainian citizens.

Figure 4. Illustration of humanitarian aid to Ukrainian people, Axa Universal Registration Document 2022, p. 203. https://www.axa.com/en/press/publications/2022-annual-report.

Humanitarian aid

Since the start of Russia's invasion of Ukraine in February 2022, the AXA Group has complied with international sanctions. We also undertook several initiatives to support the humanitarian crisis triggered by the war by lending its support to two major nongovernmental organizations: UNICEF and the UN Refugee Agency.

AXA SA supported UNICEF (1) with a €1.5 million donation to help families fleeing Ukraine after the outbreak of the war. This donation was used, among other things, to build temporary centers for refugees. By December 2022, 40 centers have been deployed in border countries enabling 234,000 children and healthcare workers to benefit from basic care, as well as psychological support. An internal fundraising campaign was also carried out, raising €73,000 thanks to the support of AXA Group's employees.

AXA SA has also increased its financial support through a donation of €1 million to the UNHCR to help people inside Ukraine and border countries with their day-to-day needs, as well as protection and shelter initiatives.

3.2. Impact on alternative performance measures

We did not find companies presenting the impact of the war in Ukraine separately in the profit and loss account. This may have been the effect of ESMA's call for caution against this, referred to in section 2.3. However, given the significant losses recognised by the surveyed companies, evidenced by the data in sections 2.4 and 2.5 the question arises whether these amounts were considered as unusual, non-underlying or exceptional and excluded from the Key Performance Indicators used in assessing and explaining financial performance. In other words, we analysed whether alternative performance measures (APMs) were used to avoid the effects of the war in Ukraine impacting the KPIs. We analysed whether new APMs were introduced or the definition of an existing APM adjusted to allow for excluding the impact. We also analysed whether the existing APMs excluded the impact of the war or not. We found two ways of adjusting alternative performance measures for the impact of the war in Ukraine. Table 4 provides an overview of the findings.

We did not find companies introducing new APMs or changing the definition of an APM. However, two companies included additional information in the management report about operating profit and net profit excluding the impact of the war in Ukraine. Another company, London Stock Exchange provided additional information on growth rates excluding the Russia/Ukraine war for some performance measures: "Growth rates excluding the Russia/Ukraine war impact have been calculated by excluding income in the region and from sanctioned customers and related business from both periods. This amounted to £80 million in 2021 and £18 million in Q1 2022, and nil beyond that."

When we then look at the APMs used by the 49 companies that reported a material impact of the war, 29 (or 59.2%) adjusted some or all APMs for the impact of the war in Ukraine. One of the 29 companies adjusted APMs for only part of the impact. This company, SAP, adjusted

Table 4. Adjustment of APMs for the impact of the war in Ukraine.

	#	%
Income related APMs are adjusted for the impact of the war in Ukraine by excluding losses and expenses	28	57%
APMs are adjusted for some Russia/Ukraine related items, but not all	1	2%
APMs are not adjusted for the impact of the war in Ukraine, but the management report also includes profit numbers excluding the impact of the war in Ukraine	2	4%
APMs are not adjusted for the impact of the war in Ukraine	18	37%
Companies with material impact of war in Ukraine	49	100%
No material impact of war in Ukraine	51	
Total	100	

APMs for the costs of restructuring due to winding down the business operations in Russia and Belarus, but the reduced revenue and bad debt provisions due to the war in Ukraine were not adjusted. The total amount of losses and expenses of the companies (partly) excluding the impact of the war in Ukraine in the APMs of these 29 companies is EUR 60.7bn which represents 84.9% of the total amount for all 49 companies (EUR 71.3bn).

Two companies did not adjust the current year amounts but excluded Russia/Ukraine from the 2021 comparatives. These are companies that sold or deconsolidated their operations in the beginning of 2022 or otherwise lost revenue in Russia and Ukraine due to the war. This adjustment restores comparability between the two years.

3.3. Impact on management remuneration

We analysed whether the losses due to the war in Ukraine were adjusted for the purposes of assessing management remuneration. In particular, we analysed the financial performance measures used in determining the amounts awarded as part of short-term incentive plans such as annual bonuses. Of the 49 companies for which the war in Ukraine had a material impact we analysed the KPIs used to assess profit-related financial performance and whether those profit related measures were adjusted to exclude the direct losses recognised due to the war in Ukraine. The results can be found in Table 5.

Of the 49 companies that reported a material impact of the war in Ukraine, slightly more than half (25 companies; 51%), representing some 75% of the total reported losses,

Table 5. Adjustment of financial measures to assess management remuneration for the impact of the war in Ukraine.

Losses due to war in Ukraine are excluded from one or more financial measures in assessing performance	24	49%
determining management remuneration		
Part of the losses due to war in Ukraine are excluded from one or more financial measures in assessing performance determining management remuneration	1	2%
Losses due to war in Ukraine are included in financial measures in assessing performance determining management remuneration	23	47%
Losses due to war in Ukraine only affect the assessment of management performance if and when they impact cash flows from operating activities	1	2%
Companies with material impact of war in Ukraine	49	100%
No material impact of war in Ukraine reported	51	
Total	100	

adjusted the financial measures for losses recognised due to the war in Ukraine. The rest did not or used performance measures that are not affected by P&L items.

We found four remuneration reports where the remuneration committee explicitly discussed the impact of the war in Ukraine on management compensation. Allianz did not adjust its APMs for the impact of the war in Ukraine. However, the Supervisory Board of Allianz Group decided to exclude the € 437m loss caused by the war in Ukraine when assessing the extent to which financial targets were achieved in determining management remuneration (see Figure 5). British American Tobacco (BAT) adjusts its APMs for the impact of the war. Adjusted Profit from operations and adjusted diluted earnings per share are used to assess management performance in its short term incentive (STI) and long term incentive (LTI) plans. The Supervisory Board discussed whether to adjust the targets: "As Russia and Belarus have been part of the Group throughout 2022, it was decided not to make any adjustments to the 2022 STI and LTI targets set at the beginning of the year - both targets and the results are inclusive of contribution from our Russian and Belarusian businesses. The full treatment of our Russian and Belarusian businesses under IFRS rules, including impairment charges and associated costs, are detailed on pages 215, 266 and 267."8 For HSBC the personal objectives of two executive directors for 2022 to a small degree depended on the successful exit from certain businesses including those in Russia9. HSBC did

Figure 5. Illustration of adjustment of financial performance for war in Ukraine to assess management remuneration, Allianz Group, Annual report 2022, p. 26. https://www.allianz.com/content/dam/onemarketing/azcom/Allianz_com/investor-relations/en/results-reports/annual-report/ar-2022/en-Allianz-Group-Annual-Report-2022.pdf.

As a consequence of the war in Ukraine, Allianz SE decided to withdraw from the Russian market. This decision could not have been foreseen either in the budget planning or in the actual target setting. The planned divestment of the majority stake in Allianz's Russian business resulted in extraordinary charges of \leqslant 437 mn in the financial year 2022, which are reflected in the net income attributable to shareholders. In the event of such unforeseeable extraordinary developments, it is at the discretion of the Supervisory Board to take them into account, if necessary, when determining target achievement. In order to recognize the actual performance of the Board of Management in the context of variable compensation, the Supervisory Board took into account the losses incurred as a result of this planned sale of a majority interest when it determined target achievement. Adjusted for this effect, net income attributable to shareholders in the past financial year was \leqslant 7.17 bn. This was slightly below the target of \leqslant 7.20 bn, resulting in target achievement of 99.29%.

Overall, this results in an achievement rate of 105.35% for the Group financial targets.

not adjust APMs for the impact of the war in Ukraine. Finally, London Stock Exchange's remuneration committee discussed whether to adjust the financial targets for the lost revenues due to the war in Ukraine and decided against adjusting.

4. Audit and auditor report

The magnitude of the impact the war in Ukraine may have on companies will affect the work of the auditor. First of all, it may affect the risk analysis due to the uncertainties that the consequences of the war and the related sanctions may have for the financial position and performance of the company. Second, it may impact the materiality assessment. The latter can be caused by the fact that the overall size of the business is reduced or the composition of the activities is changed or (operating) profit may be impacted by significant one-off charges. It may also affect the scope of the audit for example where Russian entities are no longer controlled, businesses have been sold or joint arrangements are no longer under joint control. It may also affect access to premises, records and local component teams in Russia and Ukraine. The war has also increased the risk of cybercrime and hacking in general, warranting additional attention for the risk of fraud, theft and continuity of IT and IT controls. In this section we will analyse the extent to which and how the war in Ukraine has affected the audit and the auditor report of companies surveyed.

4.1. Frequency and location of references to war in Ukraine in the auditor report

Table 6 provides an overview of the frequency and location of references to the war in Ukraine in the auditor reports surveyed.

Two auditor reports contained a KAM dedicated to the war in Ukraine. Another 30 KAM's (of which 2 came from the same auditors that wrote the KAMs dedicated to the war in Ukraine) contained references to the war in Ukraine, for example in the context of impairment testing. So in 24 (24%) auditor reports the war in Ukraine was considered to be demanding attention for the auditor to an extent warranting the inclusion of a separate Key Audit Matter (KAM) or the reference in a KAM on another topic. In these 24 auditor reports 32 KAMs referred to the war in Ukraine (some auditor reports contained more than one KAM referencing the war in Ukraine). We will address these in more detail in section 4.2.

Table 6. Frequency and location of references to war in Ukraine in auditor report.

Section within auditor report	2022		
	# of references	%	
War in Ukraine is addressed in a separate KAM	2	5%	
War in Ukraine referenced in another KAM	30	79%	
Going concern section	1	3%	
Emphasis of Matter paragraph	0	0%	
Other sections of the auditor report	5	13%	
Total # of references to war in Ukraine	38	100%	
Total # auditor reports referencing war in Ukraine (so excluding double-counting for multiple references)	28		
No reference to war in Ukraine	72		
Total	100		

We found one reference to the war in Ukraine in the going-concern section of an auditor report. Interestingly, that company itself did not explicitly refer to the war in Ukraine in the going-concern section of the financial statements, although it does mention general geopolitical risks. The auditor reports to have performed "independent sensitivity analysis on management's assumptions including applying incremental adverse cashflow sensitivities. These sensitivities included the impact of certain severe but plausible scenarios, evaluated as part of management's work on the Group's long term viability including the war in Ukraine, materialising within the going concern assessment period". 10 As referred to before we found three (3%) companies that mentioned in their going-concern or viability sections of the annual report that they had considered the impact of the war in Ukraine. In those three cases the auditor did not reference the war in Ukraine. We found no auditor report in which an emphasis of matter paragraph was included mentioning the war in Ukraine.

Finally we found seven references to the war in Ukraine in other parts of six auditor reports. These comprise the assessment of materiality (3 times), the risk assessment (2 times), the paragraph on general IT controls, referring to the cybersecurity risk related to the crisis in Ukraine (1 time) and in a general description of the changes in the audit approach compared to last year (1 time). Figure 6 contains an example of references to the war in Ukraine in the materiality assessment by the auditor. The exceptional charges caused by exiting Russia were eliminated before assessing materiality. In prior year, such elimination of exceptional charges had not taken place.

Figure 6. Illustration of impact on materiality assessment. Auditor report of Deloitte on the 2022 financial statements of BP.

Materiality	The materiality that we used for the group financial statements was \$1,250 million (2021 \$700 million) which was determined based on profit before tax adjusted for the exceptional charges of \$25.5 billion (comprising mainly of investment impairment and recycling of accumulated exchange losses from equity) associated with the decision to exit bp's shareholding in Rosneft and underlying replacement cost profit before interest and tax.
	In the prior year we determined materiality using profit before tax (with no adjustments) and underlying replacement cost profit before interest and tax.

4.2. Content of KAMs in the auditor reports

Table 7 provides an overview of the findings, in particular the key judgements the auditor is referring to in the KAMs. The two KAMs dedicated to the war in Ukraine focused on the consequences of the divestment and discontinuation of business in Russia. In the other 30 KAMs the war in Ukraine was considered to be an element of attention for the auditor in addressing specific judgements or estimates made by management. Unsurprising, the vast majority of the KAMs related to impairment assessments of assets (both financial and non-financial).

Table 7. Content KAMs in auditor report.

Nature KAM	2	2022			
	# of	% of total			
	KAMs	KAMs			
Discontinuation or divestment of operations in Russia	3	10%			
Revenue recognition (including estimate of cost to complete contracts; assessment of complex trading transactions and impact on finance debt; and assessment of fair value of commodity contracts)	4	13%			
Expected credit losses of financial assets measured at amortised cost (including classification)	7	22%			
Classification and measurement of financial assets and financial liabilities measured at level 2 and 3 fair values	1	3%			
Recoverability of investments in joint-ventures and associates	1	3%			
Recoverability of other non-current assets including property, plant and equipment, goodwill and other intangibles	14	44%			
Measurement of provisions for outstanding claims in property & casualty business	1	3%			
Uncertain tax positions and deferred tax	1	3%			
Total # of KAMs referencing war in Ukraine	32	100%			
Total # of auditor reports referencing war in	24				
Ukraine in a KAM (excluding double-counting)					
No reference to war in Ukraine in KAMs	76				
Total	100				

5. Concluding remarks

This research shows that the war in Ukraine had a significant direct negative financial impact on the 100 large listed European companies surveyed. Almost half of them reported material losses directly related to the war in Ukraine in the form of impairment losses, losses on disposal or held for sale classification and the recognition of additional insurance and other liabilities. In total, losses up to EUR 71.3bn were reported. Most of the losses were the result of exiting the Russian market. The annual reports show that 37 (or 42%) of companies with operations in Russia had exited or were in the process of exiting Russia and 7 (8%)

had suspended operations. That still leaves 45 (51%) companies with operations in Russia that have not taken the decision (yet) to exit the Russian market (although 4 of them had completely written off their investments in Russia). The impact was felt most significantly in the automobile, food, beverage and tobacco and energy sectors, whereas none of the companies in the health care sector reported a material impact. The indirect financial impact in the form of lost revenues, additional expenses due to price increases, lost trading volumes due to sanctions and trade restrictions could not be assessed but will most likely be significantly higher as these will have a longer term impact.

The survey shows that reporting on the impact of significant events like the war in Ukraine can be improved. Many companies have spread the information across the management commentary and the financial statements. Users of the financial statements would be helped by providing an overview of the impact in a single section, for example in the significant judgements and estimates paragraph of the financial statements, with reference to details in the notes to the line items affected. In addition, the disclosure about judgements made, such as whether control has been lost or transferred, whether non-current assets meet the held for sale test and whether the recognition criteria for provision have been met, can be improved as they were missing in the surveyed population of annual reports.

When presenting their financial performance, companies excluded the significant losses due to the war in Ukraine to a large extent (84.5%) by using alternative performance measures that exclude the impact of non-recurring or exceptional items. Also, the negative impact on management remuneration was dampened using these same alternative performance measures to assess management compensation, leading to 75% of the losses being ignored. Of course, one could argue that the war in Ukraine is an event beyond the control of management so should not impact the performance measure. On the other hand, one could argue that management is responsible for risk management including the impact of geopolitical risks on the company, so the impact on the company of events like this to a certain extent evidences the successfulness of risk management of the company.

We also saw that the war in Ukraine had a significant impact on the work of the auditors. More than a quarter (28%) of the auditors referred to additional audit procedures performed due to risks emanating from the war in Ukraine as part of a Key Audit Matter.

On the bright side, a large part (60%) of the surveyed companies reported on their donations and other forms of support for the employees and citizens of Ukraine that fell victim to this war. Even companies with no exposure to Ukraine, Russia or Belarus reported aid to Ukrainian citizens out of solidarity.

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Notes

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Appendix 1: Population of companies surveyed

Table A1. The 2022 annual reports (management report and financial statements, including auditor reports) of the following 100 companies have been included in this research.

Company	Country	Sector	Company	Country	Sector	Company	Country	Sector
Adidas AG	D	4020	DSV A/S	DK	5020	Nestle SA	СН	4510
Adyen NV	NL	5020	Enel SpA	I	6510	Nokia	SF	1510
Airbus SE	NL	5020	Engie SA	F	6510	Nordea Bank Abp	SF	3010
Alcon AG	CH	2010	Eni SpA	I	6010	Novartis AG	CH	2010
Allianz SE	D	3030	Equinor ASA	N	6010	Novo Nordisk A/S	DK	2010
Amadeus IT Group SA	E	1010	EssilorLuxottica SA	F	2010	Pernod Ricard SA	F	4510
Anglo American PLC	UK	5510	Experian PLC	IRL	5020	Prosus NV	NL	1010
Anheuser Busch Inbev SA	В	4510	Ferrari NV	I	4010	Prudential PLC	UK	3030
Ashtead Group PLC	UK	5020	Flutter Entertainment PLC	IRL	4050	Reckitt Benckiser Group PLC	UK	4520
ASML Holding NV	NL	1010	Givaudan	CH	4020	Relx PLC	UK	4030
AstraZeneca PLC	UK	2010	GlaxoSmithKline PLC	UK	2010	Rio Tinto PLC	UK	5510
Atlas Copco AB	S	5020	Glencore PLC	CH	5510	Roche Holding AG	CH	2010
AXA SA	F	3030	Heineken NV	NL	4510	Rwe AG	D	6510
BAE Systems PLC	UK	5020	Hermes International SCA	F	4020	Safran SA	F	5020
Banco Bilbao Vizcaya	E	3010	Holcim AG	CH	5010	Sanofi SA	F	2010
Argentaria SA								
Banco Santander SA	E	3010	HSBC Holdings PLC	UK	3010	SAP SE	D	1010
Barclays PLC	UK	5520	Iberdrola SA	E	6510	Schneider Electric SE	F	5020
Basf SE	D	2010	Industria de Diseno Textil SA	E	4040	Shell PLC	UK	6010
Bayer AG	D	4010	Infineon Technologies AG	D	1010	Siemens AG	D	5020
Bayerische Motoren Werke AG	D	3010	ING Groep NV	NL	3010	Sika AG	CH	5010
BNP Paribas SA	F	3010	Intesa Sanpaolo SpA	I	3010	Stellantis NV	NL	4010
BP PLC	UK	6010	Investor AB	S	3020	STMicroelectronics NV	CH	1010
British American Tobacco PLC	UK	4510	Kering SA	F	4020	TotalEnergies SE	F	6010
Capgemini SE	F	1010	Koninklijke Ahold Delhaize NV	NL	4520	UBS Group AG	СН	3010
Compagnie de Saint Gobain SA	F	5010	L'Air Liquide SA	F	5520	UniCredit SpA	I	3010
Compagnie Financiere Richemont SA	СН	4020	Lloyds Banking Group PLC	UK	3010	Unilever PLC	UK	4520
Compass Group PLC	UK	4020	London Stock Exchange Group PLC	UK	3020	Vestas Wind Systems A/S	DK	6010
CRH PLC	IRL	5010	Lonza Group AG	CH	2010	Vinci SA	F	5010
Danone SA	F	4510	L'Oreal SA	F	4020	Vodafone Group	UK	1510
Dassault Systemes SE	F	1010	LVMH Moët Hennessy Louis Vuitton SE	F	4020	Volkswagen AG	D	4010
Deutsche Boerse AG	D	3020	Mercedes-Benz Group AG	D	4010	Volvo AB	S	5020
Deutsche Post AG	D	5020	Münchener Rückversicherungs Gesellschaft	D	3030	Wolters Kluwer NV	NL	4030
Deutsche Telekom AG	D	1510	National Grid PLC	UK	6510	Zurich Insurance Group AG	CH	3030
Diageo PLC	UK	4510						

Table A2. Explanation sectors.

Code	Description	Code	Description
1010	Technology	4050	Travel and Leisure
1510	Telecommunications	4510	Food, Beverage and Tobacco
2010	Health Care	4520	Personal Care, Drug and Grocery Stores
3010	Banks	5010	, c
	Financial Services	5020	Industrial Goods and Services
3030	Insurance	5510	Basic Resources
4010	Automobiles and Parts		
4020	Consumer Products and Services	5520	Chemicals
4030	Media	6010	Energy
4040	Retail	6510	Utilities