COST INEFFECTIVENESS
EVIDENCE IN CARTEL
DAMAGES

Lessons learned from
BritNed v ABB

Introduction

Cartels distort the market in several ways. Perhaps most obviously they allow firms to raise prices directly to generate higher profit margins. However, they can also lead to higher costs overall by letting inefficient firms retain market share and by dampening incentives to innovate. As Nobel prize-winning economist Sir John Hicks put it: "the best of all monopoly profits is a quiet life".1

If cartels disrupt normal competitive mechanisms that promote cost efficiency, simply looking at whether the cartel led to higher profit margins will not reveal the full extent of harm to customers.

The question of cost inefficiency effects loomed large in BritNed v ABB – the first cartel damages claim to reach final judgment in the English courts.2

BritNed, the operator of the interconnector connecting the Dutch and UK electricity grids, claimed damages due to its purchase of the submarine power cable from ABB. ABB was found by the European Commission (EC) to have been party to a global cartel relating to high voltage submarine and underground power cables.3 The decision established that the cartelists had agreed to allocate the BritNed project to ABB by either declining to participate in the tender or by submitting uncompetitive bids.4

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4. See Decision of the European Commission, paragraph 395 and BritNed v ABB, paragraph 141
In his judgment, which has since been appealed by both parties, the judge found no evidence of inflated margins, but did award modest damages for the cartel’s impact on costs under two discrete heads of loss:

- ‘baked-in inefficiencies’ that were deemed to have been passed-on to BritNed (£7.5 million); and
- a share of ‘cartel-related cost savings’ that ABB accessed from reduced bidding costs and its improved ability to manage future capacity (£5.5 million).

We do not expect the second head to survive the Court of Appeal and do not focus on this aspect of the judgment in this article.⁵

The baked-in inefficiency damages represent under 3% of the final price of €265 million agreed between BritNed and ABB for the cartelised project. This compares with the approximately €58 million derived from the approximately 22% overcharge produced by the claimant’s econometric analysis – which the judge considered “insufficiently reliable to be used in any way at all.”⁶

In our first article on the BritNed judgment, we set out our views on the court’s detailed evaluation of the econometric evidence of overcharge.⁷ In this article, we focus on the treatment of cost inefficiencies that underpinned the damages award. We compare this treatment with consulting industry best practice for assessing efficiency in the context of advising business on performance improvement. Building on our own experience of combining these skillsets in cartel litigation, we then conclude by considering the implications for addressing efficiency in cartel damages claims going forward.

What does economic theory say about cartel impacts on efficiency?

Economic theory identifies three separate types of efficiency that competition promotes and which cartels risk impairing:

- **Allocative efficiency**: competition puts pressure on firms to price close to their costs resulting in lower profit margins and better prices for customers. The closer price is to cost, the more efficiently the economy can allocate scarce resources between competing needs. Prices above cost mean that customers who value the product more than the cost of producing it are nonetheless deterred from buying it. This leads to inefficient levels of consumption and output and a sub-optimal allocation of society’s resources.⁸

- **Productive efficiency**: competition puts pressure on firms to reduce costs, operate efficiently and ensure – through a Darwinian ‘survival of the fittest’ selection process – that inefficient firms lose market share to more efficient rivals. Market allocation cartels disrupt this process and thereby risk allowing survival of not just the fittest, but also the fattest. Wrongly allocating contracts to inefficient firms leads to higher costs and ultimately higher prices.⁹

- **Dynamic efficiency**: competition also puts pressure on firms to innovate. In the long run, this may have the most powerful impact on consumer welfare if it leads to paradigm shifts in the quality of products and/or radically improved production processes. Cartels could amount to pressing a ‘pause button’ on innovation as again firms feel less pressure to work hard to stay ahead of the competition.¹⁰

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⁵. The cartel savings element – a surprise to many – does not make sense in a compensation framework (there is no mention of exemplary damages) as the claimant could not have been harmed by these cost savings to ABB. Indeed, the savings relate to ABB not having to compete to win projects, yet the judge’s main finding (to rule out an explicit overcharge) was that that ABB did actually compete for the BritNed project specifically, if not for others. There is also the tension of assuming the inefficiencies were passed-on but the savings were not – otherwise the savings would have to be offset against, not added to, the inefficiency damages.

⁶. BritNed v ABB, paragraph 417


⁸. This allocative inefficiency is not to be confused with inefficiencies that arise from market allocation cartels (see next bullet). See also Competition: Theory and Practice, Massimo Motta, Chapter 2, Section 2.2. Note that reduced allocative efficiency is not necessarily revealed by a comparison of margin as the cartel may have improved the ability of all firms to pass-on cost increases during the cartel. See Quantifying cartel damages and cost pass-through, by Burak Darbaz, Mat Hughes & David Vincent of AlixPartners (forthcoming)

⁹. The Competition and Markets Authority (CMA) describes these two effects as (i) a ‘market sorting’ effect, i.e. the process of ensuring inefficient firms leave the market, and (ii) an ‘x-inefficiency’ effect, i.e. the difference between the most efficient behaviour that the firm is capable of and its actual behaviour. Productivity and Competition (2015, CMA45 see paragraph 3.17). Confusingly, in paragraph 3.18, the CMA also describes the market-sorting effect in terms of allocative inefficiency.

Broadly we can refer to the first type of harm as direct price effects and the other two as cost inefficiency effects. There is substantial economic literature on the materiality of such adverse effects. For example:

- **Direct price effects**: famously, the European Commission’s practical guide on antitrust damages quotes a meta-study showing average overcharges of 20%. The study, which as we observed in our first article should be treated with caution, primarily captures price effects but could also include estimates of cost inefficiency effects.

- **Cost inefficiency effects**: Disney, Haskel and Heden (2003) analysed the impact of competition on productivity and found that market competition increases both the level and growth of productivity. Günster, Carree and van Dijk (2011) undertook an analysis of 141 firms that participated in 49 European cartels and found that innovation (modelled as R&D investments) was lower during the cartel period.

Hence, a complete cartel damages assessment may need to consider all these potential impacts. Whether they apply in practice in a specific case will of course depend on the evidence.

**How were these effects assessed in BritNed v ABB?**

As discussed above, this case involved a market allocation cartel that resulted in ABB winning the BritNed contract. The EC found that other rivals agreed either not to bid or to submit a phoney bid much higher than ABB’s.

We first summarise what the judge did and then consider the expert evidence and the judge’s assessment of it, before presenting our own views.

**THE JUDGE’S APPROACH**

To determine the extent to which BritNed may have overpaid, the judge sided with the claimant to define “the overcharge [...] as the difference between (i) the price agreed between ABB and BritNed and (ii) the price that would have been agreed – whether with ABB or another provider – had the cartel not operated.” (Emphasis added).

This clearly goes beyond price effects to also capture cost effects – in particular any productive inefficiency from the cartel blocking BritNed’s access to more efficient suppliers than ABB. It also seems to capture dynamic inefficiencies to the extent that suppliers may have innovated more absent the cartel. As the judge observed: “baked-in inefficiencies might arise because of an absence of internal pressure to produce a competitive price or (anterior to this) an absence of internal drive within ABB to improve the products it was selling.” (Emphasis added).

Unfortunately, data on rivals’ costs and prices was apparently unavailable as ABB was the only defendant involved in the litigation. Only data on rivals’ costs during the cartel can comprehensively inform the productive inefficiency question. Similarly, only data on all suppliers’ costs after the cartel ended can comprehensively inform the dynamic inefficiency question and a long period after the cartel may be needed to capture the benefits of an innovation.

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11. Innovations that lead to a step-change in improving quality, as opposed to reducing production costs, can nonetheless be thought of as leading to a step reduction in “quality adjusted” costs


13. Disney, R., Haskel, J. and Heden, Y. (2003). Restructuring and Productivity Growth in UK Manufacturing. The Economic Journal, 113(489), pp.666-694. The authors find a significant relationship between market competitiveness – measured using various proxies such as market concentration – and the level and growth of productivity. They also show that 90% of productivity growth can be explained by the exit of inefficient firms and the entry of efficient ones (as opposed to internal cost efficiency programmes)


15. BritNed v ABB, paragraph 18


17. Note that rivals’ costs during the cartel may of course also be affected by dynamic inefficiency. This means that data on rivals’ costs after the cartel may be required to consider both dynamic and productive inefficiencies.
Accordingly, the judge recognised that he “cannot realistically assess what a rival bid would have been.”\textsuperscript{18} Instead, he attempted to calculate ABB’s counterfactual bid, where ABB faces competition from efficient rivals. This comprised evaluating the evidence on direct price effects and further considering whether there was prima facie evidence of inefficiency in ABB’s costs. In short, the judge found no evidence of direct price effects, but did conclude ABB’s costs were subject to “baked-in inefficiencies”.

To quantify these inefficiencies, the judge emphasised that the evidence was “exiguous” and clarified he could not just assume that they existed.\textsuperscript{19} However, he did ultimately find an inefficiency based on internal documents suggesting that rival cables are 20% thinner than ABB’s. The judge concluded that this led to excessive copper costs and that, absent the cartel, ABB would either have lost the contract or would have had to absorb the extra costs of its less efficient technology.\textsuperscript{20}

To support this reasoning, the judge pointed to the fact that after the cartel ended, ABB lost 9 out of the 10 most similar projects to BritNed (compared to winning 14 out of 14 during the cartel), and on the project it did win post-cartel, the client had specifically requested a thicker copper cable.\textsuperscript{21}

Using what he described as a ‘broad brush’ approach, the judge estimated the overcharge resulting from this inefficiency at €7.5 million, equivalent to assuming that ABB would have had to lower its bid by some 15% of the copper related costs.\textsuperscript{22}

It can be seen that this approach tries to capture the productive inefficiency associated with a market allocation cartel. It does not capture any dynamic inefficiency effects.

\textbf{THE EXPERTS’ APPROACHES AND THE JUDGE’S VIEWS ON THESE}

Both claimant and defendant economic experts focused exclusively on trying to estimate direct price effects and no expert evidence on cost inefficiencies was presented.\textsuperscript{23}

Both experts developed models that compared ABB’s bids during and after the cartel. The defendant’s expert used a simple margin comparison taking ABB’s accounting costs as read, and also used these costs in econometric models (alongside other relevant factors) that sought to explain ABB’s prices.

The claimant expert raised the prospect of the cartel causing cost inefficiencies to argue against using ABB’s cost data in the econometric analysis. Instead of using ABB’s actual costs, the claimant expert used proxies for efficient costs based on industry-wide cost-indices for key cost inputs (namely copper and aluminium) and tried to control for other ‘legitimate’ factors that should affect competitive prices.\textsuperscript{24}

The judge found the defendant’s margin analysis useful to support the finding of no direct price effects, but recognised that margins could not address the question of whether the cartel lead to cost inefficiencies. The judge was thoroughly unpersuaded by the defendant expert’s view that he had not found evidence of any material cost inefficiencies.\textsuperscript{25}

However, the judge disagreed with the claimant expert’s blanket dismissal of the cost data. In essence, he found that the possibility of the cartel causing cost inefficiencies did not mean that the ABB cost data was insufficiently reliable for the examination of direct price effects.\textsuperscript{26} He also found that the claimant expert had relied on speculation to justify abandoning ABB cost data in the econometric model and her “attacks on the reliability of the direct costs recorded in the project pricing models (PPMs) to be misconceived”.\textsuperscript{27}

\begin{itemize}
  \item \textsuperscript{18} BritNed v ABB, paragraph 451(3)
  \item \textsuperscript{19} BritNed v ABB, paragraph 446 and 447
  \item \textsuperscript{20} BritNed v ABB, paragraph 446 and 449
  \item \textsuperscript{21} BritNed v ABB, paragraph 448(4)
  \item \textsuperscript{22} BritNed v ABB, paragraph 451(3) and (4). The inefficiency adjustment was limited to the copper element of the cable. The suggestion from the claimant’s economist that the approach should be extended to other raw material and production costs was dismissed due to a lack of evidence. BritNed v ABB, paragraph 451(5)
  \item \textsuperscript{23} In the next section, we consider a possible argument that the claimant’s model was also implicitly seeking to capture productive inefficiencies through the use of proxies
  \item \textsuperscript{24} BritNed v ABB, paragraph 290(2) & 318. One of the control variables was the total volume of copper – the importance of this is explained in the next section.
  \item \textsuperscript{25} “Mr Biro acknowledged the risk that direct costs might be inflated for this reason but considered that there was no reason to believe it was a material factor. … “No reason to believe” is a peculiarly weak formulation… I do not consider that Mr Biro – an expert economist – would be able to identify such inefficiencies, as I am sure Mr Biro would himself accept.” (BritNed v ABB, paragraphs 366/7)
  \item \textsuperscript{26} This assessment differs from that of a Dutch court in a recent case, also involving ABB. In that case the court emphasised the implications of the bidding process on the cartelists’ incentives to reduce costs and thus rejected ABB’s margin analysis as irrelevant. District Court of Gelderland, Mar. 29, 2017 (TenneT TSO BV, Saranne BV / ABB BV, ABB Ltd.), available at http://deeplink.rechtspraak.nl/uitspraak?id=ECLI:NL:RBGEL:2017:1724 (in Dutch), see paragraph 4.6
  \item \textsuperscript{27} BritNed v ABB, paragraph 265
\end{itemize}
Although the judge did ultimately reject the claimant’s econometric evidence of price effects, this was for other reasons other than the use of cost-proxies per se.\textsuperscript{28}

\textbf{OUR VIEWS}

Overall the judge’s approach to cost inefficiencies seems sensible in principle. He made the distinction between direct price effects and cost inefficiency effects – and determined that the prospect of the latter should not preclude the use of actual costs to determine the former. He also found that the examination of the latter requires a specific and separate focus. Given the paucity of expert evidence and relevant data available, he used a ‘broad brush’ to base his findings on evidence suggestive of some (modest) productive inefficiencies and stopped there in the absence of evidence on dynamic inefficiency.

One may ask whether the experts could have produced further evidence to help the judge assess the productive inefficiency question in a more robust way. To quantify the resulting harm, the judge would have required an estimate for counterfactual efficient costs. Various methodologies are available to derive such estimates.

The most obvious solution is to benchmark ABB’s costs against those of its rivals. However, as noted above, ABB’s rivals were not part of the proceedings and information on their costs was apparently not available.

An alternative possible approach is the use of cost-proxy models that substitute actual or reported costs with cost-indices (for key input costs, such as copper costs) and product characteristics that drive costs (such as cable length). In theory, this can isolate cartel-related cost inefficiencies from legitimate cost factors that drive prices, as cost-indices are unaffected by the cartel. If the cartel led ABB (and indeed all cartelists) to incur higher costs during the cartel, then an index may illuminate that by only allowing for changes in the price of key input costs between the during and after cartel periods.

As the claimant expert’s model did use cost-indices (for copper and aluminium) and product characteristics instead of reported costs in her econometric model of direct price effects, we need to consider whether this approach did in fact allow her to also capture cost inefficiency effects.

This argument was not explicitly set out in the judgment but can perhaps be inferred. The claimant expert’s concerns about the use of ABB’s reported costs were summarised as due to (i) a lack of transparency and potential over-reporting, and (ii) the presence of cartel-induced baked-in inefficiencies.\textsuperscript{29} The judge noted that the claimant expert tried to use only “legitimate factors that would go to affect price […] so as to create […] a model that was independent of ABB’s actual reported costs.”\textsuperscript{30} This suggests that the claimant expert may consider that her modelling approach addresses both concerns identified above. Although it remains to be seen if this argument features in the appeal, we have seen similar arguments deployed on other cartel damages cases.\textsuperscript{31}

\textbf{A COST-PROXY SHORTCUT?}

In the following paragraphs, we set out how – in principle – a cost-proxy model could capture inefficiency effects. We further describe the general and case-specific problems with such an approach.

Consider the following example, where for simplicity we assume that total cable costs reflect only the copper cost and quantity used and that the only control variable used is a copper price index (that is clearly unaffected by the cartel). There are no direct price effects as the same fixed margin (€10) is added to total cost in each period. However, the supplier does succeed in reducing the volume of copper it needs (for identical projects) after the cartel.

\begin{table}
\centering
\caption{Cost-proxy illustration}
\begin{tabular}{lccc}
\hline
 & \textbf{DURING CARTEL} & \textbf{AFTER CARTEL} & \textbf{DIFFERENCE} \\
\hline
Cost of copper index (per tonne) & €12 & €10 & €2 \\
Copper volume (tonnes) & 10 & 9 & 1 \\
Total cost (volume x cost) & €120 & €90 & €30 \\
Margin & €10 & €10 & €0 \\
Cable price & €130 & €100 & €30 \\
\hline
\end{tabular}
\end{table}

\textsuperscript{28.} BritNed v ABB, paragraphs 417 and 419
\textsuperscript{29.} BritNed v ABB, paragraph 349
\textsuperscript{30.} BritNed v ABB, paragraph 317(1)
\textsuperscript{31.} It is also routine for early stage claimant estimates to be informed by publicly available cost indices in the absence of supplier costs through disclosure

Cost inefficiency evidence in cartel damages: Lessons learned from BritNed v ABB
The margin comparison shows that the cartel did not lead to higher prices by increasing the supplier’s profits. Nevertheless, the cable price was €30 higher during the cartel. As the cost index shows, €20 is explained by the elevated cost of copper during the cartel period (for reasons clearly unrelated to the cartel as the cartel did not affect the price of copper). The residual of €10 – which reflects the higher volume of copper used during the cartel – could be attributed to cartel-related cost inefficiencies.

So, does this mean that such a ‘cost-proxy shortcut’ works?

Certainly, the isolation of an unexplained residual may indicate cost inefficiency effects. However, there remain critical causality and quantification questions, in particular:

- The residual could result from a **productive inefficiency**. However, an index on its own cannot resolve the question of differences between firms in terms of their relative cost inefficiency.
- The residual could equally result from a **dynamic inefficiency**. However, an index approach does not give any insight into whether the innovations achieved after the cartel (to cut volume from 10 to 9) would necessarily have arisen **during** the cartel.

These questions require additional direct evidence.

Unlike in the example above, the cost-proxy model put forward by the claimant expert in the BritNed case would have been unsuccessful in identifying cost inefficiency effects in any case. This is for two reasons. This is because, unlike our hypothetical example in table 1, the inefficiency persisted after the cartel. Returning to table 1, the post-cartel volume figure would have been 10t not 9t – giving a total cost of €100 and a price of €110. The price increase of €20 would have been perfectly explained by the cost-index inflation and no unexplained residual would have emerged. In fairness, the claimant expert did implicitly try and guard against this by only using post-cartel projects that ABB won (paragraph 312 (1)).

As it turned out, the judge was able to infer from ABB’s internal documents and its post-cartel loss-rate that ABB’s cables were thicker than rival cables and that this was prima facie evidence of productive inefficiencies.

To conclude, whilst cost-proxy models that rely on indices can provide prima facie evidence of inefficiencies, it is important to use as much factual evidence as possible and to deploy expert evidence on cost inefficiencies. With no such expert evidence and no hard data on rivals’ costs, the judge was left to patch together disparate pieces of evidence to formulate a best guess of cartel inefficiency effects. In the circumstances, he appears to have done a reasonable job on this. However, in our experience, to address these issues properly requires expert evidence from specialist efficiency consultants and a willingness to consider a range of empirical methodologies aimed specifically at assessing efficiency.

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32. *BritNed v ABB*, paragraph 318
33. This may have been related to the claimant expert’s assertion that they had found evidence of an overpayment for copper (see *BritNed v ABB*, paragraph 264 (1)). The judge found that the “anomaly” could be perfectly explained and that “there was nothing in the point”. The judge did not rule out that proper expert evidence on this issue would not have led to a different conclusion: “The fact is that the sort of point that BritNed was seeking to make through Dr Jenkins and through the cross-examination of Mr Biro really needed to be made by an expert in cable costs called by BritNed, on which Mr Larsson-Hoffsten could then have been cross-examined” (paragraph, 264 (1) (e)).
34. This is because, unlike our hypothetical example in table 1, the inefficiency persisted after the cartel. Returning to table 1, the post-cartel volume figure would have been 101 not 91 – giving a total cost of €110 and a price of €110. The price increase of €20 would have been perfectly explained by the cost-index inflation and no unexplained residual would have emerged. In fairness, the claimant expert did implicitly try and guard against this by only using post-cartel projects that ABB won (paragraph 312 (1)).
Assessing firm efficiency – what does good look like?

Assessing the impact of a cartel on cost efficiency requires techniques that are the bread and butter of management consultants who focus on cost reduction. Firms routinely employ these to review the efficiency of their own operations, those of their suppliers (for the purposes of procurement negotiations), or those they are looking to acquire.\(^{35}\)

There is a growing trend for these skillsets to be deployed in cartel litigation – in particular where data is insufficient to enable sufficiently powerful econometric analysis. For example, AlixPartners has acted on over 20 automotive component cartel matters and routinely work with such consulting colleagues to address these issues, especially for components where technologies have changed materially or where there is insufficient data to support econometric analysis. In our view, experts with such expertise could have played a crucial role in the *BritNed* proceedings.

The kind of techniques that efficiency consultants use include:

1. **Benchmarking**
   
   This involves drawing on industry experience from having advised a range of different types of businesses in a sector or similar sectors. It consists of a range of techniques, including establishing ‘target operating model’ metrics for key cost parameters, such as ratios for R&D/revenue, overhead/revenue, staff churn/staff cost, product waste metrics, etc.

2. **Business process review**

   This involves evaluating the company’s processes to identify gaps in best practice for efficient operations and procurement. It consists of evaluating the strength of procedures to purchase optimally, such as frequency of tenders and processes for contract compliance.

3. **‘Should-cost’ analysis**

   This involves using cost-engineering experts to reconstruct the cost base of the procured product based on knowledge of component volumes, input costs and production processes. Often this involves ‘tear-down’ analyses in Technical Expert Workshops to assess the physical product and the relative cost/functionality of the product.

Depending on the specific case and gaps in the evidence bases, all these techniques can have a role to play in assessing cartel impacts on firm efficiency.

More broadly, we note that some of the concerns raised by the claimant expert to reject the use of ABB cost data seemed to arise from calling into question the accuracy of the cost data in the PPMs and indeed whether it had been accurately and faithfully reported for the proceedings.\(^{36}\) This is the clear domain of forensic accountants who can evaluate not just whether anomalies exist between models and management accounts, but also review the processes underlying the use and reporting of information. A combination of forensic and efficiency expertise also might have put more accurate numbers on both the additional costs resulting from the thicker cable (the initial costs) as well as countervailing benefits (lower operational costs\(^{37}\)).

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\(^{35}\) In particular, such “outside-in” buy-side due diligence work involves deconstructing a target firm’s cost base to a fairly high level of detail often with limited data. This helps identify inherent efficiencies that may be improved by purchasers able to leverage scale and superior processes in purchasing, manufacturing and overheads management.

\(^{36}\) *BritNed v ABB*, paragraphs 263 to 265

\(^{37}\) The judge refers to internal documents that refer to operational cost savings resulting from the use of the thicker cable. *BritNed v ABB*, paragraph 448(1)
Conclusions

Cartels can harm efficiency and therefore customers directly through price uplifts and indirectly by impairing cost efficiency. The judge on BritNed correctly identified these separate effects.

A key finding of the case is that concerns over cost inefficiency effects should not undermine the ability to evaluate price effects, but there does need to be a specific evaluation of cost inefficiency effects. Such an evaluation may be particularly important where cartels disrupt competitive mechanisms that would otherwise promote cost efficiency (e.g. contract allocation cartels); less so where cartelists focus exclusively on pricing aspects.

In our experience, a rigorous treatment of these separate effects requires evidence from efficiency experts. This allows for complementary analyses to the economic analysis to be robustly carried out.

As the judge recognised, it was clearly insufficient to rely only on expert economists to address all these issues.\(^\text{38}\) It is not clear whether the claimants did not seek to capture cost inefficiency effects at all or thought it could be wrapped up in a one-off econometric exercise.

However, assuming the baked-in inefficiency award withstands the appeal, it is clear that more expert evidence on these issues is needed.

\(^{38}\) BritNed v ABB, paragraphs 261 to 262
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ABOUT US

For nearly forty years, AlixPartners has helped businesses around the world respond quickly and decisively to their most critical challenges – circumstances as diverse as urgent performance improvement, accelerated transformation, complex restructuring and risk mitigation.

These are the moments when everything is on the line – a sudden shift in the market, an unexpected performance decline, a time-sensitive deal, a fork-in-the-road decision. But it’s not what we do that makes a difference, it’s how we do it.

Tackling situations when time is of the essence is part of our DNA – so we adopt an action-oriented approach at all times. We work in small, highly qualified teams with specific industry and functional expertise, and we operate at pace, moving quickly from analysis to implementation. We stand shoulder to shoulder with our clients until the job is done, and only measure our success in terms of the results we deliver.

Our approach enables us to help our clients confront and overcome truly future-defining challenges. We partner with you to make the right decisions and take the right actions. And we are right by your side. When it really matters.

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