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CBV Institute leads the Chartered Business Valuator (“CBV”) profession – Canada’s only designation dedicated to business valuation since 1971. CBV Institute is a leader in the international valuation community and is committed to advancing professional excellence for business valuation globally. As a not-for-profit valuation professional organization, CBV Institute establishes the highest standards of business valuation practice through education, accreditation and governance of the CBV. The integrity of the CBV is protected by the world-class CBV Program of Studies and Membership Qualification Examination, and upheld by the CBV Code of Ethics.

CBV Institute is the trade name of The Canadian Institute of Chartered Business Valuators. The CBV designation is represented by Chartered Business Valuator (CBV) and Experts en Evaluation d’Entreprises (EEE).

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Inspired by an unwavering commitment to professional excellence, we establish the highest standards of business valuation practice and education to elevate the stature of the CBV designation and the profession globally.

CBV analysis will be recognized as the essential instrument for informed business decision-making, transforming the power and authority of the Chartered Business Valuator.

This new dimension of professional opportunity will fuel demand for CBVs, open doors to career advancement and drive program enrollment.

Our Values

Everything we say and do is governed by our Code of Ethics and grounded in the values of integrity and mutual respect, for the benefit of the public interest.

Journal of Business Valuation

The Journal of Business Valuation is an annual publication of CBV Institute that is released electronically and available world-wide. It is devoted to sharing articles, presentations and business studies of the year which were written by CBVs and other professionals to provide insight and informed comments on business valuation and related fields. The opinions expressed by contributing authors in the Journal of Business Valuation do not necessarily carry the endorsement of CBV Institute.
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BLURRED LINES — WHEN DOES AN EXPERT BECOME AN ADVOCATE?
TIPS TO MAINTAIN YOUR INDEPENDENCE AND OBJECTIVITY
TIPS TO HELP YOU AVOID BLURRING THE LINE BETWEEN IMPARTIALITY AND ADVOCACY

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It is not uncommon for emotions to run high among the clients of lawyers, accountants and other professionals who hire a CBV to testify as an independent expert or advisor. CBVs, however, must adhere to a different standard—from the time we are approached for an engagement, through to performing it, writing the report, and giving testimony. In fact, when engaged to work as experts in Ontario, CBVs sign a form confirming that we owe a duty to the courts to provide an opinion and evidence that is fair, objective and non-partisan.

The suggestions below can help you maintain independence and objectivity.

1. Start due diligence before accepting an engagement.

Although a referral to a new job can be gratifying, an open conversation with the lawyer before taking it on is an important step toward the creation of an objective, unbiased report that is useful to the case.

Such a dialogue can help you understand the nature of the lawyers’ case, where they’re going with it, and the question or questions you are being asked to answer. It can also help you see whether there’s potential for a conflict of interest or other matters that can threaten your objectivity. This is the time, for instance, to disclose any past or ongoing work you’ve ever done for any parties in the litigation, as well as past or ongoing relationships or connections that could raise independence or impartiality issues down the road. Your conversation may, for instance, reveal that you provided an opinion in the past contrary to the view your potential client is seeking, that a published decision picked up that opinion, and that it might be best to walk away.

During this preliminary talk, you can try and get a sense of whether the support and information necessary to be of assistance to the lawyer on this case will be available to you. You can assess your ability to get paid in advance. Plus, you can confirm that you will receive the information you need to form an objective opinion. Such information generally includes a copy of relevant legal correspondence such as the statements of claim and of defense, as well as financial statements and other segmented financial information.

It may take a little while for you and the lawyer to work this through, and sometimes you will not end up with a clear view that addresses every potential problem down the road, but whatever knowledge you gain is useful in advance.

Finally, your exploratory conversations are a good time to get a feel for whether the lawyer is trying to push you in one direction or another. Most lawyers do understand that their duties as advocates differ from yours. Good professionals recognize that CBVs can only help the courts if they remain committed to submitting an objective report to trial. But if you get a sense that you might be pressured from a lawyer you have not worked with before, we would encourage you to do some research on their past cases to see if you’d be comfortable taking this case.
2. **Maintain an ongoing dialogue with the lawyer.**

Brainstorming with the lawyer once you’ve been engaged and as needed throughout the case is encouraged. Furthermore, sharing of draft reports and obtaining feedback is a critical part of the process. Such a process will ensure you have all of the relevant facts and that you are addressing the key question(s) needed by your counsel.

Don’t be dismayed if the lawyer challenges or vets the basis for your conclusion during these dialogues. Really good lawyers do this to make sure all of the findings in your report are objective.

While going through the analysis together, you can add real value to the case by:

- Listening to feedback that helps you update your report so it ultimately addresses the challenge that the court needs to answer.
- Confirming that you have all the evidence and documents available, including key documents that may show a contrary view.
- Correcting any factual misunderstandings.
- Advising the lawyer of any soft spots in their assumptions.
- Making sure all the assumptions that could bear on your opinion are confirmed in evidence.
- Sharing preliminary findings or observations, to clarify whether the question should be amended.
- Ensuring that the right question is being addressed.

The caveat here is that everyone involved is comfortable and confident, and no one crosses the line into inappropriate pressure.

There is no need to shy away from disclosing these discussions to the court during cross-examination. Experts who have had ongoing discussions with their lawyer, and who have had their assumptions and analysis properly vetted, will generally provide more helpful and objective expert evidence.

3. **Be a professional skeptic.**

The best way to stay objective and avoid advocacy is to continually assess and question the reasonableness of the lawyer’s instructions or assumptions, and identify and discuss any areas of concern within your area of expertise. You may need to do this more than once. It’s not uncommon, in complicated commercial litigation matters for the question that you are answering to change or evolve as you move forward.

A healthy quantity of skepticism can take you a long way toward an impartial report and testimony. Consider the findings of *The Biases of Experts*, an article that ran in the Manitoba Law Journal in 2019¹. It identified the following pitfalls to independence or impartially:

- Uncritically accepting the client’s facts.
- Focusing on one set of research only.
- Ignoring contradictory evidence.
- Focusing on just weaker evidence.
- Drawing only conclusions favourable to their clients from the facts.

Ongoing skepticism can help you avoid these pitfalls: comprehensively research, question every fact, and consider all the facts to form your opinion.

¹ *The Biases of Experts: An Empirical Analysis of Expert Witness Challenges*, by Jason M. Chin, Michael Lutsky, and Itiel E. Dror
4. Ask an objective third party to review your report.

Even the most conscientious CBV can miss a fact or lose perspective after weeks or months immersed in a case. That's why it's a good idea to ask someone else, ideally another CBV, to review and critique your work. A second set of eyes on your report can help you take off the blinders and root out unintended biases, prejudicial language or faulty reasoning that may have crept in.

CBVs in large firms can request a fulsome second level partner review. CBVs in medium-to-large firms can ask their staff and the people with whom they work to review their reports. CBVs in small firms or independently can pay another CBV, or ask someone outside the organization to critique the main issues at a high level.

It's important to advise the lawyer you are doing this, to ensure you are not waiving privilege, and that you are maintaining privacy.

5. Stick to facts and just the facts.

As advocates for their clients, some lawyers choose to use forceful language and hyperbole in court. The language in a CBV's report, and the language a CBV uses when giving testimony, in contrast, must be measured and clear.

Just like your report, your testimony provides concise, factual evidence for a trial. The facts in your report form the basis or foundation for your ultimate opinion—as neutrally as possible, based on the assumptions you've been given.

 Judgmental language such as “unexpectedly large increase” can be perceived as advocacy. So can emotion-laden adjectives and adverbs, such as “erratic”, “unpredictably” or “unfortunately” to emphasize your points. These verbal excesses can hinder your credibility and independence before you even get into the box, and can also become fodder for an aggressive cross-examination by the other side.

Keep in mind that reports, along with pleadings, are almost always given to the trial judge before the trial starts. Most judges read these in advance to familiarize themselves with the case and any significant issues that experts will address. As a result, before you even get into the witness box, you can assume that the trial judge has made a preliminary assessment of your independence, based on what's written in the report, the type of language that's used, how the opinion was expressed, and what the assumptions were.

Here are a few pitfalls to avoid:

- Explaining, or, even more egregiously, giving your personal spin on what the case is about.
- Including a summary of the case, what the pleadings say or the statement of defense; these could introduce inconsistencies or unnecessary assumptions.
- Commenting or interpreting the evidence, evaluating credibility or weighing competitive evidence; these are responsibilities of the judge or arbitrator, not the CBV.
6. Respect the professionals on the other side.

CBVs are frequently asked to critique other experts in their reports, responding reports, and on the stand. Always be polite and respectful in your critiques. Judges prefer CBVs to show professionalism to one another and to the lawyers on both side. They expect fairness and objectivity in helping the court, rather than an unreasonable rebuff of another point of view or refusal to concede.

It is advisable to acknowledge some or even many components of another expert’s report positively when you are responding to it. Almost every professional CBV will provide very good points to at least consider. Agreeing with what the other expert has said and accepting that some parts of a report prepared by the other side are valid and correct demonstrates your independence. It shows that you are willing to make reasonable concessions that don’t undermine the fundamental opinion.

Likewise, don’t treat cross-examining lawyers as adversaries or bait them by making provocative statements such as “I know where you are going.” The opposing lawyer may well be an adversary of the client who’s paying for you, and may well choose to act like a gladiator for their client, but that is appropriate to their role in court. You are there to support your opinion calmly, with measured and appropriate facts that help the court—not to swing at the other side.

Crafting or, worse yet, asking questions on the stand crosses the line into advocacy and compromises your independence. Leave the questioning to lawyers. It’s up to them to win the case, not you.

That said, professional advice that helps the lawyer understand what the issue is and what areas to cross-examine are fair game. And in court, judges have no problem when an expert answers questions about the process or provides the court with relevant facts that can help preparation of cross-examination. You and the lawyer can even decide that the lawyer will ask you to provide an overview or précis for the courts, i.e. the key issues, your opinion and a summary of how you got there.

7. Stay calm and avoid emotion when testifying.

The right tone and attitude in court is important. It is never advisable and indeed unprofessional to raise your voice or argue with the other side’s lawyer.

This means staying calm when the lawyer on the other side asks difficult questions, up to and including questions that challenge your assumptions. Pressure to come to conclusions that favour the other side is inevitable. Rather than bowing to such pressure with an emotional response, you will need take your time, think through the issues, and explain your perspective and assumptions objectively. Ultimately, the judgment is going to reflect your independent and objective view, not the fact that a lawyer pressured you into it. It can be helpful, in fact, to re-examine how you would look at this if you were on the other side. Inevitably the answer should be: similarly.

It’s particularly important to keep calm if an error in your report comes to light while you are on the stand. Even the most conscientious CBV can blunder occasionally. If you have made a mistake that the other side seizes on, acknowledge it, explain the impact, and provide your new view. Your lawyer can acknowledge your error at the front end of the direct, and address it. Don’t avoid admitting your mistake, or try and come up with rationalizations to explain it. You will pay the price in lost credibility.

Another common scenario CBVs commonly encounter is a request to address or speculate on hypothetical scenarios or assumptions they did not make. Giving opinions based on threshold facts that are questionable or that you if pressed can’t reasonably support are danger areas for experts.
Your best option is to think through these questions and answer them objectively. Be aware that in just about every cross-examination, you will have to make concessions. If the factual assumption is unrealistic and unreasonable, your willingness to address it demonstrates your ability to stay independent. You can tell the court you didn’t make that assumption because you didn’t regard it as reasonable, and then explain what your opinion would be if you had made that assumption. Your credibility is enhanced by going ahead and answering the question, and diminished if you refuse.

Trial judges may have problems with your opinion, or consider you evasive and difficult if you defend unreasonable factual assumptions and refuse to concede areas that a reasonable person would concede on the basis that they didn’t make that particular assumption.

Finally, it is even more important in virtual environments than in bricks-and-mortar courtrooms to stay calm and measured.

In live courts, judges may be too far away from you to see your face well, or may be looking away from you to take notes during the time you are on the stand. In a virtual environment, the judge can usually see you clearly. They may well notice facial expressions that they would not notice from a witness on the stand in a courtroom. If you are frowning, or showing discomfort with a line of questioning, or unsure about what you are saying, the judge may well be able to read your emotions on your face.

8. Don’t allow clients’ opinions to unduly influence your opinions.

It’s common and acceptable for CBVs to interview the client as well as the lawyer. In theory, who knows the facts of the business better than the client?

Clients, however, don’t always appreciate the boundary between advocacy and independence. They may well offer opinions based on their emotions, pressure you to pursue a particular avenue, or suggest paths of enquiry that you consider unnecessary.

During such conversations, you can remind clients that you appreciate their perspective, but your responsibility is to justify, rationalize and explain the opinions you arrived at in your report and ultimately in court. Don’t shy away from sticking to your guns.

9. Tell the court if there are scope limitations due to cost/benefit constraints.

All judges are sensitive to the cost of litigation and recognize that there’s not an unlimited budget to pay experts. It’s perfectly acceptable to tell the court that you limited your opinion to certain areas to help the court and also stay within the budget.

Pullouts

If you convey to the court that you are fair and reasonable and that you have made reasonable concessions, your expert opinion is well-thought out, and you’ve truly tried to help discharge your obligation to the court, you are going to help your client in the case and yourself in future cases.

Judges are inclined to look positively upon cases where the expert provides objective opinions the lawyer can argue on the basis of factual information such as admissions made on discovery or documents that support it.

Judges appreciate an expert who is confident in his or her opinion, and who makes assumptions supported by facts that are reasonable and can be defended.

You are there to support your opinion and help the court, not to swing at the other side. It’s up to the lawyer to win the case, not you.

Presented at the 2021 CBV Congress, Toronto, Ontario
Prem M. Lobo1 and Liviu Cananau

“The hard truths are the ones to hold tight.”
Jeor Mormont (Lord Commander of the Night’s Watch), in A Game of Thrones

“It’s easy to confuse what is with what ought to be…….”
Tyrion Lannister, in A Game of Thrones

“A wise man once said that you should never believe a thing simply because you want to believe it.”
Tyrion Lannister (probably quoting himself), in A Game of Thrones

1.0 INTRODUCTION

The issue of causation is a key consideration in framing the circumstances in which financial losses suffered by a plaintiff are recoverable. Proving that a wrongful act/breach occurred and that the said act/breach is causally connected to the financial loss suffered is often a legal/factual determination, while proving the quantum of financial loss arising from a wrongful act/breach is usually the realm of loss quantification experts (hereinafter, “expert” or “experts”). The question that sometimes arises for experts is whether, or to what extent, an expert has to either comment on or establish a link between the wrongful act/breach and the resulting financial loss (i.e., causation). When is it appropriate for an expert to assume that a calculated quantum of financial loss was caused by a wrongful act/breach? When does an expert have to show that a calculated quantum of loss was directly caused by a wrongful act/breach versus merely correlated with the occurrence of such? To what extent does an expert have to consider and eliminate from the calculated loss that portion relating to other causes? How does an expert go about doing so? These are all important questions.

The first part of this paper will address some of the overarching legal frameworks that have developed over time relating to the issue of causation and the quantification of financial loss. The second part of this paper will attempt to address some of the responsibilities of loss quantification experts with respect to the scope of review relating to the causation of financial losses.

Rather than a “be all end all” piece to address causation in all loss quantification contexts, the purpose of this paper is to provide food for thought with respect to the topic of causation. Note that all loss quantification contexts are unique and what is appropriate may depend on the specific facts and circumstances of each context.
Part I: The Legal Perspective with Respect to Causation and Financial Loss

“The Law is the Law.”
Daenerys Targaryen, in A Game of Thrones

In order to understand the role of loss quantification experts with respect to causation and financial losses, it is helpful to first understand some of the overarching legal principles and considerations that have developed over time relating to the issue of causation and the quantification of financial loss.

2.0 AN INTRODUCTION TO CAUSATION

Litigation involving financial loss claims occurs in a variety of circumstances. The associated causes of action also vary widely and include tort claims (such as negligence), breaches of contract, regulatory infractions, other statutory compensation entitlements and/or criminal matters. Although no two cases are the same, the legal elements for financial loss claims typically have several areas of commonality:

a) The existence of a duty, relationship or obligation (collectively, the “Duty”);

b) Conduct, action or inaction by the defendant in the context of the said duty, relationship or obligation which does not meet the required standard of care or conduct (collectively, the “wrongful conduct”); and

c) The manifestation of an actual business loss or financial damage (collectively, the “financial loss”).

A number of other requirements must be satisfied in order to for a financial loss to be legally compensable including the establishment of “factual” causation. Reference to “causation” is an expression of the relationship that must be found to exist between the impugned conduct of one party and the damage suffered by the other in order to justify the payment of compensation.

Causation is assessed through the application of specific causation tests and/or considerations that vary depending on the type of action and/or area of law that is involved. There is, for example, a long line of jurisprudence that governs the necessary elements of causation where damage in the form of consequential financial loss has been suffered due to negligence.

3.0 LESSONS FROM JURISPRUDENCE

Due to the scope limitations of this paper, not all areas of law can be covered. The cases summarized below illustrate the causation test(s) applicable to negligence claims. They also highlight other relevant considerations such as “proximity” requirements, alternative causation tests, as well as, special difficulties in either identifying or articulating the correct causation standard.

3.1 Bond Reproductions Inc. and Revolution Resource Recovery Inc. (“Bond Reproductions Inc.”)²

Bond Reproductions Inc. provides a good illustration of the test for causation as well as the interface between causation and proximity considerations. In this case, the plaintiff was the operator of a digital printing business which suffered a power outage following an accident where a truck owned by the defendant struck a nearby power hydro pole. At the time of the accident, the plaintiff was experiencing a high volume of work and was operating “around the clock” production lines. Although no property owned by the plaintiff was directly damaged by the accident, the ensuing power outage caused the plaintiff to halt production for a substantial period of time. Time sensitive work had to be contracted out by the plaintiff to a third party. Other jobs had to be postponed or were lost altogether. This led to a loss of revenue for the plaintiff. The plaintiff sought recovery for its financial losses from the operator of the truck.

² 2018 BCPC 241.
The decision in this case focused on causation which included a two prong analysis:

a) assessment of factual causation being whether the truck accident caused “as a matter of fact” the business interruption suffered by the plaintiff; and,

b) review of “proximity” considerations (“proximity”).

As with most “negligence” claims, causation in this case was determined using the “but for” test which is satisfied if the plaintiff can provide, on a balance of probabilities, that “but for” the defendant’s wrongful conduct, the financial loss would not have occurred. Alternatively, if the loss would have occurred with or without the impugned conduct, the “but for” test would not be met.

In Bond Reproductions Inc., the “but for” test was satisfied on the basis that the defendant’s damage to the hydro pole resulted in power loss that was directly related to the business interruption suffered by the plaintiff. Put differently, there was general agreement that the business interruption would not have happened if the defendant had not damaged the power pole.

However, the establishment of causation, although necessary for the claim to succeed, was insufficient in itself to render the defendant liable for the financial losses claimed without also satisfying proximity considerations. The proximity analysis applied in this case requires that there be a close enough nexus between the wrongful conduct and the financial loss to justify a finding of liability on the part of the defendant (notwithstanding that factual causation has been established).

Specifically, the plaintiff had to show that the financial loss suffered was reasonably foreseeable and/or a probable consequence of the wrongful conduct. Since the defendant had no specific knowledge of the plaintiff’s business operations and/or its specific reliance on the hydro pole in question, it could not be expected to know or anticipate that damage to the said pole would affect the energization of the plaintiff’s business and/or result in business interruption. The claim, therefore, failed on the basis that the required proximity was lacking.

3.2 Segway Hotels Ltd. v Consumer's Gas Co.³ (“Segway Hotels Ltd.”)

A different result was reached in the case of Segway Hotels Ltd. notwithstanding similar circumstances to Bond Reproductions Inc. This case involved alleged negligence by a gas company and its contractors who caused an interruption to the supply of electric power to the plaintiff during the construction of a gas pipe line along Queen Street in Toronto, Ontario.

The plaintiff operated a hotel requiring electric power for the provision of its accommodation/services and for the operation of various appliances. The required power was supplied by Toronto Hydro through a feeder line (the “Feeder Line”) in an underground duct previously installed by Toronto Hydro. A copy of the plan for the Feeder Line showing the exact location of the line had been forwarded to the gas company and/or its general contractor (the “first defendant”) when utility “locates” were completed.

In providing the necessary permissions and approvals for the gas pipe line works, Toronto Hydro stated that there would be no objection to the gas pipe work provided that proper care was taken when crossing the Feeder Line that had been installed to provide electric power to the plaintiff’s hotel. This warning was given to the general contractor before construction/work was commenced.

³ 1959 CanLii 159 (ON CA).
As it turned out, the Feeder Line was broken by a subcontractor in the course of construction/work. This resulted in the electrical power to the hotel being cut off which caused damage to the hotel. At trial, the defendants were found liable for the financial losses suffered by the plaintiff. The matter was appealed by the defendant to the Ontario Court of Appeal where causation was carefully considered. According to the Court of Appeal, there was no doubt that the defendants actually severed the Feeder Line. It was also accepted that the financial losses suffered by the plaintiff directly followed from the defendants’ interference with the Feeder Line thereby establishing the necessary “but for” causation.

However, unlike in the *Bond Reproductions Inc.* case, the Court of Appeal further determined that the injury suffered by the hotel was sufficiently proximate to the wrongdoing to justify liability since the defendants ought to have been able to reasonably foresee the damage. A distinguishing factor was that the defendants had been put on notice of the presence of the Feeder Line and its function. In fact, the general contractor had been specifically cautioned to ensure that no damage is caused to the Feeder Line in the course of the gas pipe construction/work. As a result, the finding of liability on the part of the defendants was upheld.

### 3.3 Resurfice Corp. v Hanke ("Resurfice")

Although the test for causation commonly involves a “but for” analysis, this will not necessarily be the correct or appropriate approach in every case. Care should be given to recognize circumstances where a different test is required or warranted. This would include, for example, circumstances where there are multiple defendants who engaged in wrongful conduct but it cannot be demonstrated on a balance of probabilities who specifically caused the damage/loss. Alternatives to the “but for” test are often advanced where there is a concern that the “but for” test may lead to an undesired (unjust or unreasonable) result.

An example of circumstances where this was considered is the *Resurfice* case. In this case, the operator of an ice-resurfacing machine was injured when the operator mistakenly placed hot water into the gasoline tank of the machine. This caused the release of vaporized gasoline which was then ignited by an overhead heater causing an explosion/fire. The plaintiff sued the manufacturer and distributor of the machine on a multi-party basis for damages alleging that the gasoline and water tanks were similar in appearance and placed too close together on the machine making it easy to confuse the two.

The matter was dismissed at trial on the basis that the “but for” test did not establish that the accident was caused by the negligence of the manufacturer or distributor. Specifically, the apparent intervening negligence of the machine operator made it impossible to satisfy the “but for” test. The plaintiff appealed to the Alberta Court of Appeal who set aside the judgment and ordered a new trial on the grounds that the judge erred in both his causation and proximity analyses.

On the issue of causation, the Court of Appeal indicated that where there is more than one potential cause of damage, the “but for” test may be unworkable which would then be substituted with the “material contribution” test as an alternative. Applied to this case, the existence of multiple defendants and the contributory actions of the plaintiff favoured the application of the “material contribution” test over the “but for” test which was considered unworkable.

The Court of Appeal also found that the trial judge failed to undertake a proper proximity analysis in concluding that the design of the gasoline and water tanks was not the proximate cause of the injuries and that the risk was not foreseeable. The Court of Appeal determined that the trial judge failed to place sufficient emphasis on the fact that the tanks were located side by side with the same colour markings and also failed to account for evidence that other machine operators had made the same mistake. The Court of Appeal noted that the proximity analysis must include case specific policy considerations including the potential seriousness of the injury, relative financial positions of the parties etc.

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The matter was then further appealed to the Supreme Court of Canada who dialed back the “material contribution” test applied by the Court of Appeal. The Supreme Court affirmed that the basic test for determining causation remains the “but for” test. This test applies to all cases including, without limitation, multi-cause injury cases including where there is contributory conduct which can be apportioned, as permitted by statute. It is, therefore, incorrect to depart from the “but for” test and apply the “material contribution” test whenever there is more than one potential cause of damage. The “but for” test remains the applicable default standard. However, the Supreme Court recognized there may be special circumstances where the “but for” test should be set aside in favour of the “material contribution” test:

a) It must be impossible for the plaintiff to provide that the defendant’s negligence caused the plaintiff’s injury using the “but for” test and the impossibility must be due to factors that are outside of the plaintiff’s control; and,

b) It must be clear that the defendant breached a duty of care owed to the plaintiff thereby exposing the plaintiff to an unreasonable risk of injury and the plaintiff must have suffered that form of injury. In other words, the plaintiff’s injury must fall within the ambit of the risk created by the defendant’s breach.

The Supreme Court provided examples of where it might be appropriate to depart from the “but for” test using the above criteria. One example is where two gunshots are independently fired carelessly by two separate individuals with the result that one of the two shots injures an individual and it is impossible to say which of two tortious actions was the cause of the injury. In this situation, it would be appropriate to apply the “material contribution” test provided that it is established that each of the defendants acted carelessly or negligently which resulted in creating an unreasonable risk of the same specific type of injury that the plaintiff then, in fact, suffered.

3.4 Lyness v. Wang5 (“Lyness”)

It is not always clear in what circumstances the “but for” test should be set aside in favour of the “material contribution” test, which is an evolving area of law. Once the correct test is identified, it is important to refer to the correct terminology in applying the test and avoid confounding the mechanics of the different tests. An example of the confusion that can arise between the two tests can be found in the Lyness case.

This case involved a motor vehicle accident claim appealed due to the trial judge’s apparent erroneous direction to the jury on causation considerations. The trial judge instructed the jury with respect to both the “but for” and the “material contribution” tests. There was a misapprehension on the trial judge’s part as to the difference between the two tests including by providing direction to the jury that both tests can apply in a given case. The trial judge directed the jury that the “material contribution” test is another way of framing the “but for” test which was found to be incorrect. This case underscores the requirement to ensure that only one (correct) test is applied in any given case and that there be no combination of the elements of one test with another.

5 2010 ONCA 741.
3.5 Donleavy v Ultramar Ltd.6 (“Donleavy”)  

The recent Donleavy case is another example of where confusion arose at trial in connection with the correct causation test to be applied. This case also highlights the importance of avoiding combining or overlapping the “but for” and “material contribution” tests.

The matter went to trial over an oil leak at a residential property associated with an outdoor fuel oil tank. The plaintiffs’ oil tank leaked over a lengthy period of time thereby resulting in significant environmental cleanup costs, as well as certain rental income losses. The defendants in this case were the parties responsible for supplying oil to the plaintiffs’ property. The defendants had filled the oil tank on over 20 occasions over the course of a number of years. In the course of doing so, the defendants were required (under applicable regulations) to inspect the oil tank but failed to tag the tank for removal due to corrosion. As it turned out, the tank was corroded at the bottom and leaked oil on a consistent basis over the years.

At the same time, a contributing factor to the oil leak was that the plaintiffs improperly installed an oil tank intended for indoor use within an outdoor space. Over time, water that pooled at the base of the oil tank caused it to corrode, therefore, resulting in oil leakage.

The trial judge held that the “material contribution” test was the appropriate causation test to use because of the involvement of multiple parties in the outcome. The Ontario Court of Appeal followed Resurface in finding this to be an incorrect approach maintaining that the “but for” test applies even where a defendant’s negligence is not the sole cause of the plaintiff’s injury.

According to the Court of Appeal, the critical threshold for the application of the “material contribution” test is the impossibility of proving which of two or more possible tortious causes, in fact, resulted in the damage. In this case, there was no reason why the actions of the defendants who failed to properly tag the leaking oil tank for removal made the “but for” test unworkable. The Court of Appeal, further, noted that where the “material contribution” test is applicable, it needs to be considered less through the lens of determining the actual cause of the loss or damage suffered and more through the lens of whether the tortfeasor materially contributed to the risk of the loss or damage suffered.

A further issue taken up was that, although the trial judge preferred the use of the “material contribution” test, she actually applied the “but for” test in her analysis. Specifically, the conclusions were more focused on actual causation (being a “but for” exercise) than on material contribution to risk (being a “material contribution” exercise). The judge found that the oil leakage would have been completely avoided if the defendants had properly tagged the tank for removal feeding directly into a “but for” conclusion. The end result was that although there was an error by the trial judge in identifying the correct causation test to be applied, the proper analysis was undertaken and consequently, the judgment was upheld.

As the foregoing cases demonstrate, although the jurisprudence articulates clear tests for establishing causation in negligence claims (including cases that involve a financial loss component), the applicability of the tests is far from straightforward. The causation theory and correct test to be applied to any given set of circumstances are important factors for the loss quantification expert to be aware of and consider, as appropriate.
Part II: The Loss Quantification Perspective with Respect to Causation and Financial Loss

“We look up at the same stars and see such different things.”
Jon Snow, in *A Game of Thrones*

This part of the paper will attempt to address some of the responsibilities of loss quantification experts with respect to the scope of review relating to the causation of financial losses. Some of the questions that may arise for loss quantification experts can best be demonstrated by the simplified loss quantification example set out below (a brief contextual set up for now, to be discussed in more detail later).

4.0 AN EXAMPLE

Assume that Mr. Bronn, an executive of Company A, which manufactures and sells protective wraps for transportation of industrial goods, resigns and commences employment at Company B, a competitor. Over time, Mr. Bronn was instrumental in developing and expanding the customer base for Company A's protective wraps. He attended many trade conferences to meet potential customers, organized pitch meetings and helped close significant customer deals. He was well liked by customers and many addressed issues, questions and concerns directly with him. Unfortunately things soured between Mr. Bronn and senior management at Company A. Company B, seeking to expand its presence in the market for protective wraps, saw an opportunity, and made Mr. Bronn a lucrative employment offer he could not refuse.

After joining Company B, Company A's sales and profits are observed to decline, irking Company A's senior management. They accuse Mr. Bronn of improperly enticing customers to conduct business with Company B. They further allege that Mr. Bronn made defamatory statements about the quality of Company A's products, causing customers to switch to Company B.

The matter proceeds to litigation, and experts are retained by both parties to quantify the potential financial losses arising from Mr. Bronn's alleged actions, assuming that Mr. Bronn is found to be liable for improper actions.

One of the questions that arises in this case is whether it enough for an expert to assume that Mr. Bronn is liable for the alleged improper actions based on facts to be adduced into evidence and proven, and quantify the decline in Company A's average profit after his resignation versus before his resignation, and assume that such decline was entirely the result of the alleged improper actions of the executive.

Does the expert have to go further by showing that the decline in profits after Mr. Bronn's departure was directly attributable to his actions after departure? Does the expert have to show that there were no other unrelated factors, such as an increase in competition in the market, or an expiry of a patent, or poor customer service etc. that could have caused the decline in profits after departure?

Does the loss quantification expert have to show that the decline in profits after Mr. Bronn's departure was not merely correlated with his departure, but directly caused by his departure and alleged actions after?

We will shortly explore these questions in more detail. However, the above provides a helpful segue into the topic of correlation versus causation.
5.0 CORRELATION VERSUS CAUSATION

Correlation in statistics is a measure that indicates how two or more variables move (or do not move) together in relation with each other. In statistics, correlation is measured between 0 and 1, and can be positive or negative. 0 would indicate that two variables do not move in relation to each other. 1 would indicate that two variables move at the exact rate in the same direction in relation to each other.

A negative correlation implies that two variables move in opposite direction with each other (an inverse relationship), such that when one is observed to increase the other is observed to decrease and vice versa. A correlation of -1 would indicate that two variables move at exactly the same rate in opposite directions in relation to each other.

Meanwhile, the term causation indicates that one event directly causes another event to occur.

It is important to remember that because two variables are correlated, it does not mean that one necessarily causes the other to happen.

For example, assume that it is summertime. Based on data gathered on ice cream sales and bicycles accidents, both are found to have a highly positive correlation. When ice cream sales are observed to increase, bicycle accidents are also observed to increase. This does not mean that ice cream consumption causes bicycle accidents. While there may be instances of bike riders carrying an ice cream while riding and getting into an accident, what likely causes an increase in both is the warm summer weather, which results in more ice cream consumption and also results in more bike riding, which results in more reported accidents.

The question that arises is whether loss quantification experts need to carry out a statistical analysis to identify correlation between an action/variable and loss? Canadian courts have not usually required loss quantification experts to carry out a statistical analysis of correlation. In any case, from a practical perspective, sufficient data required to do so would probably not be easily available.

The other question that arises is whether experts need to “prove” causation? Again, Canadian courts have not usually required experts to “prove” causation. This is a factual and legal determination made by the courts based on the preponderance of facts and evidence adduced at trial.

So, do experts need to analyze causation, if so, when, and to what extent?

6.0 DO LOSS EXPERTS NEED TO ANALYZE CAUSATION?

As noted by the Supreme Court in Snell v. Farrell:7

“causation is an expression of the relationship that must be found to exist between the tortious act of the wrongdoer and the injury to the victim in order to justify compensation of the latter out of the pocket of the former”

Proving causation is usually a factual or legal determination. However, depending on the circumstances and facts of specific cases, loss experts may have to do analyses to establish that a reasonable, proximate link between the alleged harmful act and the ensuing financial losses does exist, or that they have eliminated the impact of unrelated factors.

Depending on the facts and circumstances of some loss quantification contexts, further analyses may not be necessary, as the reasonable, proximate link between the alleged harmful act and ensuing financial losses may be reasonably apparent.

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7 1990 2 S.C.R. 311.
For example in a class action proceeding whereby alleged undisclosed fees were charged by a financial institution to credit card holders, the link between the fees charged and the alleged lack of disclosure may be reasonably apparent.

Similarly in a wrongful death case or a personal injury matter, there may be a reasonably apparent link between the losses and the alleged harm.

In other cases, there may be other experts such as economists or industry/market experts that are opining on the reasonable, proximate link between the alleged harmful act and ensuing financial losses.

For instance, take a securities litigation where there is an allegation that a company did not disclose material information to the market on a timely basis, causing investors to purchase equities at a higher price. When the disclosure was eventually made, there appears to be a decline in the share price, causing investors to allege that they have suffered financial losses.

An economist might be retained to establish whether there is a relationship between the observed decline noted in the share price and the alleged late disclosure, or to what extent the decline may have resulted from other market factors impacting similar companies in the industry.

Meanwhile, depending on the facts and circumstances of specific cases, Courts have required that loss experts:

a) Consider and eliminate from the calculations unrelated factors that could have contributed to a financial loss/observed decline in profits. For instance, actions of competitors, changes in technology, departures of important employees;

b) Seek/source/refer to factual information (to be adduced into evidence) with respect to the impact of alleged harmful actions on a plaintiff. For instance, interviews with the plaintiff's personnel to discuss the impact of highway construction activities by a municipality leading to disruptions in business operations, or examinations for discovery; and,

c) Consider the time that has elapsed between the alleged harmful actions and the occurrence of the calculated financial losses.

Note that, overall, experts are not expected to consider/eliminate every possible unrelated factor or explanation for an observed decline profit/calculated financial loss. However, depending on the facts and circumstances, more obvious impacts may need to be considered/eliminated.

An example of when it may have been beneficial for an expert to further explore the link between causation and financial losses comes from a US case, MapInfo Corp. v. Spatial Re-Engineering Consultants. MapInfo and SRC, both computer software companies, had entered into a software partnership agreement which authorized SRC to distribute MapInfo's products to end-users, as well as a development and distribution agreement to create a joint product that would be marketed under MapInfo's trademark. The relationship between the parties deteriorated and both parties entered into a Termination Agreement. Subsequently, MapInfo commenced an action alleging a breach by SRC of the Termination Agreement, while SRC responded by counterclaiming against MapInfo. Among various other allegations, SRC alleged that it had suffered financial losses as a result of disparaging comments made by MapInfo.

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8 No. 02-CV-1008 (DRH) (N.D.N.Y. Sep. 28, 2006).
MapInfo moved to preclude the reports and testimony of SRC’s loss expert concerning SRC’s damages from MapInfo’s alleged disparagement on the grounds that the expert’s reports did not satisfy the requirements for reliance or reliability, failed to use proper methodology and assumed the effect of a “campaign of disparagement” that was not supported by the evidence.\textsuperscript{9} SRC’s loss expert assumed that MapInfo engaged in a campaign of disparagement against SRC and that this campaign was effective in preventing SRC from acquiring business they would have obtained absent the disparagement. The expert’s reports contained opinions regarding SRC’s lost sales as a result of MapInfo’s alleged disparagement. To calculate these lost sales, the expert constructed a financial model to estimate what portion of MapInfo’s predictive analytics income would have shifted to SRC had MapInfo not disparaged the products and reputation of SRC.\textsuperscript{10}

MapInfo contended that its alleged statements had no effect on either resellers or customers of SRC. In support of its contention, MapInfo offered declarations from thirty-two separate partners or resellers and five customers that either they never heard the alleged statements or, if they did, the statements had no effect on their view of SRC.\textsuperscript{11}

The Court noted that SRC proffered no evidence to demonstrate the effect MapInfo’s alleged disparagement had on SRC in the marketplace.\textsuperscript{12} During his deposition testimony, SRC’s President admitted that the only proof he had that twelve customers alleged to have been affected by the alleged disparagement, and thus “lost or potentially lost customers,” was that SRC was sometimes given the “cold shoulder” when they attempted to sell to these customers.\textsuperscript{13}

The Court concluded that SRC did not convincingly prove a causal connection between MapInfo’s alleged disparagement and any losses by SRC. As such, the Court concluded that testimony from SRC’s loss expert would be irrelevant and precluded such testimony.\textsuperscript{14}

Some implications that could be drawn from the specific circumstances of the above case are that SRC, as a plaintiff by counterclaim, could have attempted to put forth evidence as to causation, and/or the loss expert could have done more work to establish which specific losses of sales/customers and financial losses were reasonably caused by the alleged statements of MapInfo, rather than assuming that all calculated losses were caused by these. In this case, it was not manifestly obvious that all the calculated financial losses were caused by the alleged statements (in contrast to, say, in the class action or personal injury cases described above). Further information could have been available or obtained (for instance, by speaking to customers, such as what MapInfo did) to further refine/adjust the calculated losses to include only those attributable to the alleged statements. Therefore, in the specific facts and circumstances of this case, it was not sufficient for SRC’s expert to assume that the alleged disparagement caused all the financial losses calculated.

In summary, while loss experts are not required to prove statistical correlation or prove causation, depending on the facts and circumstances of each case, experts may need to obtain a sufficient degree of comfort that there is a reasonable, proximate link between the alleged harmful act and ensuing financial losses.

\textsuperscript{9} No. 02-CV-1008 (DRH), 8 (N.D.N.Y. Sep. 28, 2006).
\textsuperscript{10} No. 02-CV-1008 (DRH), 9 (N.D.N.Y. Sep. 28, 2006).
\textsuperscript{11} No. 02-CV-1008 (DRH), 10 (N.D.N.Y. Sep. 28, 2006).
\textsuperscript{12} No. 02-CV-1008 (DRH), 11 (N.D.N.Y. Sep. 28, 2006).
\textsuperscript{13} No. 02-CV-1008 (DRH), 12 (N.D.N.Y. Sep. 28, 2006).
\textsuperscript{14} No. 02-CV-1008 (DRH), 13 (N.D.N.Y. Sep. 28, 2006).
7.0 HOW CAN LOSS EXPERTS ANALYZE CAUSATION (WHERE RELEVANT)?

In those circumstances where loss experts may need to further analyze the link between causation and financial losses, the overarching question for an expert to ask is whether there is a reasonable, proximate link between the alleged harmful act and the ensuing financial losses being calculated. It is important to know that there is no magic solution/road-map for every fact situation.

Where factual data exists and accounting/forensic-type analyses are possible (for example, in the Mapinfo v. SRC case described above), experts should consider making an attempt to obtain and glean information from such data.

For instance, consider the fact scenario introduced above of the executive, Mr. Bronn, who leaves Company A to join its competitor, Company B. Mr. Bronn is alleged by Company A to have improperly enticed customers to conduct business with Company B. It is further alleged that Mr. Bronn made defamatory statements about the quality of Company A’s products, causing customers to switch to Company B. After joining Company B, Company A’s sales and profits are observed to decline.

Assume the following simplified operating results for Company A, before and after Mr. Bronn’s departure.

<table>
<thead>
<tr>
<th>Table 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Company A</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Before Mr. Bronn’s Departure</strong></td>
</tr>
<tr>
<td>Sales</td>
</tr>
<tr>
<td>COGS</td>
</tr>
<tr>
<td>Gross Profit</td>
</tr>
<tr>
<td>Expenses</td>
</tr>
<tr>
<td>Profit</td>
</tr>
<tr>
<td><strong>Annual Change</strong></td>
</tr>
<tr>
<td>Sales</td>
</tr>
<tr>
<td>COGS</td>
</tr>
<tr>
<td>Gross Profit</td>
</tr>
<tr>
<td>Expenses</td>
</tr>
<tr>
<td>Profit</td>
</tr>
<tr>
<td><strong>Total Decline</strong></td>
</tr>
</tbody>
</table>

Based only on a “before versus after” comparison, average annual sales revenue has declined by $17.5 million, and average annual profit has declined by $4.46 million.

However, in this case, it may be possible to delve down further into the potential reasons for the decline in Company A’s sales revenue and profits. It may be possible to obtain, via examinations for discovery or other means, information on the customers of Company B. One may then be able to compare the customers and sales made by Company A in the years prior to and after Mr. Bronn’s departure with those of Company B.

If some customers are found to have left Company A (or decreased their level of annual purchases) and gone to Company B (or increased their level of annual purchases), this can be used to get a first/preliminary indication that Company A’s customers went to Company B.
Then, attempting to contact such customers to ask them their reasons for the switch, or obtaining this information from other means (surveys for example) may shed further light on why customers left Company A — i.e., whether the switch was to some degree made as a result of Mr. Bronn’s actions/statements, or whether the switch was for other, unrelated reasons.

For instance, after obtaining and delving into available details, a summary of Company A and Company B’s sales revenue prior to and after Mr. Bronn’s departure might reveal the following:

Table 2

<table>
<thead>
<tr>
<th></th>
<th>Before Mr. Bronn’s Departure</th>
<th>After Mr. Bronn’s Departure</th>
<th>Total Decline</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2015</td>
<td>2016</td>
<td>% change</td>
</tr>
<tr>
<td>Sales</td>
<td>$50,000</td>
<td>$60,000</td>
<td>20%</td>
</tr>
</tbody>
</table>

Company A Customers

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>10,000</td>
<td>15,000</td>
<td>15,000</td>
<td>13,333</td>
</tr>
<tr>
<td>2</td>
<td>14,000</td>
<td>14,000</td>
<td>14,000</td>
<td>14,000</td>
</tr>
<tr>
<td>3</td>
<td>6,000</td>
<td>11,000</td>
<td>6,000</td>
<td>7,667</td>
</tr>
<tr>
<td>4</td>
<td>12,000</td>
<td>12,000</td>
<td>12,000</td>
<td>12,000</td>
</tr>
<tr>
<td>5</td>
<td>8,000</td>
<td>8,000</td>
<td>8,000</td>
<td>8,000</td>
</tr>
<tr>
<td></td>
<td>$50,000</td>
<td>$60,000</td>
<td>$55,000</td>
<td>$55,000</td>
</tr>
</tbody>
</table>

Company B Customers

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>5,000</td>
<td>5,000</td>
<td>5,000</td>
<td>5,000</td>
</tr>
<tr>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>10,000</td>
<td>8,000</td>
<td>12,000</td>
<td>10,000</td>
</tr>
<tr>
<td>Other</td>
<td>15,000</td>
<td>15,000</td>
<td>15,000</td>
<td>15,000</td>
</tr>
<tr>
<td></td>
<td>$30,000</td>
<td>$28,000</td>
<td>$32,000</td>
<td>$30,000</td>
</tr>
</tbody>
</table>

Note: Calculations are based on the data provided in the table.
From the above, the following observations could be made:

a) Customers 1 and 4 were pre-existing customers of Company A and both had decreased sales/purchases from Company A after Mr. Bronn’s departure in 2017. However, neither customer appears to have started doing business with or increased sales/purchases from Company B after Mr. Bronn employment there. Potential inquiries with these customers and/or Company A management could indicate why they may have decreased business with Company A after 2017. For instance, did they switch to a different supplier than Company A or B? Did they reduce purchases due to their own requirements for protective wraps being different or lower? Did they reduce business with Company A due to poor customer service or quality issues? Was any part of their lower level of business due to the alleged actions/statements of Mr. Bronn? Depending on what such inquires indicate, the potential loss associated with these customers may be nil;

b) Customer 3 was a pre-existing customer of Company A and ceased doing business with Company A after Mr. Bronn’s departure in 2017. This customer started doing business with Company B after Mr. Bronn employment there, and this level of average annual sales was almost the same as what it previously transacted with Company A. Potential inquiries with this customer and/or Company A or B management could indicate why it may have ceased business with Company A after 2017. For instance, did it cease doing business for some of the other/unrelated business reasons noted above, or did they cease doing business due to the alleged actions/statements of Mr. Bronn? Depending on what such inquires indicate, there may be some potential loss associated with this customer; and,

c) Customers 2 and 5 were pre-existing customers of Company A and both had decreased sales/purchases from Company A after Mr. Bronn’s departure in 2017. However both were also pre-existing customers of Company B, and neither appear to have increased their average annual sales after Mr. Bronn’s employment there. Potential inquiries with these customers and/or management could indicate why they may have decreased business with Company A after 2017. For instance, did they decrease doing business for some of the other/unrelated business reasons noted above, or did they decrease doing business due to the alleged actions/statements of Mr. Bronn? Given that they were already pre-existing customers of Company B and their level of sales/purchases from Company B did not increase after Mr. Bronn’s arrival, unless other facts indicate to suggest that “but for” Mr. Bronn’s actions Company A’s sales to these customers would have been higher, there may be no potential loss associated with these customers.

Overall, what may initially appear to be a decline in Company A’s sales revenue and profit across all five customers may, upon analysis of sales trends by customer as between Company A and B and further inquiries with the relevant customers and/or company management, suggest that the total financial loss initially calculated may need to be adjusted/reduced for factors unrelated to the alleged actions of Mr. Bronn. In the example above, based on the results of the inquiries, the loss in average annual sales revenue (and related lost profits) may be limited to that associated with Customer 3.
8.0 REFLECTING/ADJUSTING FOR THE IMPACT OF UNRELATED FACTORS

Depending on the facts and circumstances of specific loss quantification contexts, it may be necessary to consider, adjust for and/or eliminate that portion of a calculated financial loss caused by identifiable and obvious factors which are unrelated to the alleged action or actions at issue.

Unrelated factors may include economic impacts (the impact of the 2008–2009 recession and the most fearsome of all, the impact of COVID-19), the actions of competitors, changes in technology, departures of important employees among others.

The importance adjusting for/eliminating unrelated factors is set out in a Canadian case, Jorna & Craig Inc. v. Chiasson. In this case, the dispute involved the alleged financial losses incurred by Mr. Jorna and Ms. Craig, the purchasers of a Scotia Drugs pharmacy located in Halifax, as a result of the alleged violation of the purchase and sale agreement and non-competition agreement by the seller of the pharmacy, Mr. Chiasson.

The Court noted that the applicants/plaintiffs’ calculation of financial losses assumed that the alleged competing activities of the seller were the sole reason as to why certain of the purchased pharmacy’s sales were not in line with historical and projected future growth rates.

The Court noted that:

“Other possible causes would include Scotia’s location in an economically depressed neighbourhood, the presence of a nearby needle exchange and methadone clinic, competition from other local pharmacies, and so on. For instance, [one witness] testified that he switched pharmacies because he was afraid of being robbed of his medications upon exiting Scotia.”

The court noted a lack of consideration of alternative causes of the observed and calculated financial loss, coupled with the lack of other evidence from the plaintiffs on causation.

With respect to adjusting for unrelated economic factors, in the past year, the impact of COVID-19 has been catastrophic in many regards: the world wide death toll, illnesses, the health costs, restrictions on travel and socializing, disruptions to “normal life” and the tremendous economic toll.

Not surprisingly, the impact of COVID-19 has also been felt in terms of loss quantification. In short, “but for” an alleged harmful act, what profits or cash flows would a plaintiff have generated, FACTORING IN the impact of COVID-19?

The impact of COVID-19 has differed from complete shut downs for some businesses during certain periods (restaurants, social venues), to varying degrees of sales declines, to sales increases for other businesses (technology and health care companies, for instance). Since the onset of restrictions associated with COVID-19 in early 2020, and given the ongoing uncertainty associated with COVID-19 (the effectiveness of vaccines, the easing of public health restrictions, the impact this will have on the “new normal” etc.), many loss quantification engagements encompassing the period of time from 2020 on have to somehow, using the best available data and information, incorporate/forecast the impact of COVID-19 into loss calculations (i.e. adjust for/eliminate this impact from the loss otherwise attributable to an alleged harmful act).
Notwithstanding the above-noted uncertainties, since loss quantifications still need to occur, the impact of COVID-19 may need to be considered in loss quantifications by one or a combination of:

a) Adjusting past losses to account for COVID-19 impacts;

b) Adjusting forecasted future losses for the same;

c) Reflecting appropriate discount rates to present value future losses; and,

d) Using a contingency factor to risk-adjust calculated losses.

For example, assume that Company A provides valet parking, auto detailing, luxury car rentals and related automobile services at a high-end hotel, where it has a dedicated office and operations space in the parking garage pursuant to a 10-year lease with the hotel. Both Company A and the hotel commenced operations in January 2019. Due to COVID-19, the hotel is temporarily closed. Company A struggles to pay its rent and is evicted by its landlord in June 2020. Company A alleges that it was improperly evicted and claims lost profits for the remainder of the 8.5 years of its lease term.

In legal terms, the lease agreement cannot be terminated for convenience by either party, and has specified terms for what comprises termination for cause. Given the uniqueness of its operation, it is not feasible for Company A to relocate elsewhere in order to mitigate its potential losses.

Given the relatively short operating history, there is not much in the way of historical operating results to rely on (i.e., only between January 2019 and June 2020).

However, in 2019, both the hotel and Company A collaboratively developed a set of forecasts for Company A’s operations for the next 10 years (“the 2019 Forecasts”). The 2019 Forecasts were based on the hotel’s expected operations, were extensively negotiated and amended a number of times, were based on market forecasts obtained from third parties, and were used as the basis to negotiate the operating arrangements between Company A and the hotel.

In 2019, Company A mostly achieved its forecasts for that year as set out in the 2019 Forecasts. The 2019 Forecasts set out a growth pattern for Company A from 2019 to 2022, at which point revenue and profit was expected to stabilize.

It is now January 2022. The question for the loss expert is as follows: “but for” the alleged improper lease termination, what profits would Company A have earned during the remainder of the 8.5 years of the lease, taking into account that operations would have been impacted by COVID-19?
Assume that the 2019 Forecasts for Company A, as prepared in 2019, were as follows:

Table 3: Company A Forecasts

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>2027</th>
<th>2028</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>$1,000,000</td>
<td>$2,000,000</td>
<td>$2,500,000</td>
<td>$3,000,000</td>
<td>$3,000,000</td>
<td>$3,000,000</td>
<td>$3,000,000</td>
<td>$3,000,000</td>
<td>$3,000,000</td>
<td>$3,000,000</td>
</tr>
<tr>
<td>Expenses</td>
<td>$400,000</td>
<td>$800,000</td>
<td>$1,000,000</td>
<td>$1,200,000</td>
<td>$1,200,000</td>
<td>$1,200,000</td>
<td>$1,200,000</td>
<td>$1,200,000</td>
<td>$1,200,000</td>
<td>$1,200,000</td>
</tr>
<tr>
<td>Profit</td>
<td>$600,000</td>
<td>$1,200,000</td>
<td>$1,500,000</td>
<td>$1,800,000</td>
<td>$1,800,000</td>
<td>$1,800,000</td>
<td>$1,800,000</td>
<td>$1,800,000</td>
<td>$1,800,000</td>
<td>$1,800,000</td>
</tr>
</tbody>
</table>

Termination COVID-19

How would one go about adjusting the above forecasts to reflect the impact of COVID-19 (assuming there are no other unrelated factors to adjust for)?

Potentially one way to do so may be to look at the best available current industry forecasts to benchmark where the industry is presently (with the impact of COVID-19), versus in the past (i.e. in 2019 before COVID-19), and what is forecasted in the future, and adjust Company A’s forecasts consistent with what industry forecast trends indicate.

For instance, assume that:

a) Industry forecasts indicate that Company A’s industry (for high end car services) declined 75% in 2020, are expected to recover somewhat in 2021, and are expected to return back to full pre-COVID-19 (i.e. 2019) revenue levels by 2022;

b) Government sources indicate that the population will be fully vaccinated by December 2021, with the economy having started reopening in September 2021, and fully reopened by January 2022; and,

c) Uncertainties exist with respect to the future impacts of COVID-19 and related closures that this may entail. However, with the fully vaccinated population and enhanced public health measures, it is expected that such future impacts will have a far less significant impact on Company A and the hotel’s ability to remain open and operate.

One way to reflect the level of revenue and profit for Company A “but for” the lease termination, and reflecting the impact of COVID-19 would be to take the 2019 Forecasts and adjust/push the 2020 forecasts back two years, to 2022 — i.e. a two year delay. In order words, revenues forecast for 2020 would be pushed back to 2022, 2021 to 2023, and 2022 to 2024.

Of course, this would effectively cause two years of the 8.5 remaining lease term and loss period to be lost. However, that would be the unfortunate and unavoidable consequence of COVID-19. A two year delay of this nature would be consistent with industry forecasts indicating a return to 2019 pre-COVID levels by 2022. Specifically, in the case of Company A, which was in a growth pattern based on the 2019 Forecasts, the resumption of its previously forecasted growth would be effectively delayed two years.

To adjust the figures for 2020 and 2021 in the 2019 Forecasts, one could either reduce the original figures for 2020 and 2021 by 75% to reflect what happened with the industry, or potentially further adjust 2020 to zero/nominal revenue and profits (or a loss) to reflect that, in Company A’s context, it was not (and would not have been) able to operate for most of 2020 because the hotel in which it was located was shut down.
Given government sources indicating an economic reopening in September 2021, one way to reflect this would be to calculate a “ramp up” starting in 2021, until originally forecasted revenue and profits for 2020 would be achieved in 2022 (recall that the two year delay would mean that 2020 revenues would be pushed back to 2022).

The fact that the 2019 forecasts were jointly developed and based on the best available information suggests that they can be relied upon for forecasting the remainder of the lease term. However, if any additional information has, with the passage of time, become known with respect to the accuracy of the 2019 Forecasts, this should potentially be reflected as well.

Adjusting the 2019 Forecasts to reflect the impact of COVID-19, and the two year delay in resumption of its original growth trajectory (and assuming no other adjustments are relevant), might look like this:

### Table 4: Company A Forecasts

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>2027</th>
<th>2028</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>1,000,000</td>
<td>2,000,000</td>
<td>2,500,000</td>
<td>3,000,000</td>
<td>3,000,000</td>
<td>3,000,000</td>
<td>3,000,000</td>
<td>3,000,000</td>
<td>3,000,000</td>
<td>3,000,000</td>
</tr>
<tr>
<td>Expenses</td>
<td>400,000</td>
<td>800,000</td>
<td>1,000,000</td>
<td>1,200,000</td>
<td>1,200,000</td>
<td>1,200,000</td>
<td>1,200,000</td>
<td>1,200,000</td>
<td>1,200,000</td>
<td>1,200,000</td>
</tr>
<tr>
<td>Profit</td>
<td>600,000</td>
<td>1,200,000</td>
<td>1,500,000</td>
<td>1,800,000</td>
<td>1,800,000</td>
<td>1,800,000</td>
<td>1,800,000</td>
<td>1,800,000</td>
<td>1,800,000</td>
<td>1,800,000</td>
</tr>
</tbody>
</table>

### Company A Adjusted Forecasts — “But for” Scenario — Reflecting 2 Year Delay

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>2027</th>
<th>2028</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>1,000,000</td>
<td>-</td>
<td>500,000</td>
<td>2,000,000</td>
<td>2,500,000</td>
<td>3,000,000</td>
<td>3,000,000</td>
<td>3,000,000</td>
<td>3,000,000</td>
<td>3,000,000</td>
</tr>
<tr>
<td>Expenses</td>
<td>400,000</td>
<td>-</td>
<td>200,000</td>
<td>800,000</td>
<td>1,000,000</td>
<td>1,200,000</td>
<td>1,200,000</td>
<td>1,200,000</td>
<td>1,200,000</td>
<td>1,200,000</td>
</tr>
<tr>
<td>Profit</td>
<td>600,000</td>
<td>-</td>
<td>300,000</td>
<td>1,200,000</td>
<td>1,500,000</td>
<td>1,800,000</td>
<td>1,800,000</td>
<td>1,800,000</td>
<td>1,800,000</td>
<td>1,800,000</td>
</tr>
</tbody>
</table>

However, notwithstanding the above, to account for future risks, including the potential re-emergence of COVID-19, an additional risk premium could be applied to the discount rate used to present value future losses as at a current date (i.e., January 2022). In addition, a further contingency factor could be applied to the calculated loss figures, if appropriate, to reflect additional risks and uncertainties.

### 9.0 CONCLUSION

“Never forget what you are. The rest of the world will not. Wear it like armour, and it can never be used to hurt you.” — Tyrion Lannister, in *A Game of Thrones*

In summary, while loss quantification experts are not required to prove statistical correlation or prove causation, depending on the facts and circumstances of each case, experts may need to obtain a sufficient degree of comfort that there is a reasonable, proximate link between the alleged harmful act and ensuing financial losses. Where the link between calculated financial losses and the alleged actions at issue is not manifestly obvious, and where factual data exists and accounting/forensic-type analyses are possible, experts should consider making an attempt to obtain and glean information from such data to obtain comfort with respect to such a reasonable, proximate link.

Note that all loss quantification contexts are unique and what is appropriate may depend on the specific facts and circumstances of each context.
COVID 19: IMPACT ON VALUATIONS — OBSERVATIONS SINCE MARCH 2020
When the Dow Jones plunged nearly 3,000 points on March 16, 2020, it marked the largest single-day drop in the U.S. stock market as COVID-19 took hold around the world. In Canada, the Toronto Stock Exchange implemented a Level 1 market-wide circuit breaker that put equity trading on hold for 15 minutes. Four minutes after trading resumed, the S&P/TSX index was down 1,569.46 points.

But unlike other crashes, many sectors of the economy rebounded quickly, even setting new records as they went through the rest of 2020 and into 2021. As at March 31, 2021, the TSX surpassed the March 2020 level by 39.8% and was 9.6% higher than the December 31, 2019 level.

The remaining volatility may indicate there’s still market uncertainty, supporting the use of scenario analysis and an overall increase of the cost of equity during that point in the pandemic.

But just as some sectors did very well during that third wave others faltered. For example, technology stocks thrived, but the opposite happened to energy shares. Many thought revenues at grocers would blossom, but the cost of setting up COVID-related safety barriers made a massive hit to their bottom lines. Some M&A deals were cancelled, there was little liquidity for private companies as investors bowed out and the business sector saw a massive decrease in investment.
Whether up or down, at all times, both buyers and sellers want to know where they stand and forecasts for the future, making our jobs as business valuators more important than ever before.

There’s still much speculation as to what shape the recovery will take: what with a fourth wave of COVID-19 now upon us and a growing list of Variants of Concern, will the recovery ultimately turn out to be a V or a W — or something else? When you look at the charts and the S&P 500 up to the end of Q1 2021 it’s evident the markets were relatively V-shaped in their recovery. At early points in the pandemic, industries did some shifting up and down but as of the end of Q1 2021, many industries had fully recovered and some were actually making gains.

Volatility, on the other hand, saw a massive spike after the market crashed. While that has eased to some extent, “volatility expectation” prevails and it may take some time to get back to the more stable pre-pandemic conditions evident at the end of 2019.

Valuation at any point of time is specific, so late December 2019 was very different than March 2020, which was very different from the end of Q1 2021.

At all times though, business valuators need to concern themselves with cash flow. There was uncertainty around cash flow when the markets tumbled. Massive retrenchment took place when it came to near-term cash flows as experts pondered how quickly the recovery would occur. There were also differences in liquidity in the publicly traded markets vs private companies.

Business valuators deal with day-to-day changes all the time. Now in particular, it’s crucial for us to look back and see what really drives the value of a specific industry.

At times like this, there are always concerns about inflationary pressures, but central bankers saw the COVID crash as a short-term phenomenon, relatively speaking. There was pent-up demand for products and services because of health restrictions, business closures and people wanting to spend their saved money. Total CPI is likely to move towards 2.0% soon, but the Bank of Canada has yet to raise its interest rates.

Nevertheless, the economic outlook was different at the end of Q1 2021 than at the same time in 2020. Most of the news is positive now as a number of recovering industries search for skilled talent. Employment is expected to rise by 5.6% in 2021, while the unemployment rate is projected to fall by 6.6% by early 2022.
### Fiscal Policy

The federal deficit zoomed to $400 billion in Q2 2020 but is projected to gradually decline over the next few years. The costs stem from a number of measures put in place to support businesses, the self-employed and others. High levels of spending are expected to continue for the next two to three years before returning to more normal levels.

### Consumer Spending

Savings rates made a gigantic leap for many households during the first waves of the pandemic because consumers couldn’t get out and spend their money. But then the rate declined from 14.6% in Q3 2020 to 12.7% in Q4 2020 as consumers regained confidence in spending. One of the largest risks for the consumer is housing prices. The Canadian Real Estate Association reported that national home sales hit an all-time record in March 2021 as more people put their houses up for sale. Housing starts reported a growth of 5.3% in 2020 with an average 219,000 units. The market is expected to increase even more in 2021 and reach just above 230,000 units before declining. Housing prices in some parts of the country, however, remain out of reach for the younger generation.

### Business Investments

The business sector saw a considerable decrease in investment during the pandemic as Canadians held back on all kinds of spending. Some of the worst hit sectors were mining, manufacturing, agriculture, wholesale, retail, professional services, accommodation, food services, arts and recreation. Business investments are expected to make a modest recovery of 5.4% in 2021 after falling by 11.6% in 2020. As this turns around, it will hopefully increase our productivity and competitiveness as a country.

<table>
<thead>
<tr>
<th>Canadian industry outlook</th>
<th>Estimated real GDP growth in 2021, by industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts, entertainment, and recreation</td>
<td>26.1%</td>
</tr>
<tr>
<td>Accommodation and food services</td>
<td>25.3%</td>
</tr>
<tr>
<td>Administrative and support services</td>
<td>11.2%</td>
</tr>
<tr>
<td>Wholesale trade</td>
<td>8.9%</td>
</tr>
<tr>
<td>Retail trade</td>
<td>8.6%</td>
</tr>
<tr>
<td>Health care and social assistance</td>
<td>8.5%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>8.3%</td>
</tr>
<tr>
<td>Educational services</td>
<td>8.1%</td>
</tr>
<tr>
<td>Agriculture, forestry, fishing &amp; trapping, and support</td>
<td>6.7%</td>
</tr>
<tr>
<td>Professional, scientific and technical services</td>
<td>6.7%</td>
</tr>
<tr>
<td>Transportation and warehousing</td>
<td>6.3%</td>
</tr>
<tr>
<td>Waste management and remediation services</td>
<td>4.4%</td>
</tr>
<tr>
<td>Government</td>
<td>3.9%</td>
</tr>
<tr>
<td>Construction</td>
<td>3.7%</td>
</tr>
<tr>
<td>Information and cultural services</td>
<td>3.7%</td>
</tr>
<tr>
<td>Finance, insurance, real estate and rental and leasing</td>
<td>2.5%</td>
</tr>
<tr>
<td>Mining, oil &amp; gas</td>
<td>2.3%</td>
</tr>
<tr>
<td>Utilities</td>
<td>-0.6%</td>
</tr>
</tbody>
</table>

Credit Spreads and Ratings

Credit spreads expanded during the pandemic, particularly for lower grades. Companies should see more of a bump in the cost of equity for the less stable, riskier companies. When it comes to credit ratings, there have only been a handful of industries that have seen more downgrades than increases. Industries like energy have had downgrades but that’s not so much about demand as it has been about transporting energy to markets.

Market Activity

Stock markets that tumbled in March 2020 rose back up and continued growth is expected for at least the next two years. Other industries that have shown good growth are agriculture, forestry and fishing, which rose 10.9% as of the end of March 2021. These industries are expected to head back to slow growth come 2023.

It’s not known how long it will take some industries to fully recuperate — such as travel, transportation, airlines and dining — businesses that were virtually shut down during the first waves of the pandemic. Many of these enterprises have since started up again, but getting back to “normal” for all of these groups may take some time.

When it comes to home renovations and home building, the price of some lumber doubled from March 2020 to March 2021. According to Altus Group’s 2021 Canadian Cost Guide, the price per square foot for a detached home in Vancouver varies from $145-$265, $140-240 in the Greater Toronto area, $105 in Montreal and $90 in Halifax. All of these costs depend on the price of lumber.

Leverage and EBITDA

One interesting metric to monitor was the Debt-to-EBITDA ratio during this period. Generating earnings during the pandemic was difficult for many sectors, especially during 2020. A major exception was IT, which has done very well. Debt-to-EBITDA ratios at these companies are generally down — not because they have paid off debt (necessarily), but rather because everyone has been taking to their computers during the pandemic and increasing earnings for this sector.

<table>
<thead>
<tr>
<th>Change in Debt-to-EBITDA ratio between March 2020 and March 2021 by S&amp;P sector*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy</td>
</tr>
<tr>
<td>Industrials</td>
</tr>
<tr>
<td>Consumer discretionary</td>
</tr>
<tr>
<td>S&amp;P 500</td>
</tr>
<tr>
<td>Materials</td>
</tr>
<tr>
<td>Utilities</td>
</tr>
<tr>
<td>Communication services</td>
</tr>
<tr>
<td>Consumer staples</td>
</tr>
<tr>
<td>Information technology</td>
</tr>
<tr>
<td>-40.0%</td>
</tr>
</tbody>
</table>
Valuations of Multiples

Between December 2019 and March 2021 valuation of multiples in some industries fluctuated by almost 100%, leading to increased uncertainty and volatility. The federal government stepped in with a number of subsidy programs and these should be taken into account when looking at normalizations, especially when comparing a company’s multiples with its peers.

Valuators provide the most updated market guidance they can, but the situation changes so quickly sometimes that even this guidance may no longer be relevant at the valuation date, since it may not reflect the same degree of optimism/conservatism as the entity’s revised forecast.

Valuators should also ensure they are taking geographical and business model differences into account when applying multiples. For example, emergency procedures and government support vary by region and online presence might be key to short-term revenue generation. As a result, both elements will likely have a significant impact on operations and short-term profitability, and consequently, on multiples.

Market approach – Illustrative example on the evolution of the market capitalization of the GANFAM group

The GANFAM group of companies market capitalization increased between 43% (Facebook) and 70% (Amazon) respectively (average of 55%) between December 2019 and March 2021.
The most well-known tech companies — the GANFAM group of Google, Apple, Netflix, Facebook, Amazon and Microsoft — came out as great winners, as people around the globe entered lockdown and took to their computers, televisions and cell phones. Google continued to be one of the top search engines in the world during the pandemic, while Apple sales soared to a record US$90 billion in Q1 2021 and became the first publicly traded U.S. company to reach the US$2-trillion mark. While Netflix added subscribers during Q1 2021, its sales were starting to slow as some areas began lifting lockdown restrictions.

The GANFAM group saw their implied EV/EBITDA increase up to five times, except for Netflix, which grew its profitability.

These businesses are unique in that they have the cash, cash equivalents and the ability to fuel the growth for their own internal projects. That’s why we are predicting these companies will average a 55% increase in earnings.

Other technology companies, like disruptor firm Zoom, had a 402% increase in market capitalization between December 2019 and March 2021. Another disruptor, Lyft, saw its market cap grow 62% during the same time period.

Lyft, Beyond Meat and Uber, for example, have changed people’s views on everything from technology to behaviour (like eating vegan). For valuers, these companies aren’t necessarily concerned about EBITDA — just yet. For them, it’s all about discounted cash flow and revenue multiples. The disruptor companies, for the most part, have made names for themselves during the pandemic, but not anything near what the GANFAM group did. These technology companies were large and well known even before COVID-19 and they hit the jackpot because of their disproportionately large size.

**Market approach — Illustrative example on the evolution of the market capitalization on the market disruptors**

[Graph showing market capitalization movement during Covid]

As can be seen the pandemic did serve the « disruptors » as well. Their market capitalization grew between 62% (Lyft) and 402% (Zoom) between December 2019 and March 2021 (average of 180%)

**Canadian Banks**

Canadian banks saw their market capitalizations fluctuate an average 9.9% between December 2019 and March 2021. Canadian bank shares fell in March 2019 like most other stocks, but rose with federal government intervention and subsidies that kept these financial institutions strong and stable. Some, like Royal Bank of Canada, had a record year in 2019, while most of the others did better than they had the previous year. Price to earnings multiples were quite stable — between the 10-12 range — but it’s really a function of their actual performance that came through.

When mortgage deferrals and other supports came off the books in late September and October, 2020, some thought there would be a large drop in bank stocks, but the Canadian consumer weathered the storm relatively well with savings and disposable income going up for many households during the pandemic.
Market approach — Illustrative example on the evolution of our Canadian banks

The Canadian banks saw their market capitalization fluctuate between -6% (Laurentian Bank of Canada) and 19.4% (National Bank of Canada) with an average of 9.9% between December 2019 and March 2021.

Grocers & Retailers

This was a group many thought would be big winners because for quite a while no one was allowed to go to restaurants in many parts of the country. While they came out strong, the additional costs of maintaining safety protocols during COVID-19 were a financial burden. Canadian grocers and retailers saw their market cap fluctuate between -5% (for companies like Couche tard) and +33.4% (The North West Company) with an average of 11.1% between December 2019 and March 2021.
Energy

Canadian energy producers saw their market caps fluctuate between 33.3% and 87.9% with an average of 66.6% between December 2019 and March 2021. This group has a much broader range of EV/EBITDA or P/E multiples, which suggests they are vastly valued using discounted cash flow-based methods rather than market multiples.

Market approach — Illustrative example on the evolution of the Canadian energy producers

Guidance on Complex Capital Structures

Business valuers who deal with companies with complex capital structures or general valuation may want to highlight to their clients that the potential for volatility is still high — not as bad as it was a year ago, but still hanging on. There is also the possibility and the impact of further government subsidies that may affect individual companies and the overall economic environment.

Certainly cash flow is an issue to many industries. Some continue to raise questions about how long it will take for them to recover, the size of the rebound and whether they will ever return to a sense of “normalcy.” In other cases, if a business sector has done well during the pandemic, it will want to know how long this will last and what the “new normal” will look like for them.

There are certain pricing options that can be made when working with private equity firms or companies with complex capital structures, and there are implications of how value may cascade across the capital structure of the company. There are a number of ways to calculate and forecast value, including the Current Value Method and the Probability Weight of Expected Return Method. These approaches are available to spread total equity value across different classes of participating securities. The Current Value Method looks at the business as if it was sold today given all the legal rights and restrictions, liquidation practices, etc., and how people can maximize their returns. Another measure of value is the Option Pricing Method that takes a forward-looking view, using option pricing volatility in conjunction with all the rights of the shares to model payoffs at some future date. With the Probability Weighted Expected Return Method, you can forecast a number of different scenarios for future exit strategies.

All of the COVID-19 volatility and uncertainty in the market can have any number of impacts on valuers when doing this work — not just arriving at the value of the company as a whole, but how it can affect individual shareholdings in the company.
For example, when applying the Option Pricing Model, higher volatility may drive higher payoffs to certain share classes. Then again, you may have a higher discount for lack of marketability, especially if an option model is used. Valuators also have to take into account the probability rate of expected return: there’s a lot of hype right now about IPOs and stock transactions. Depending on these different scenarios and the industry valuators are in, you need to determine the probability of a liquidation scenario versus any kind of positive exit. All of these factors need to be considered if you are trying to cascade value across complex capital structures.

On top of this, entrepreneurs and heads of corporations would prefer to take very direct methods to do valuations in ways that might be too simplistic. But hopefully you will find a number of methods that can add up to a strong and supportable solution.

**Summary**

The Number One outcome from this particular phase of the pandemic is that scenario analysis continues to be as important as ever, especially given the uncertainty and expected volatility around cash flows for a number of industries. Using just a single cash flow forecast is no longer good enough. In fact, it is becoming increasingly apparent that valuators must come up with as many scenarios as possible, determine their sensitivity and then link them to the risk factor being applied to them. And not everyone agrees with what’s coming out of these various results. That means it’s more important to stress test the results and see how many valuation scenarios we are able to get to determine how sensitive they are, then link them to a risk factor. These scenarios should contain all salient information. We do acknowledge that with all these uncertainties it becomes more difficult to put together a picture that works at a given point in time.

A view may need to be taken at the valuation measurement date as to the potential for, and impact of, possible government subsidies that may affect individual companies and the overall economic environment. The impact of government subsidies or initiatives generally would not be reflected in the results of a portfolio company until it crystallizes or can be reasonably assured.

It may also no longer be appropriate to include recent transaction prices — especially those from before the expansion of the pandemic — to receive significant, if any, weight in determining fair value.

However, consideration should be given to the specific effects of COVID-19 and the economic impact on a company’s future performance. The consequences will vary among industries. And projections will also need to be updated, as well as probability adjusted scenarios. As a best practice, we suggest scenario analyses take into account at least the duration and magnitude of the current crisis.

What we do see coming in Canada is a lot of liquidity and a large appetite for both IPOs and special purpose acquisition companies (SPACs). There’s both a lot of capital available and a large appetite for SPACs, which are deemed to be a shorter vehicle to liquidity than an IPO. Is it a trend? Only time will tell. Even though the first phases of COVID-19 hit hard, savings grew overall and the availability of capital hasn’t gone away. While the majority of SPACs are quality companies, some are coming to the end of their lives. There is some concern that people bought into these quality companies and underlying businesses only to discover in a year or two that they were more hype than value.

**What’s Next?**

We believe that volatility isn’t going to go away soon, especially with the increase in COVID-19 variants. The question is: what direction will that volatility take? When we look at March 2020 all the volatility was to the downside. Thankfully, much of the high volatility that’s taken place over the last year has been on the upside. What lies ahead is only conjecture. Time will tell what happens with inflation, but right now most people aren’t overly concerned. On the other hand, there are others who do see inflation and interest rates rising, especially as the price of goods such as building materials and housing rise, which in turn, will increase inflation.
FORECAST VALIDATION FOR ECONOMIC LOSS QUANTIFICATION
FORECAST VALIDATION FOR ECONOMIC LOSS QUANTIFICATION

By Larry Andrade, Rachel Ryman, Natalia Raimondi, and Adrija Sengupta

Preamble

Forecast validation has always been an important component of loss quantification. Though many disputes involve stable businesses, the post-pandemic environment has created short- to medium-term volatility that requires consideration of forecasts when quantifying losses more frequently than ever before. To assist independent experts retained to quantify economic loss, this paper discusses the role of the independent expert in validating forecasts. We also cover tools, techniques, and best practices to assess forecasts in order to integrate forecasts into calculations of lost profits and lost business value.

Introduction to Forecasts in Economic Loss

According to CPA Canada, a forecast is,

“Prospective financial information prepared on the basis of assumptions as to future events which management expects to take place and the actions management expects to take as of the date the information is prepared (best-estimate assumptions).”

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Why are forecasts prepared?

Forecasts are often prepared in the normal course of business, for example, when bank financing is required, capital spending decisions are made, operational budgets are established, or if they are required for regulatory compliance. Alternatively, forecasts may be prepared outside of the normal course of business, in contemplation of litigation. Table 1, includes circumstances in which forecasts may be prepared, the goal of each type of forecast, special considerations when validating each type of forecast, and any possible biases of the preparer.

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Goal of Forecast</th>
<th>Special Considerations</th>
<th>Possible Bias of the Preparer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bank Financing</strong></td>
<td>• Securing financing</td>
<td>• Payment of Interest &amp; Principal</td>
<td>• Overstate cash flows (aggressive)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Bank Covenants</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Growing or Stable Cash Flows</td>
<td></td>
</tr>
<tr>
<td><strong>Capital Spending Decisions</strong></td>
<td>• Assess whether to buy or lease capital assets</td>
<td>• Return on Investment, Internal Rate of Return</td>
<td>Overstate cash flows (aggressive) or understate cash flows (conservative)</td>
</tr>
<tr>
<td></td>
<td>• Assess expansion opportunities</td>
<td>• Timing of Cash Flows</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Availability of Financing</td>
<td></td>
</tr>
<tr>
<td><strong>Operational Budget</strong></td>
<td>• Assess cash flow needs</td>
<td>• Historical Cash Flows</td>
<td>Overstate cash flows (aggressive) or understate cash flows (conservative)</td>
</tr>
<tr>
<td></td>
<td>• Reflect business plan</td>
<td>• Business Plan</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Contracts</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• Contingent Compensation</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Earn-Outs</td>
<td></td>
</tr>
<tr>
<td><strong>Regulatory Compliance</strong></td>
<td>• Compliance with relevant regulations</td>
<td>• Understanding of Regulations in Force</td>
<td>Understate cash flows (conservative)</td>
</tr>
<tr>
<td></td>
<td>• Inform stakeholders</td>
<td>• Prescriptive Measurements Tools</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Changes Over Time</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Industry Specific Factors</td>
<td></td>
</tr>
<tr>
<td><strong>Litigation</strong></td>
<td>• Input to economic loss model</td>
<td>• Qualifications of Preparer</td>
<td>Plaintiff — prove damages, tendency to provide optimistic forecasts</td>
</tr>
<tr>
<td></td>
<td>• Align with fact pattern and business plan</td>
<td>• Corroborating Evidence</td>
<td>Defendant — prove mitigation, tendency to provide pessimistic forecasts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Privacy</td>
<td></td>
</tr>
</tbody>
</table>
What factors impact the reliability of forecasts?

Forecasts prepared in the normal course of business are often relied upon in litigation to calculate economic loss; however, understanding why the forecast is prepared is necessary to determine how to use it. Each type of forecast is subject to the bias of the preparer and the intended goal they are trying to achieve. For example, if a forecast is prepared for the purpose of securing bank financing, the bias of the preparer may be to overstate cash flows to comply with debt covenants.

Consider a construction delay dispute where an expert relied on a forecast prepared by a real estate appraiser for the purpose of securing mortgage financing. This type of forecast may only contemplate post-development, stable cash flows. If an expert relied on this forecast without making an adjustment, there would be no consideration of any period of operational ramp-up. Even though this type of forecast may be appropriate for the purpose of securing mortgage financing, it would overstate cash flows required to calculate economic loss, given that the delay would impact cash flows during a ramp-up period.

If forecasts aren’t prepared in the normal course of business, they may be prepared specifically for the purpose of litigation. This is more likely to arise when experts are engaged by smaller private companies. The goal of these forecasts is to provide input into the economic loss model and to align with the fact pattern of the case and the business plan. Plaintiffs have the legal onus to prove their economic losses. When a forecast is prepared by the plaintiff, a bias may exist to be optimistic and thus overstate cash flows.

The key takeaway is that a forecast may be reliable for its stated purpose, but not necessarily for litigation. As well, a forecast may require adjustment in order to calculate economic loss, whether it is prepared in the normal course of business or for the purpose of litigation.

There are a number of factors that impact the reliability of a forecast. The purpose of a forecast and the sophistication level of its preparer may be indicators of its reliability. Both forecasts prepared in the normal course of business and those prepared for the purpose of litigation may be subject to various biases and require investigation and scrutiny when utilized for litigation purposes. A forecast prepared in contemplation of litigation may be subject to additional scrutiny from the courts and opposing financial experts due to the potential preparer-bias that may exist.
Other factors to consider include, the business’ and management’s level of sophistication, the stage of the business’ industry and stage in its lifecycle, the performance of the economy, the business’ geography, the stability of ownership and management, the structure of the company, the type of cash flows being forecasted, and the date of the forecast. Table 2 outlines various factors that impact the reliability of a forecast.

Table 2: Factors that may Impact the Reliability of a Forecast

<table>
<thead>
<tr>
<th>Factor</th>
<th>More Reliable</th>
<th>Less Reliable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose of Forecast</td>
<td>Normal Course</td>
<td>Litigation</td>
</tr>
<tr>
<td>Business’ / Management’s Level of Sophistication</td>
<td>Sophisticated</td>
<td>Unsophisticated</td>
</tr>
<tr>
<td>Industry / Business Lifecycle</td>
<td>Mature</td>
<td>Growth</td>
</tr>
<tr>
<td>Economic Performance</td>
<td>Stable</td>
<td>Recession</td>
</tr>
<tr>
<td>Geography</td>
<td>Developed Nations</td>
<td>Developing Nations</td>
</tr>
<tr>
<td>Ownership / Management</td>
<td>Stable</td>
<td>Changing</td>
</tr>
<tr>
<td>Structure</td>
<td>Public, Private Corporations</td>
<td>Private Partnerships</td>
</tr>
<tr>
<td>Type of Cash Flows</td>
<td>Normal Course</td>
<td>Incremental</td>
</tr>
<tr>
<td>Date</td>
<td>Date Loss is Measured</td>
<td>Historical Date</td>
</tr>
</tbody>
</table>

COVID has impacted various factors that reduce the reliability of forecasts including industry stability, economic performance, and possibly ownership and management stability. Public, highly regulated, and large private companies with greater sophistication, more stakeholders and various levels of financial review are perceived to produce more reliable forecasts. Independent experts are often retained to quantify economic loss for smaller private companies, which may have greater variance in the quality and reliability of forecasts than larger private, public and highly regulated companies.
When are forecasts required to determine economic loss?

Forecasts are required to determine economic loss when quantifying a loss of business value or a loss of profits, when the business is a going concern and generating a sufficient return on its assets and when cash flows are not historically stable or are not expected to be stable in the future. A forecast is required for “but for” cash flows\(^2\) (turquoise dotted line) and actual cash flows subsequent to the loss measurement date.

**Figure 1: When Forecasts are Required to Calculate Economic Loss**

In Figure 1, the first vertical black dotted line indicates the date of loss, being 2018. The lavender line indicates the loss period, from 2018 to 2025. The turquoise dotted line represents forecasted but for cash flows and the solid navy line represents the actual cash flows following the cause of action. The actual cash flows from 2018 to 2021 are known; however, cash flows from 2021 to the end of the loss period must be forecast because actual operating results are unavailable.

Also reflected in Figure 1 is a dip in forecast cash flows in 2020 to represent the impact of COVID. Cash flows were trending upwards from 2016 to 2020, but given volatility in business performance resulting from COVID, historical cash flows may not be indicative of future cash flows. Economic events like COVID increase the need to rely on forecasts.

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\(^2\) The term “but for cash flows” describes cash flows that would have been generated “but for” the subject of the dispute (a.k.a., the cause of action).
Role of the Independent Expert in Forecast Validation

In arbitrations, 90%³ of the independent experts are appointed by the parties and only 10% by the triers of fact. Irrespective of the nature of appointment, it is almost universally accepted that the primary and overriding duty of an expert is to assist the trier of fact on matters within their area of expertise.

As such, the role of the independent expert remains the same whether validating a forecast or performing any other stream of work: to act independently and to provide opinion evidence that does not stray beyond the expert’s area of expertise.

As summarized in Table 3 below, independent experts can adopt the role of validation, adjustment, or preparation of a forecast when a forecast is required to calculate economic loss. Each of these roles poses various challenges and benefits. Consideration of independence and area of expertise are paramount when adopting any of these roles.

Table 3: Role of the Independent Expert when using Forecasts

<table>
<thead>
<tr>
<th>Role</th>
<th>Possible Challenges</th>
<th>Possible Benefits</th>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Validation</td>
<td>• Lack of transparency into information and assumptions used</td>
<td>• Maintain independence</td>
<td>Lower</td>
</tr>
<tr>
<td></td>
<td>• Lack of access to information required to corroborate inputs and assumptions</td>
<td>• Don’t stray outside area of expertise</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Lack of access to the preparer</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• May require Subject Matter Expert (“SME”) (outside our area of expertise)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjustment</td>
<td>• Ability to independently support adjustments</td>
<td>• Ability to use forecasts prepared for non-litigation purposes</td>
<td></td>
</tr>
<tr>
<td>Preparation</td>
<td>• Not SME like management</td>
<td>• May be necessary, depending on sophistication of management</td>
<td>Higher</td>
</tr>
<tr>
<td></td>
<td>• Self-review risk</td>
<td>• May be able to corroborate all elements of forecast</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Prepared in contemplation of litigation — may be given less weight by trier of fact</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

³ 2012 International Arbitration Survey, Queen Mary University of London; p24; http://www.arbitration.qmul.ac.uk/media/arbitration/docs/2012_International_Arbitration_Survey.pdf
What is the role of the independent expert when forecasts are used?

Validating a forecast involves verifying its calculations, inputs, and underlying source documents, as well as identifying and supporting assumptions used. Validation is the first and primary role of the expert, as it is easier to maintain independence and stay within the relevant area of expertise. There are a number of challenges when validating forecasts, including lack of transparency into the information and assumptions relied upon to prepare the forecast, lack of access to information for corroboration, lack of access to the preparer, and the need to obtain subject matter expertise to validate elements of the forecast. At times, the process of validating a forecast helps to identify areas where the forecast may require adjustment. Given that independent experts may not be experts in the subject matter of the forecast, adjustments should be limited to items that can be independently supported or are within the expert’s area of expertise. Even if areas for adjustment are identified, it may be challenging to identify evidence to support the quantum of the adjustment. Despite challenges associated with adjusting a forecast, especially those prepared in the normal course of business, at times a forecast may only be used to quantify economic loss if it has been adjusted. To the extent information is not available to support a reasonable adjustment, the expert can adjust the discount rate to reflect risk of achieving the forecast that cannot be directly captured in the cash flow, though this is less preferable.

Preparing a forecast increases the level of risk to an independent expert. There is significant threat to an expert’s independence with respect to the preparation of forecasts, including the possible lack of subject matter expertise, self-review risk, and the fact that the forecasts are being prepared in contemplation of litigation, which may reduce the reliance courts place on the resulting conclusion. Unfortunately, an expert might be required to prepare a forecast if management does not do so in the normal course of business or they are not sophisticated enough to prepare one for the purpose of litigation. A benefit of the independent expert preparing the forecast is the opportunity to objectively support and document the inputs and assumptions, which may not always be prioritized when forecasts are prepared by management. Overall, experts should be very careful when preparing forecasts and should only do so as a last resort.

Given the impacts of COVID, adjustments to forecasts to reflect the changing economic environment, current estimates of recovery, and other relevant factors may be necessary.

The key takeaway is that, ideally, independent experts should adopt the role of validating forecasts. To the extent adjustments are required and can be reasonably supported, experts may do so. Finally, experts should avoid preparing forecasts unless they are unavailable and management cannot reasonably prepare a forecast in contemplation of litigation.
What guidance is available to the independent expert when forecasts are used?

When preparing an independent expert report, depending on the designation held by the expert, various professional standards govern the role and provide guidance relevant to forecasts.

In Ontario, there are three common designations held by independent experts who may prepare expert reports quantifying economic loss, including Chartered Business Valuators (“CBV”), Chartered Professional Accountants (“CPA”) in Canada, and Certified Public Accountants (“CPA”) in America. Irrespective of the expert’s designation, expert reports filed in Ontario are required to comply with the rules of civil procedure and submit a Form 53 Acknowledgment of Expert’s Duty when providing an opinion on economic loss.

All professional standards listed here provide guidance on the role of the expert; however, the American Institute of Certified Public Accountants (“AICPA”) is the only body that provides specific guidance on forecasts.

Opposing counsel may use professional standards in cross examination to undermine an expert’s credibility. It is good practice to know which designations and professional affiliations are held by the opposing expert, as the relevant standards that the opposing expert must comply with may be used to challenge your work.

Table 4 below includes a summary of relevant professional standards pertaining to the role of the independent expert and applicable guidance with respect to prospective financial information.

Table 4: Summary of Professional Standards and Guidance on Forecast Validation

<table>
<thead>
<tr>
<th>Destination</th>
<th>Chartered Business Valuators Institute</th>
<th>Chartered Professional Accountants Canada</th>
<th>American Institute of Certified Public Accountants</th>
<th>Rules of Civil Procedure (Ontario)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role of the Independent Expert</td>
<td>Guidance Provided</td>
<td>Guidance Provided</td>
<td>Guidance Provided</td>
<td></td>
</tr>
<tr>
<td>Guidance Relevant to Forecast Validation</td>
<td>Minimal Guidance Provided</td>
<td>Minimal Guidance Provided</td>
<td>Guidance Provided</td>
<td></td>
</tr>
</tbody>
</table>

Table 5 on the next page highlights relevant sections of the various professional standards and a summary of guidance on the role of an independent expert and forecast validation.
### Table 5: Guidance on the Role of an Independent Expert and Forecasts

<table>
<thead>
<tr>
<th>Standards</th>
<th>Role of Independent Expert</th>
<th>Guidance Relevant to Forecasts</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBV</td>
<td>• To act independently and objectively⁴</td>
<td>• Rely on the work of a specialist, when deemed necessary⁶</td>
</tr>
<tr>
<td></td>
<td>• To disclose assumptions outside area of expertise⁵</td>
<td>• Obtain reasonable assurance concerning the specialist’s reputation for competence and degree of independence⁶</td>
</tr>
<tr>
<td></td>
<td>• Rely on the work of a specialist, when deemed necessary</td>
<td>• Obtain client / management representations, when deemed necessary⁷</td>
</tr>
<tr>
<td>CPA</td>
<td>• To provide impartial and objective assistance in understanding matters beyond the expertise of the trier of fact⁸</td>
<td>• Rely on persons or firms possessing expertise relevant to the engagement⁹</td>
</tr>
<tr>
<td></td>
<td>• To provide transparency in decision-making and impartiality in testimony so as not to be seen as advocating for one side⁸</td>
<td>• Evaluate: relevant expertise, reputation, objectivity and independence, source of information, reasonableness of assumptions, methodologies, findings and conclusions, and relevance¹⁰</td>
</tr>
<tr>
<td></td>
<td>• To provide impartial and objective assistance in understanding matters beyond the expertise of the trier of fact⁸</td>
<td>• If this evaluation identifies inadequacies or high level of risk, perform additional procedures to address or resolve such factors¹⁰</td>
</tr>
<tr>
<td>AICPA</td>
<td>• Independence required to perform an examination or an engagement to apply agreed-upon procedures¹¹</td>
<td>• If not satisfied with regard to these factors, either don’t rely on the work of the individual(s) concerned or disclose concerns¹⁰</td>
</tr>
<tr>
<td></td>
<td>• Independence not required to perform a compilation service (should still be assessed and disclosed)¹¹</td>
<td>• Procedures on understanding the industry and accounting principles and practices within the industry¹¹</td>
</tr>
<tr>
<td></td>
<td>• Procedures on understanding the entity’s business and the key factors on which the future financial results are determined¹¹</td>
<td>• Procedures on understanding the entity’s business and the key factors on which the future financial results are determined¹¹</td>
</tr>
<tr>
<td></td>
<td>• Guidance on requesting written representations from a responsible party stating that forecasts / entity and are suitably supposed and the limitations of the forecast¹²</td>
<td>• Guidance on requesting written representations from a responsible party stating that forecasts / entity and are suitably supposed and the limitations of the forecast¹²</td>
</tr>
<tr>
<td></td>
<td>• Procedures on evaluating assumptions and gathering support for assumptions using internal and external sources¹²</td>
<td>• Procedures on evaluating assumptions and gathering support for assumptions using internal and external sources¹²</td>
</tr>
<tr>
<td></td>
<td>• Guidance on using the work of a specialist¹¹</td>
<td>• Guidance on using the work of a specialist¹¹</td>
</tr>
<tr>
<td>Rules of Civil Procedure</td>
<td>• To provide opinion evidence that is fair, objective and non-partisan¹³</td>
<td>• To provide opinion evidence that is related only to matters that are within area of expertise¹³</td>
</tr>
</tbody>
</table>

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⁴ CBV Institute Practice Standard 310 — Paragraph 6.1 G
⁵ CBV Institute Practice Standard 310 — Paragraph 9.2 E, CBV Institute Practice Standard 32—Paragraph 5 D
⁶ CBV Institute Practice Standard 320 — Paragraph 5 E
⁷ CBV Institute Practice Standard 320 — Paragraph 5 F
⁸ Standard Practices for Investigative and Forensic Accounting Engagements, Paragraph 700.01
⁹ Standard Practices for Investigative and Forensic Accounting Engagements, Paragraph 400.14
¹⁰ Standard Practices for Investigative and Forensic Accounting Engagements, Paragraph 400.01
¹¹ AICPA Prospective Financial Information Guide: Chapter 10 — Types of Practitioners’ Services
¹² AICPA Prospective Financial Information Guide: Chapter 14 — Examination Procedures
¹³ Form S3 Courts of Justice Act Acknowledgment of Expert’s Duty
The overarching theme with respect to the role of the independent expert is to act independently and objectively and to provide evidence within their area of expertise.

CBV practice standards 310, 320, and 330 and CPA standard practices for investigative and forensic accounting engagements provide procedures around relying on the work of a specialist and management. This guidance can be applied while relying on management forecasts and other subject matter experts to validate and adjust forecasts.

The AICPA provides a guide on prospective financial information which provides procedures on understanding the industry and accounting principles and practices within the industry, understanding the entity’s business and the key factors on which the future financial results are determined, and evaluating assumptions and gathering support for assumptions using internal and external sources. It also provides guidance on requesting written representations from a responsible party, stating that forecasts are reasonable, represent the expected financial position of the entity, and are suitably supported; and that they clarify the limitations of the forecast and the use of the specialist’s work.

The AICPA Guide on Prospective Financial Information provides helpful guidance and procedures on validating and adjusting forecasts. Practitioners may want to consider reviewing this guidance especially if the opposing expert is an American CPA.

What is the role of counsel when forecasts are used?

In certain circumstances, counsel may need to provide instructions and/or assumptions around reliance on forecasts. While independent experts should consider the reasonability of the causal connection between the allegations and the economic losses claimed from their (financial) perspective, in some cases, counsel may be required to provide legal instructions or assumptions regarding relevant legal issues such as remoteness.

For example, a plaintiff may allege that they lost an opportunity to expand their business because of some wrongdoing. In some cases, counsel may instruct experts that, from a legal perspective, the losses being claimed beyond the normal operations may be too remote to attribute to the actions of the defendant, notwithstanding the existence of forecasts to support such losses.

How should work pertaining to forecasts be documented?

To comply with professional requirements, it is important to document work completed pertaining to forecasts. Copies of all relevant versions of forecasts should be retained, as well as support for all assumptions and inputs tested, support for all adjustments made to forecasts and any independent expert reports relied upon. Independent experts should also obtain a management representation letter stating that forecasts are reasonable, represent the expected financial position of the entity and are suitably supported and the limitations of the forecast.

Independent experts must follow all documentation requirements outlined in relevant professional standards.

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14 Source: CBV Institute Practice Standard 330 – Paragraph 5 D IV
15 Source: CBV Institute Practice Standard 330 – Paragraph 5 F
16 Source: CBV Institute Practice Standard 330 – Paragraph 5 G
17 Source: AICPA Prospective Financial Information Guide: Appendix A
Tools and Techniques

The primary objective of the independent expert is to validate forecasts by reviewing, supporting, and testing the reasonability of the forecast. Ideally, the forecast provided proves to be reasonable and can be relied upon for the purpose of quantifying economic loss. To the extent that the forecast is not reasonable for this purpose, experts may need to adjust the forecast to the extent that those adjustments can be independently supported. To the extent that adjustments cannot be independently supported, the expert may reflect the risk of achieving the unadjusted forecast through the discount rate.

This section discusses some tools and techniques to make forecasted cash flows more objective and independent. The below list of techniques is not exhaustive, nor are they presented in order of priority. Further, each case is different and will require a tailored approach guided by the expert’s professional judgement.

Technique #1 — Review Accounting Guidance

While the CPA and CBV governing bodies do not provide guidance with respect to forecast validation, the AICPA provides guidance with respect to prospective financial information as follows:

- what constitutes prospective financial information,
- guidelines for preparation and presentation of prospective financial information,
- guidance as to the level of industry knowledge and relevant accounting practices of the entity that the practitioner should have or obtain, and
- procedures to evaluate assumptions including:
  - evaluating whether the responsible party/forecast preparer has reasonable objective basis for the forecast;
  - considering whether sufficiently objective assumptions can be developed for each key factor; and
  - gathering support for assumptions using internal and external sources, which includes a detailed list of internal and external sources of information.

The AICPA guidance is clear that practitioners have a responsibility to perform validation procedures to confirm that the forecast is mathematically accurate and assumptions are internally consistent.

Although there is no requirement to follow the above guidance unless the expert is an American CPA, in our view it is valuable and relevant guidance that should be considered by independent experts to inform the direction of the work plan.

18 Canadian Institute of Chartered Business Valuators.
19 AICPA Guide, Chapter 8, paragraph 8.08.
**Technique #2 — Understand the Forecast**

Forecasts may be prepared by management of the business that is party to the dispute or by a third-party subject matter expert. It is important that the expert obtain a good understanding of the forecast, irrespective of who prepares it. Understanding the forecast enables the expert to identify areas of risk which may necessitate additional validation to gain comfort over the forecast. To understand the forecast the expert should consider seeking answers to the following questions:

- **Who prepared the forecast?**
- **What does the forecast pertain to?**
- **Why was the forecast prepared?**
- **When was the forecast prepared?**
- **How was the forecast prepared?**

**Who prepared the forecast?**

As a starting point, experts should assess who prepared the forecast and consider the preparer’s qualifications. For example, if the preparer has a recognized professional accreditation, this may indicate that the preparer has relevant training and may have been exposed to relevant guidance on prospective financial information. This may give the expert a higher level of comfort over the reliability of the forecast.

If management prepared the forecast, it may be important to understand the role the preparer individual occupies at the subject company by reviewing the following considerations:

- Is the preparer best suited to prepare the forecast?
- Is the preparer involved in the oversight of business operations and reporting financial results?
- How long has the preparer worked at the subject company?
- Does the preparer have experience preparing forecasts for the subject company? If not, has the preparer prepared forecasts for a similar company or similar industry?
- Does the preparer have relevant industry experience?

If the preparer is new to the company and new to the industry, experts may need to scrutinize the inputs and assumptions in the forecast in greater detail to gain comfort.

**What does the forecast pertain to?**

The expert should understand whether the forecast pertains to an existing business with historical operating results or a new business without any historical results. To the extent the forecast includes new business operations, the preparer should consider the following:

- Does the forecast pertain to a new business or a new division?
- Does the new division offer complementery products or services to an existing division?
- Does the subject company have experience in the industry related to the new business or division?

Forecasts of a new business or division in a new industry or new geography may require additional scrutiny because determination of the key inputs to the forecast would have been derived without the benefit of historical baseline or benchmark financial information.

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23 For example, a mining expert with technical expertise might be engaged to provide a forecast with respect to estimated mineral production.
Why was the forecast prepared?

The reason a forecast was prepared may provide insight into possible bias. Once experts have identified possible bias, they can identify inputs that may overstate or understate the forecast for further investigation.

If a company prepares forecasts in the normal course of business, a review of historical forecasts may help support or refute management’s track record of preparing and meeting those forecasts. Experts should seek to understand any significant variance between the forecast and actual operating results and to assess whether the variances were caused by factors within the company’s control or factors beyond their control, such as COVID. A discussion with management can be a good starting point and guide such analysis.

When was the forecast prepared?

The date that the forecast was prepared can provide valuable insight into its reliability. The closer the forecast was prepared to the valuation date or the date that the expert report is being prepared, the more reliable the forecast may be for the purpose of quantifying economic loss.

Consider a company who, over the last few years, has been planning to open a new division in 2020. That company’s 2019 forecasts for the new division are likely to be more reliable than its 2018 forecasts, given the benefit of hindsight and the fact that more data is available to assess macro and micro economic indicators and trends which would be factored into the 2019 forecast.

Even if a forecast was not prepared long ago, a significant economic event impacting the business, occurring after the forecast date could render the forecast less useful. For example, a forecast prepared a few weeks prior to the onset of COVID would likely not be optimal to forecast operating results after the onset COVID.

How was the forecast prepared?

As previously outlined, the AICPA Guide for prospective financial information suggests practitioners should review the forecast for mathematical errors and internal inconsistency and revise where appropriate24.

Where the forecast includes formulas, the expert should conduct clerical checks and recalculate the resulting numbers. Where the forecast includes hard coded information, the expert should verify that the numbers in the forecast tie to supporting documentation and identify which inputs represent assumptions.

Once the expert is satisfied with the accuracy of the forecast, additional insight may be gained by performing the following analyses:

- Calculate financial ratios to evaluate the reasonableness of the forecast compared to historical ratios and comparable company ratios.
- Perform common size or trend analysis to evaluate the reasonableness of the forecast as compared to historical or comparable company results.
- Perform sensitivity analysis to identify key assumptions in the forecast and to inform how experts might prioritize the work involved to substantiate the specific inputs. Depending on budget, experts can choose to focus on only the most material inputs or on all inputs starting with the most material inputs.
- Compare previous forecasts to actual operating results to evaluate management’s track record of preparing and meeting forecasts. If significant variances are identified experts should try to understand the nature of the variances (i.e., whether they were attributed to internal factors within the company’s control or to external unforeseen events, such as COVID).

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Consideration of the appropriateness of some or all these suggested techniques should be made by the expert, using professional judgement.

**Technique #3 — Discuss the Forecast with Management**

Once the expert has gained an understanding of the assumptions employed in the forecast, a discussion with management to understand the underlying rationale is likely warranted.

While experts should defer to management’s knowledge of the business, they should seek to understand and corroborate management representations where possible, and may consider asking the following example questions:

- How have the subject company’s capacity constraints been reflected in the forecast?
- Is management putting forward a best or worst-case scenario? Why or why not? What factors support management’s view that the forecast is a best or worst-case?
- Has management considered competition? Why or why not? Who are the subject company’s competitors and what is the competitive landscape (i.e., barriers to entry)?
- What is the reason for variances between historical forecasts and historical operating results, if any?

While having access to management is ideal, it may not always be possible in practice. Notwithstanding that an expert may not have access to management, it is best practice to request all relevant information underlying the forecast.

When making information requests, it is generally helpful to counsel to indicate the rationale for each request, in order to improve the likelihood of compliance with the request. Otherwise, the courts and opposing parties may not appreciate the significance of the request and find it easier to refuse to comply.

**Technique #4 — Do Your Research to Corroborate the Preparer’s Inputs and Assumptions**

Experts can further analyze and corroborate forecast inputs and assumptions by researching industry and macroeconomic data and comparable companies.

**Industry and Macroeconomy**

Research on the subject company’s industry and the macroeconomic environment can help contextualize the forecast. Experts may consider investigating the following:

- **Industry Benchmarking**: How do the historical revenue growth and financial ratios in the forecast compare to relevant industry metrics? Why do the subject company’s metrics deviate from the industry metrics?
- **Industry and Economic Forecasting**: How is the industry and economy expected to change in the future? What are the drivers of change? Are these changes reflected in the subject company’s forecast?
- **Geographic Benchmarking and Forecasting**: Does the subject business operate outside of Canada? If so, how does the macroeconomic climate of that country impact forecasts, for example through inflation or foreign exchange rates?

Understanding the impact of the industry and economic outlook on the subject company is always important; however, it is increasingly important with the onset of COVID, given COVID has affected the global economy and most businesses and industries.

Experts should critically assess whether COVID-impacts have been appropriately reflected in the forecast, when validating forecasts in a post-COVID environment and when considering whether forecasts should be adjusted.
Should an adjustment be warranted, the expert must consider both the quantum and duration of the impact and the timing of the anticipated recovery. For example, the table below is an example of what an expert may review and consider when supporting the duration of the impact and the timing of the anticipated recovery. Figure 2 highlights the results of a publication by McKinsey Global Institute, summarizing the industries impacted by COVID and estimated recovery to pre-COVID levels in a best and worst-case scenario.

**Figure 2: Post-COVID Recovery, By Industry**

*In a muted recovery, it could take more than five years for the most affected sectors to get back 2019-level contributions to GDP.*

<table>
<thead>
<tr>
<th>Estimated time to recover to pre-COVID-19 sector GDP¹</th>
<th>Small-business share of sector GDP, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>2021</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Arts, entertainment, and recreation</td>
<td></td>
</tr>
<tr>
<td>Accommodation and food services</td>
<td></td>
</tr>
<tr>
<td>Educational services</td>
<td></td>
</tr>
<tr>
<td>Other services²</td>
<td></td>
</tr>
<tr>
<td>Transportation and warehousing</td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td></td>
</tr>
<tr>
<td>Mining, quarrying, and oil and gas extraction</td>
<td></td>
</tr>
<tr>
<td>Wholesale trade</td>
<td></td>
</tr>
<tr>
<td>Administrative and support services</td>
<td></td>
</tr>
<tr>
<td>Utilities</td>
<td></td>
</tr>
<tr>
<td>Finance and insurance</td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td></td>
</tr>
<tr>
<td>Retail trade</td>
<td></td>
</tr>
<tr>
<td>Management of companies and enterprises</td>
<td></td>
</tr>
<tr>
<td>Real estate, rental, and leasing</td>
<td></td>
</tr>
<tr>
<td>Professional, scientific, and technical services</td>
<td></td>
</tr>
<tr>
<td>Information services</td>
<td></td>
</tr>
<tr>
<td>Healthcare and social assistance</td>
<td></td>
</tr>
</tbody>
</table>

Virus-contained scenario  Muted-recovery scenario

1 Data as of June 15, 2020.
2 Excluding public administration.


Industries could be affected in the short-term, permanently or not at all. The data in Figure 2 above suggests that the six industries from the top may be permanently affected in a worst-case (“muted-recovery”) scenario. Moving down the chart, certain industries have been temporarily affected with worst-case recovery in 2022 or 2023.

Industry and macroeconomic research can be used to precipitate discussions with management, support the forecast, identify areas for forecast adjustment, and form qualitative discussion in the expert report.
Comparable Company Data

In addition to industry and macroeconomic information, the expert may research comparable company data to corroborate forecast inputs and assumptions. Experts should identify appropriate comparable companies by considering the qualitative and quantitative factors detailed in Table 6 below:

Table 6: Quantitative and Qualitative Considerations to Identify Comparable Companies

<table>
<thead>
<tr>
<th>Examples of Quantitative parameters</th>
<th>Examples of Qualitative parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Total assets</td>
<td>• Company description (i.e., nature of the business, market segments, industry)</td>
</tr>
<tr>
<td>• Revenue</td>
<td>• Country of operations</td>
</tr>
<tr>
<td>• EBIT</td>
<td>• Scope of operations (i.e., what countries are serviced, products / services offered)</td>
</tr>
<tr>
<td>• EBITDA</td>
<td>• Age and maturity of company etc.</td>
</tr>
<tr>
<td>• Market capitalization</td>
<td></td>
</tr>
<tr>
<td>• Total book value of debt/equity</td>
<td></td>
</tr>
</tbody>
</table>

Often the inclusion and exclusion of companies in the comparable company data set involves applying professional judgement and an iterative approach. Experts may choose to select several comparable companies and take an average of various metrics, such as revenue growth rate (%) to benchmark against the subject company forecast. Outliers may skew results and need to be excluded or investigated further.

Table 7 on the next page includes a non-exhaustive list of various resources that an expert may consider to assist with industry and comparable company research.
<table>
<thead>
<tr>
<th>Resource</th>
<th>Cost</th>
<th>Private or Public Company Data</th>
<th>Description of Data Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Reports</td>
<td>Free</td>
<td>Public</td>
<td>Industry and comparable company data</td>
</tr>
<tr>
<td>Capital IQ</td>
<td>Subscription Required</td>
<td>Public &amp; Private</td>
<td>Comparable company data (i.e., cost of capital)</td>
</tr>
<tr>
<td>Bloomberg</td>
<td>Subscription Required</td>
<td>Public &amp; Limited Private</td>
<td>Industry and macroeconomic data</td>
</tr>
<tr>
<td>EIU — The Economist Intelligence Unit</td>
<td>Subscription Required</td>
<td>Public</td>
<td>Industry and comparable company data</td>
</tr>
<tr>
<td>EMIS — Emerging Markets Information System</td>
<td>Subscription Required</td>
<td>Public</td>
<td></td>
</tr>
<tr>
<td>Factset</td>
<td>Subscription Required</td>
<td>Public &amp; Private</td>
<td></td>
</tr>
<tr>
<td>Refinitiv Eikom</td>
<td>Subscription Required</td>
<td>Public &amp; Private</td>
<td></td>
</tr>
<tr>
<td>IBISWorld</td>
<td>Subscription Required</td>
<td>Public &amp; Private</td>
<td></td>
</tr>
<tr>
<td>Margent</td>
<td>Subscription Required</td>
<td>Public</td>
<td></td>
</tr>
<tr>
<td>Marketresearch.com</td>
<td>Subscription Required</td>
<td>Public</td>
<td></td>
</tr>
<tr>
<td>Duff and Phelps</td>
<td>Subscription Required</td>
<td>Public</td>
<td>Industry data (i.e., cost of capital)</td>
</tr>
<tr>
<td>Pitchbook Data Inc.</td>
<td>Subscription Required</td>
<td>Private</td>
<td>Depends on type of subscription</td>
</tr>
<tr>
<td>Bureau Van Dijk (BVD) (Moody’s Analytics Co)</td>
<td>Subscription Required</td>
<td>Private</td>
<td>Comparable company data</td>
</tr>
<tr>
<td>SME Benchmarking Tool</td>
<td>Free</td>
<td>Public &amp; Private</td>
<td>Industry data</td>
</tr>
</tbody>
</table>
Experts must apply professional judgement to determine the nature and extent of research required. To avoid being accused of “cherry-picking” data to suit a certain narrative, it is important to present research that is balanced and covers a spectrum of results.

Once research is performed, experts should compare results to forecast inputs as follows:

- Compare forecast price assumptions against industry analyst forecasts;
- Understanding the industry and economic outlook and assess whether the forecast assumptions are consistent with that outlook; and,
- Compare key ratios (i.e., EBITDA margin, EBIT-to-revenue, net working capital-to-revenue, capital expenditures-to-revenue, etc.) of comparable companies with that of the forecasted values.

After experts have gathered and tested external data against forecast inputs, they should carefully consider whether an adjustment to the forecast is warranted.

**Technique #5 — Ask for Help**

Notwithstanding the work that can be completed around forecast validation by the independent expert, there may be important inputs to the forecast that are outside their area of financial or accounting expertise that require validation. For example, financial forecasts for certain industries and businesses contain highly technical inputs that are normally outside of the purview of expertise of a financial or accounting expert. In such cases, it may be necessary for the financial expert to seek and rely upon the expertise of an appropriate subject matter expert to assess and validate the forecast being used to quantify economic losses.

As previously discussed, experts have a duty to the courts to opine on areas only within their expertise. It best serves counsel and the courts if the right experts are identified to provide input on technical areas early in the process. Venturing outside of one’s own expertise can pose significant risks to independent experts and is likely not of assistance to the court and the trier of fact.

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25 To the extent that a subject matter expert provides input on a forecast or actually forecasts one component, the financial expert must still comply with relevant accounting guidance (Technique #1), strive to understand the subject matter expert’s work (Technique #2) and discuss their work with the subject matter expert (Technique #3).
Key Takeaways

An expert opinion needs to be independent, supported and objective — but it should also be easily-understood, simple and compelling. In the quantification of economic losses, the financial forecast is often the foundation or focal-point of the analysis and therefore it requires special consideration and scrutiny. As independent experts, it is our job to apply our expertise, experience, and professional judgement to provide the court with comfort that the forecasts have been reasonably validated and supported, considering the specific case facts and relevant context.

Our paper has discussed the role of an expert when forecasts are required in damage quantification and we have also presented several tools and techniques that an independent expert may consider when assessing and validating forecasts. Every mandate is unique and thus an independent expert must apply professional judgement to determine how best to validate and support a forecast that will be relied upon to determine damages. In summary, based on our discussion herein, we provide the following key points:

- **Primary obligation is to assist the courts**: The primary and overriding duty of an expert is to assist the courts on matters of their expertise. Thus, independence and objectivity are key.

- **Consider the source of the forecast**: An expert must always exercise professional skepticism while assessing “who prepared the forecast”, “why was the forecast prepared”, “when was the forecast prepared”, “what does the forecast pertain to” and “how was the forecast prepared”.

- **Seek help in matters outside of expertise**: Where the subject matter of dispute is highly technical, complex or nuanced, and outside the expert’s areas of expertise, it is recommended to seek help from a subject matter expert during forecast validation.

- **Forecast validation is an “art” and not a “science”**: Every dispute is unique in its requirement for forecasts and validation of such forecasts may require application of one or more of the techniques discussed above. The expert should exercise professional judgement as they perform company and industry specific research and consequent forecast adjustments to move away from a “one size fits all” approach.
SMALLER, NOT SIMPLER — CHALLENGES WITH LITIGATION ENGAGEMENTS FOR SMALLER BUSINESSES
SMALLER, NOT SIMPLER — CHALLENGES WITH LITIGATION ENGAGEMENTS FOR SMALLER BUSINESSES

Tim Zimmerman, CBV, CFE, ABV¹ and Antonina Wasowska, CPA, CA, CBV, CFF²

If you’ve been retained on litigation engagements for small businesses, chances are you’ve encountered clients who are new to litigation and have issues with the reliability of financial information such as unreported cash sales and questionable business expenses—for example, a home office at the cottage or vet bills for a “guard dog”. Put simply, a small business does not automatically mean a less complicated engagement.

This article identifies six common challenges in litigation engagements for smaller businesses, what you should consider during the initial assessment, and how you may be able to resolve each challenge.

I. Quantifying Cash Sales and Unreported Revenue

Small businesses in general have a higher risk of unreported or underreported cash sales. In instances where a small business is known to have cash sales, it’s common that all expenses but not all sales are reported for the purpose of minimizing taxable income. Depending on the nature of the business and the industry that it operates in, cash sales may comprise a substantial portion of total sales, and records to substantiate the amount may be non-existent or irreconcilable.

Cash sales and unreported revenue in a litigation context are often a significant issue and highly contested between the parties, however, a CBV can use a range of techniques in their investigation to assist in quantifying cash sales.

Initial Assessment

Understanding the nature of the business is a critical first step in assessing the opportunity for cash sales and unreported revenue in the business. Further, reviewing the goods and services offered by the company can assist in identifying which may be easily transacted for cash, unreported due to low traceability (i.e. cover charges at a bar) or the ability to simply manipulate records (i.e. time spent on a service).

In addition, reviewing the accounting system, internal controls and any related company policies or operating procedures will build a solid understanding of the overall operations of the business and the risk and opportunity for cash sales and unreported revenue.

Lastly, if cash sales are identified, look at the specifics of the cash transaction and how it may flow through the financial reporting system. Further, if possible, analyze if cash sales are comingled in the business or tracked separately.

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² Antonina Wasowska is a Principal at Cohen Hamilton Steger & Co. She practises exclusively in the areas of business valuation, forensic accounting, and the quantification of economic damages.
Possible Solutions

The best approach will depend on the amount of supporting information available:

- Bank statement analysis — where some cash sales are known to be deposited into a corporate bank account, or more frequently, into the personal bank accounts of the business owner or their spouse or children, identify cash deposits based on preplanned criteria (e.g., specific period, specific accounts, materiality level of amounts), then verify these transactions to supporting documentation. If they’re income, verify if they have been reported. An important note is that this technique generally requires significant supporting documentation, and you often need complete information to substantiate the amounts, making it potentially time-consuming and costly.

- Comparable benchmark ratio analysis — where good source documentation is not available, or as a secondary check to test the reasonability of the amount of cash sales, various resources can be considered such as:
  - Company level: DealStats (formerly Pratt’s Stats), S&P Capital IQ, Bloomberg.

- Comparing a company’s reported operating results to benchmarks can help you explain or estimate the amount of unreported cash sales (see Exhibit 1). However, use this technique with caution as there may be specific factors that make your client’s company different from the industry data being used in the analysis.

- Overall reasonability analysis of cash component of sales—where customer accounts, booking logs, and purchase records are available they can assist with tracing cash or unreported transactions. For example, based on a company’s booking logs this analysis could compare the value of services of the bookings to the total reported sales to identify if any significant variances exist.

Finally, while there is no silver bullet for identifying unreported cash sales, creative approaches can also deliver results:

- Searching historic public matrimonial records of business owners for any indication of cash sales in the past.

- Comparing reported sales from financial statements to other internally or externally provided records (e.g., “actual sales” used for forecasts/projections, company website, presentations for shareholder meetings, bank loan applications).

- Reviewing historic marketing and promotional materials (e.g., a restaurant sign stating “save 10% if you pay in cash” would imply cash sales that may be unreported).

Exhibit 1: Example industry comparable analysis used to reveal and estimate unreported cash sales

<table>
<thead>
<tr>
<th>Subject Company</th>
<th>Comparable Benchmark Industry Data</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reported Operating Results:</strong></td>
<td><strong>Amount</strong></td>
</tr>
<tr>
<td>Total Revenue</td>
<td>$1,000</td>
</tr>
<tr>
<td>Less: COGS</td>
<td>$700</td>
</tr>
<tr>
<td>Gross Income</td>
<td>$300</td>
</tr>
<tr>
<td>Less: Expenses</td>
<td>$100</td>
</tr>
<tr>
<td>Reported Net Income before taxes</td>
<td>$200</td>
</tr>
<tr>
<td><strong>Adjustment:</strong></td>
<td></td>
</tr>
<tr>
<td>Estimated Unreported Cash Sales</td>
<td>$300</td>
</tr>
</tbody>
</table>
| Adjusted Net Income before Taxes | $500 | 50% | *Notional amounts used for illustrative purposes.*
II. Quality and Availability of Financial Documentation

It's more common than not that documentation that has been requested is incomplete or unavailable for a myriad of reasons such as the passage of time, destruction (e.g. a fire) or the documentation was never prepared by the company.

In addition, financial records provided to you may also contain inconsistencies, such as tax returns that don't reconcile to the financial statements or internally prepared profit and loss statements.

Initial Assessment

As previously mentioned, having a solid understanding of the nature of the business is key, particularly for determining what financial, economic and industry documentation might be available to assist in the analysis.

You should also review the accounting system and inventory system (if applicable) and any related policies, procedures, and internal controls.

It's important to keep track of any discrepancies in the financial records, and their estimated impact (if any) on your analysis. Using sensitivity analysis based on the variances discovered can help you estimate the impact of certain discrepancies on your financial model or analysis. For example, if certain expenses are reported differently between two sets of financial records, how would your analysis differ if you used one set versus the other?

Lastly, determine what financial information has not been provided and more importantly, why wasn’t it provided. While an incident such as a fire loss may be good rationale for lost information, a client who doesn’t seem to have possession of very specific key documentation that should exist, or is always “looking for it”, may raise a red flag regarding management’s credibility and whether information is being purposely concealed.

Possible Solutions

Prior to receiving information, where possible, take the time to review the requested items with the client to ensure they understand:

- What you’re asking for and why.
- Which specific supporting documentation—or types of documentation—would best satisfy each request.
- Why this information is important and why it needs to be provided in complete, accurate form.

Consider speaking directly with the company employees responsible for preparing any unavailable or inconsistent information, to clarify the flow of transactions, how it’s reported, and other information that may be available to help substantiate where there are gaps in the information.

On the more creative side, options include:

- Investigate if information can be economically obtained from third parties. These can include customer records of sale; vendor records for certain purchases; filed tax returns, HST returns or source deductions available from CRA; or external accountants’ working papers.
- Is it possible or economical to rebuild the data, using bank statements, sales invoices and receipts? If yes, proceed with caution as preparing financial statements for use in your analysis can lead to self-review risks.
- Analyze if missing information could be reasonably estimated:
  - From existing supporting documentation?
  - Using comparable ratio analysis or other industry statistics?

If the answer is no to either question or the amounts being reviewed are highly material to the analysis don’t try to force the outcome. Opinions based on significantly weak information will ultimately be unsupported.
III. Identifying Personal and Discretionary Expenses

In general, small businesses have a higher risk of non-business related expenses being integrated into their financial records. In closely held businesses, owners generally have full discretion over operations and financial records, often with few checks and balances and little segregation of duties. Non-business-related expenses may comprise a substantial portion of the business's expenses (e.g., related party remuneration) with the intention of minimizing income tax expense.

Small businesses also have greater potential for co-mingling of business and personal expenses. For example, vehicle-related and cellphone expenses reported in the corporation at 100% of the expenses amount despite 80% being used for personal use.

Initial Assessment

In addition to having a firm understanding of the nature of the business, interviewing the client to discuss how business expenses are being reported and the method they use to determine business vs. personal use can assist with understanding what expenses are legitimately related to the business operations.

Include in this discussion the business roles and duties of family members, as well as any internal controls for preventing personal and discretionary expenses from creeping into the financial statements.

After gathering preliminary details and support concerning known or suspected non-business activities, consider any unusual or one-time events, such as the purchase of a cottage, construction of a new home, or personal travel, where associated personal expenses could potentially slide into the corporation.

Possible Solutions

First, you should maintain an active dialogue with the client to fully understand the nature and reporting of expenses.

Second, review the general ledgers of the business. This could be a full or ad hoc review. For efficiency, using keyword searches may assist with identifying targeted expenses. If searches generate many results, review vendor names and descriptions, and further analyze names that may be questionably unconnected with the business or personal in nature.

Third, analyze vendor spending. Inquire about one-time vendors for large amounts and/or vendors with significant fluctuations in annual purchasing levels.

Lastly, if you need to go into deeper detail, conduct a targeted forensic analysis on high-risk expense accounts or transactions:

- Request details (and support where warranted) for unexplained year-over-year fluctuations in expenses.
- Perform a transactional level review of:
  - Activities that often contain a personal element (e.g., meals and entertainment, advertising, promotions, travel, etc.).
  - Related party expenses (e.g., remunerations, expense reports, corporate credit cards, shareholder loans, etc.).
- Request supporting details (and documentation where warranted) for either identified or unexplained expense accounts.
IV. Identifying Personal Goodwill

Small owner-managed businesses may be reliant on the business owner’s expertise or long-term personal relationships to generate profits. Often, business owners (or their spouses) will assume that a business has a high valuation due to a history of strong profits, however a history of profitability does not necessarily translate to transferable commercial goodwill.

Assessing the extent to which personal goodwill exists is often an important step in the valuation of smaller business interests, and should be discussed early in the valuation process, both to manage expectations and to focus the disclosure request.

An example of a common business where value is tied to personal goodwill is an incorporated consultant who carries out ad hoc project work through a corporation. In such a case, all profits are earned based on that individual’s specialized skills and relationships rather than the company’s location or reputation.

Initial Assessment

Understanding how a business generates revenue is key to properly assess the risk of personal goodwill. Ensure that you have a thorough understanding of both the business owner’s role in generating revenue, as well as the likelihood that someone else can step in or be transitioned into the current owner’s shoes and continue to generate the same revenue level.

Possible Solutions

Questions to consider include:

- Does the business have a base of skilled employees or does it rely on subcontractors?
- Is there a management team or succession plan in place?
- Is management under contract or can they easily leave the company?

Consider, too, the nature of revenue:

- Is there a base of recurring revenue, or does revenue arise from one-off projects generated by the business owner?
- Is there a diversified customer base or dependence on a few key customers who may leave if the current owner is no longer involved?

In some cases, it may be possible to transfer the business to another individual with the same or similar skill set using a non-competition agreement or transitional employment period, thereby mitigating the risk of personal goodwill. Whether this is a feasible approach will depend on the industry and specific fact pattern.

Ultimately, you need to identify what precisely is being sold or transferred to the purchaser under a notional sale and whether it is reasonable to conclude that such a sale would include commercial goodwill.

Lastly, industry research will help corroborate your conclusions about the nature of the business’ goodwill. For example:

- Review relevant industry or trade associations for articles on selling or transitioning businesses in the subject company’s industry. You may find tips for marketing a business for sale, including how to transfer goodwill to a new purchaser.
- Search online for similar types of businesses for sale. Note the numbers of listings, and attributes and key selling features of businesses for sale, for comparison with your client’s business.
- Review transaction databases for past transactions — a large number of transactions and purchase prices in excess of net asset value increase the likelihood of commercial goodwill.
V. Communicating Directly with a Business Owner (and their Spouse)

In larger litigation engagements, we are typically working with in-house Counsel or the accounting department of a larger company. These individuals will be knowledgeable about the documentation being requested, and providing this documentation is part of their job. This is very different than communicating directly with a business owner or their spouse.

When dealing directly with an owner-manager, always remember that your client is personally invested in the litigation outcome as it will directly impact their finances. Emotions may cloud their judgement, causing them to fixate on aspects of the financials that are not relevant to your analysis. Consequently, they will have certain biases which you need to anticipate and mitigate.

Clients in smaller litigation engagements are often not financially sophisticated. You may be working with an entrepreneur who understands their business but is not a “numbers” person, or with a non-owner spouse in a matrimonial engagement. Communicate clearly and avoid jargon.

In many cases, clients will not be familiar with the litigation process and your role as an expert. You can expect such clients to ask you legal questions (e.g., how long the process will take, what happens at the next stage, what kind of outcome to expect), or want to discuss legal strategies with you - even responding to your questions with “What answer will give me the best outcome?”

Initial Assessment

The main goal is to understand the client’s familiarity with the business’s financial records:

- Do they have a financial or accounting background?
- Do they play any role in preparing the financial records?
- If not involved in preparing the records, to what extent do they review the records?

Once you have this background, you can decide where to direct your questions, how in-depth to discuss the financial records with the client, and what should be addressed with their trusted financial professionals (e.g., external accountant or in-house controller).

Here too you will need to be cognizant of potential biases and to understand the client’s emotional state and potential triggers.

Possible Solutions

Start by listening to the client’s pain points and trigger issues. You need to understand what the client is communicating to you, just as the client needs to understand what you are asking of them.

If the client’s sensitivities are material to your analysis, explain how you are addressing them and the range of possible outcomes. If the items are outside the scope of analysis, or not practical to pursue (e.g., transactions from 15 years ago, while the analysis is focused on the last three to five years), clarify why these are not part of your analysis. If not fully addressed, these out-of-scope topics tend to resurface, and can be a point of frustration for the client. Managing the client’s expectations clearly will avoid misunderstandings later on.

As is the case for disclosure requests, ensure the client understands why you’re requesting certain information and what specific forms of documentation would satisfy the request. In cases where a client’s staff or professional advisors will be providing the support, communicate directly with these team members to avoid communication breakdown and minimize follow-up requests.

In explaining your analysis, avoid jargon, provide analogies, and repeat key concepts and findings. Don’t assume that the client will understand the analysis first time.
Finally, be very clear with the client about your role as a financial expert in contrast to the role of Counsel. Alert Counsel to the client’s legal questions and concerns. In some cases it may be beneficial to include Counsel in client meetings or calls, to ensure everyone is on the same page.

VI. Striking the Right Balance between the Analysis Performed/Fees Charged and the Quantum of the Potential Claim

One of the biggest challenges faced by CBVs working with smaller claims is the relationship between professional fees the client will need to incur for a fulsome analysis, relative to the size of the claim. Such fee pressures increase the need for completing your work in the most efficient, focused manner possible.

However, as we’ve discussed throughout this article, smaller does not equal simpler. You must still address many of the same issues and follow a similar process as in a larger engagement, as certain “fixed costs” are unavoidable. For example, an initial meeting with the client to understand the business and your mandate tends to take an hour, no matter how big (or small) the claim size.

Clients in smaller engagements will often be sensitive to these cost challenges and look for ways to short-cut the analysis; however, beware of requests for “pared-down” deliverables! Common requests include the following:

- “My accountant will prepare the analysis and you can review.” This request often happens when the client expects to settle quickly or go to mediation. While the accountant may be intimately familiar with the business, they will typically have a superficial understanding of valuation or loss quantification theory. Often their analysis will be incorrect and/or difficult to follow, and therefore time consuming for you to review and ensure that calculation errors are resolved. Under this approach, the final cost to the client will often exceed that of a traditional, straightforward deliverable. Furthermore, if the case does proceed to trial, an independent expert report will ultimately be required.

- “I don’t need a full report; can you just write a letter explaining [particular topic]?” Such a bespoke deliverable carries risk, as it may not be possible to craft a letter that’s both useful for the litigation and also within the CBV practice standards. Where it can be done, such a letter would likely need to be carefully worded by a senior practitioner, charging at a higher rate than more junior staff who could complete the analysis required for a standard CBV deliverable efficiently and at a reasonable cost.

Initial Assessment

Upfront planning is essential to managing fees. Start by estimating a range for the valuation or loss conclusion, based on readily available information, such as the business’s annual revenue and historical EBITDA.

Once you have this range, you can then establish what type of analysis to conduct to reach the final conclusion, and where to focus the analysis. Identify the big-dollar issues that will have the most impact on conclusions — a sensitivity analysis can help you prioritize your efforts.

Other issues to consider:

- The client’s areas of concern, along with the extent to which you can incorporate them into your analysis, where appropriate.

- Availability and quality of financial information, as these will have a big impact on time spent and fees charged.

- Whether the opposing party to the litigation also has hired an expert, and if so, where they are in their analysis.
**Possible Solutions**

Consider a staged approach to the engagement; you might start with a limited or highly focused Phase 1. For example, in undertaking a forensic analysis, you may start with certain accounts or statements. Based on the findings of this initial analysis, you may then expand your scope to a broader mandate.

Regular communication throughout the course of the engagement is key. Bill monthly with detailed invoices so the client understands where the fees are being spent and what type of analysis is being performed. Ensure you keep Counsel updated on your progress and any issues you encounter — this is especially important if your analysis takes longer or becomes more complex than anticipated.

Coordinate efforts if the opposing party has also engaged an expert. Clarify if one party will issue a report that the other party will then review, and thereby minimize duplication of efforts. For example, if the opposing party’s expert has already issued a disclosure request list, use their list as a starting point.

Always keep in mind the appropriate level of analysis for the ultimate deliverable: What will the report look like? What can you streamline? Can you do a calculation instead of an estimate? As you write the report, stick to short wording and short sentences. Emphasize key items rather than provide excessive background information. Staff according to needs, including assigning tasks to junior team members where reasonable.

Above all, ensure your final deliverable meets the CBV Standards and provides good value for the client.

**Concluding Thoughts**

Litigation engagements for small business clients are often challenging due to: incomplete or unreliable financial records required for the analysis; client-specific communication challenges or sensitivities; and additional fee pressures inherent to quantifying a smaller claim/value conclusion. The strategies outlined in this article should provide a helpful roadmap to practitioners navigating these engagements.