

# The Quixotic Belief in Corporate “Unicorns”: A Review of *Bad Blood: Secrets and Lies Inside a Silicon Valley Start-Up*

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M A T T H E W L O N D O N · ·

## I. INTRODUCTION

I n John Carreyrou’s book, *Bad Blood: Secret and Lies Inside a Silicon Valley Start-Up*,<sup>1</sup> the author lays out a compelling narrative about the rise, and later, the precipitous fall of Theranos Inc., and its youthful founder, Elizabeth Holmes.<sup>2</sup> Once valued at north of 9 billion dollars (US),<sup>3</sup> in the afterword, the author points out that this value has evaporated,<sup>4</sup> and multiple civil suits against the company and the driving forces behind it have awards that remain unsatisfied. Holmes and another top Theranos executive (Ramesh “Sunny” Balwani) were charged with fraud under US federal law by the US Attorney for the Northern District of California in

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<sup>1</sup> The original hardcover version was published in 2018 by Random House, Inc. A softcover edition was later produced (in 2020) with a new afterword by the author. All references herein will be to the 2018 hardcover version of the book [“Bad Blood”].

<sup>2</sup> *Ibid* at 3.

<sup>3</sup> *Ibid* at 183.

<sup>4</sup> *Ibid* at 296.

San Francisco.<sup>5</sup> Both were later convicted and sentenced to lengthy jail terms.<sup>6</sup>

For someone like one of the authors, (MacPherson, a former corporate lawyer who has followed with interest a variety of corporate scandals on both sides of the Canada-US border, both out of personal interest and a professional desire to remain current on developments that could be relevant to my teaching), this book raised a great many questions. After laying out a short summary of Carreyrou's prose, we will turn to two issues that really grabbed our thoughts as we were reading. The first issue is that Carreyrou seems to scrupulously avoid dealing in any significant detail with the expectation of good corporate governance.<sup>7</sup> The second is the idea that a "private" company can have the type of "public" impact, not only on return on investment for those who have decided to invest, but also influence on public institutions, both at the level of the administrative state, and on the executive and legislative branches of government. The distinction between public corporations and private ones is one that is built at least in part on a greater need for public information with respect to the former, as compared to the latter. Yet, as will be discussed below, when there are not only large sums of money at play (investors put over \$400 million (US) into Theranos<sup>8</sup> on what became a multi-billion-dollar valuation<sup>9</sup>), but also a public face to the outside world of a product that is supposed to assist

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<sup>5</sup> Alex G. Tse (Acting United States Attorney), "The United States of America vs. Elizabeth A. Holmes & Ramesh "Sunny" Balwani" (14 June 2018), online: *United States Attorney's Office Northern District of California* <[https://www.justice.gov/d9/pages/attachments/2019/02/26/holmes\\_and\\_balwani\\_indictment\\_0.pdf](https://www.justice.gov/d9/pages/attachments/2019/02/26/holmes_and_balwani_indictment_0.pdf)> [https://perma.cc/5H5Y-BSYN].

<sup>6</sup> Jody Godoy, "Ex-Theranos president Balwani sentenced to nearly 13 years for fraud" (8 December 2022), online: *Reuters* <<https://www.reuters.com/legal/ex-theranos-president-balwani-sentenced-nearly-13-years-fraud-2022-12-07/>> [https://perma.cc/C8PE-ZU9H]; Jody Godoy and Dan Levine, "Elizabeth Holmes sentenced to more than 11 years in prison for Theranos fraud" (18 November 2022), online: *Reuters* <<https://www.reuters.com/business/healthcare-pharmaceuticals/elizabeth-holmes-faces-sentencing-friday-defrauding-theranos-investors-2022-11-18/>> [https://perma.cc/RS68-QYHD].

<sup>7</sup> There are only two explicit references to the concept in the book. See *Bad Blood*, *supra* note 1, at 36, 227.

<sup>8</sup> *Ibid* at 206.

<sup>9</sup> *Supra* note 1 at 183.

the general public with the basic elements of life, there is a reason that greater scrutiny may be required.

## II. QUICK SUMMARY

The early chapters on Carreyrou’s book detail both Ms. Holmes’s upbringing and the early years at Theranos, including the compelling details of the departure of Henry Mosley<sup>10</sup>, an early Chief Financial Officer of the corporation.<sup>11</sup> The details of this high-level departure would foreshadow tactics used later against other employees who were seen as impeding the overall mission of Theranos, namely, to brand as disloyal any employee who was not willing to do whatever it took to allow Theranos to achieve its goals. What was Mosley’s crime? He showed an unwillingness to revise financial projections of future growth of the company which Mosley believed would, after revision, provide an indefensibly rosy picture of the company’s prospects.<sup>12</sup>

The writing in this book is not linear. This is not meant to be taken as a criticism. Rather, Carreyrou writes about subject-matters. Each chapter revolves around a topic, rather than trying to set out events in a timeline fashion. The author tells a story that revolves around what happened to the people involved. By focusing each of the key chapters on one or more individuals, the story is made more compelling. This is because it becomes, not a story about the chicanery of a faceless, inhuman corporation, but rather the ability of a small group of people (including Holmes and Balwani, and certain trusted subordinates, like outside counsel David Boies<sup>13</sup>) to bully, intimidate and threaten into silence members of another group (the employees of Theranos, and to an extent regulators and others) who did or might stand in the way of achieving Theranos’s goals.<sup>14</sup>

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<sup>10</sup> *Ibid* at 8.

<sup>11</sup> *Ibid* at 4.

<sup>12</sup> *Ibid* at 8.

<sup>13</sup> *Ibid* at 134.

<sup>14</sup> What those goals are might be seen to depend on one’s view of Holmes. Early on in the book, Carreyrou certainly intimates that Holmes is very much in search of financial reward. See *Bad Blood*, *supra* note 1, at 9. Later, adulation and renown are certainly part of the attraction. See *Bad Blood*, at 12. Rather, if Holmes is to be believed, her

There were several chapters of the book that drew the explicit comparison between Apple Inc. and Steve Jobs, on the one hand, and Theranos and Holmes, on the other. Holmes hired the same advertising agency which had produced some of Apple's most memorable advertising campaigns.<sup>15</sup> Comparisons between the Apple legend and the Theranos leader were made in many of the media profiles of the latter.<sup>16</sup> Apple employees were brought in as lateral hires.<sup>17</sup> Avie Tevanian, one of Jobs's closest collaborators at Apple,<sup>18</sup> became a board member of Theranos<sup>19</sup> (although, similar to Mosley, he would leave the corporation when he was judged to be difficult by Holmes<sup>20</sup>). Even Holmes's physical makeover would mirror Jobs's sartorial choices.<sup>21</sup>

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goal was to "revolutionize health care", and ensure that no one is lost "too soon". See *Bad Blood*, *ibid* at 44, 209.

The first two reasons seem based in greed and excessive self-interest. The last of these is at least admirable and, though there would undoubtedly be benefits that would flow to Holmes, the same is true of any business that produces a successful product. If the driver for action is at least in part altruistic, that may explain a certain level of commitment to these goals. It might, in the eyes of some at least, make that commitment more admirable.

Nonetheless, there is a point at which the ends (altruistic though they may be) cannot justify the means that are employed to achieve them. In my view, even giving Holmes the benefit of the doubt with respect to putting the most benign meaning to her actions and the most altruistic of motives for those actions, the reality (at least for us) is that, even without consideration of the criminal implications of the actions that ultimately ended the company, once serious physical harm to patients was a possibility, and serious finance loss was coming closer to reality, the failure to inform interested parties of the true state of affairs became inexcusable, since a small (and dimming) hope of a breakthrough was far outweighed by, for example, the likelihood of harm to members of the public.

<sup>15</sup> *Bad Blood*, *ibid*, at 150.

<sup>16</sup> Roger Parloff, "This CEO is out for blood" (12 June 2014), online: *Fortune* <<https://fortune.com/2014/06/12/theranos-blood-holmes/>> [<https://perma.cc/7SXC-NC36>]; Ken Auletta, "Blood, Simpler" (8 December 2014), online: *The New Yorker* <<https://www.newyorker.com/magazine/2014/12/15/blood-simpler>> [<https://perma.cc/SW9L-29QJ>].

<sup>17</sup> *Bad Blood*, *supra* note 1, at 30.

<sup>18</sup> *Ibid* at 35.

<sup>19</sup> *Ibid*.

<sup>20</sup> *Ibid*, at 38-40.

<sup>21</sup> *Ibid*, at 31.

Many chapters focused on individual employees or groups, and their relationships to the outside world. Two of them were particularly compelling. The first discussed Ian Gibbons, in a chapter titled with his name.<sup>22</sup> Gibbons was a talented scientist who was sidelined and demoted by Holmes.<sup>23</sup> These changes were followed by symptoms of depression. After Gibbons could not avoid being examined for discovery in a lawsuit against Theranos, despite being pressured by Theranos executives to do so,<sup>24</sup> the scientist took his own life.<sup>25</sup> While Theranos could not reasonably be held legally responsible for the death that resulted, the result is nonetheless sad, and the death might have been avoided had Gibbons never been connected to Theranos and its chicanery.

The second involved a discussion of a young man named Tyler Shultz. He would ultimately be disclosed in the book as one of Carreyrou’s sources. He was a young employee who had taken on a role at Theranos that included testing the accuracy of Theranos’s proprietary machines as compared to other commercially-available blood analyzers.<sup>26</sup> Tyler was also the grandson of George P. Shultz, a board member at Theranos.<sup>27</sup> The elder Shultz had previously served in a number of positions in government, most notably as the U.S. Secretary of State under President Ronald Reagan.<sup>28</sup> In a number of places in the book, but most directly in a chapter titled “The Grandson”, Tyler’s role at Theranos, and his warm relationship with his grandfather is detailed. Once the younger Shultz became convinced that there was wrongdoing at Theranos, his relationship with his grandfather would (at least temporarily) sour somewhat, as the elder Shultz decided to align himself with Theranos and Holmes. This deterioration was demonstrated in the book by the fact that when the elder Shultz celebrates his birthday, Holmes was invited to attend, while the younger Shultz was not.<sup>29</sup>

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<sup>22</sup> *Ibid*, at 141.

<sup>23</sup> *Ibid*, at 143.

<sup>24</sup> *Ibid*, at 146-147.

<sup>25</sup> *Ibid*, at 148.

<sup>26</sup> *Ibid*, at 185.

<sup>27</sup> *Ibid*, at 184.

<sup>28</sup> *Ibid*, at 175.

<sup>29</sup> *Ibid*, at 288.

As compelling as the story as written by Carreyrou is, it does have at least one drawback. Although each chapter is a very easy read and individually quite engrossing, it can be quite difficult to put the overall sequence of events into context. Thus, as one of us (MacPherson) read the later chapters, it became exceedingly difficult (for him at least) to remember which part of the other stories had occurred around the same time. While there were occasional reminders in certain parts of the book to assist with this, these reminders were not a regular part of Carreyrou's writing. This made putting the details relayed in different parts of *Bad Blood* into the whole story quite challenging. As a result, I asked my co-author (Matthew London) was asked to develop a timeline of major events, based on the dates of the events. The timeline also includes footnotes, explaining where references to the events can be found in the pages of the book. Our hope is that this more linear approach may help researchers who may need access to a timeline for an overall approach to the events.

### III. CORPORATE GOVERNANCE

As mentioned above,<sup>30</sup> one can make the argument that Carreyrou seems to be relatively unconcerned with “corporate governance” as a legal concept, mentioning it only twice in the book. At one level, this cannot possibly be true. Corporate governance, at its broadest, refers to the systems and relationships, both formal and informal, that determine how a corporation is run.<sup>31</sup> Accepting this definition of “corporate governance”, virtually everything discussed in *Bad Blood* could conceivably fall within its ambit. Carreyrou simply cannot avoid the law.

However, it is equally important to give Carreyrou the benefit of the doubt. He is a journalist trying to tell a compelling story, not a lawyer trying to deliver a comprehensive commentary on issues of corporate governance. As alluded to above, the story he is trying to elucidate is an inherently “human” story, with only tangential references to statutes and regulatory instruments.

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<sup>30</sup> *Supra* note 1, at 36, 227.

<sup>31</sup> Guhan Subramanian, “Corporate Governance 2.0” (March 2015) Harvard Bus Rev online: <<https://hbr.org/2015/03/corporate-governance-2-0>> [perma.cc/3UJE-VN2K].

We believe that Carreyrou is using the term “corporate governance” in a more technical sense, referring to the official decisions of the board of directors, and the information used to make them. While it is true that the board of directors are given relatively short shrift in Carreyrou’s account, the reality is that the board of directors is supposed to either manage the business and affairs of the corporation, or supervise the management of the same.<sup>32</sup> For us, there was a short passage near the end of *Bad Blood* that clearly demonstrates the reason why this is especially important in a company like Theranos. Carreyrou wrote as follows:<sup>33</sup>

Holmes knew exactly what she was doing and she was firmly in control. When one former employee interviewed for a job at Theranos in the summer of 2011, he asked Holmes about the role of the company’s board. She took offense at the question. “The board is just a placeholder,” he recalls her saying. “I make all the decisions here.” Her annoyance was so palpable that he thought he’d blown the interview. Two years later, Holmes made sure that the board would never be more than a placeholder. In December 2013, she forced through a resolution that assigned one hundred votes to every share she owned, giving her 99.7 percent of the voting rights. From that point on, the Theranos board couldn’t even reach a quorum without Holmes. When he was later questioned about board deliberations in a deposition [typically referred to as an “examination for discovery” in Canada<sup>34</sup>], George Shultz said, “We never took any votes at Theranos. It was pointless. Elizabeth [Holmes] was going to decide whatever she decided.” This helps explain why the board never hired a law firm to conduct an independent investigation of what happened. At a publicly traded company, such an investigation would have been commissioned within days or weeks of the first media revelations. But, at Theranos, nothing could be decided or done without Holmes’s assent.

There are lessons to be taken from this short excerpt by members of the board of any corporation, whether public or private. In this section of the review, I will deal with this excerpt up to the end of the quotation from George Shultz. In the next section of the review, I will deal with Carreyrou’s assertion of the differences between public and private companies.

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<sup>32</sup> From the Canadian perspective, see for example, the *Canada Business Corporation Act*, RSC 1985, c C-44 [CBCA], ss 102(1). The U.S. takes a similar approach on this issue. See Alex Knell, *Corporate Governance: How To Add Value To Your Company*, 1st ed (Boston: CIMA Publishing, 2006) at 233-234.

<sup>33</sup> *Bad Blood*, *supra* note 1, at 298 [emphasis added].

<sup>34</sup> Linda Abrams & Kevin Patrick McGuinness, *Canadian Civil Procedure Law*, 2nd ed (Toronto: LexisNexis Canada, 2010) at §13.138 [emphasis added].

### A. *The By-laws*

The first lesson to be taken from this excerpt is a drafting lesson about company by-laws. Assuming Carreyrou's assertion is accurate that there was no quorum at a meeting of the board of directors without Holmes present, this is a mistake of drafting. It is a mistake on two levels. Firstly, even absent any wrongdoing by any executive at Theranos, imagine the following scenario: Elizabeth Holmes gets hit by a bus, and is either in a coma or killed as a result. If there is no meeting without her in particular, the board generally cannot act.<sup>35</sup> In this hypothetical scenario, Theranos has not only lost its CEO during the period of her incapacitation, but its board of directors may be unable to act in the interim without other legal steps being taken that may be outside the control of the corporation, such as the appointment of power of attorney or substitute decision-maker with respect to her property.<sup>36</sup> The corporation may be paralyzed because of the way its by-laws are drafted.

Secondly on this point, even if there were no wrongdoing at all within Theranos, once a person becomes aware that he or she has an effective veto over decision-making simply by refusing to show up for a meeting, that person may be able to use that reality to effectively control all decisions

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<sup>35</sup> For an example of a case where the by-laws of a corporation (referred to as the articles of association under the English system of company law under the case arose) made it impossible for the board to have a proper meeting under the circumstances where a single director was absent, see *Freeman & Lockyer v Buckhurst Park Properties (Mangal) Ltd*, [1964] 2 QB 480 (CA). Interestingly, though there was never a valid meeting of the board of directors, the Court of Appeal nonetheless held that the board made a representation to the outside world that one of their members (Kapoor) could carry out the duties of managing director, despite the lack of a valid appointment to this position by the board of directors.

<sup>36</sup> American Bar Association, "Power of Attorney" (2023), online: *American Bar Association* <



made at the board level.<sup>37</sup> This is not a good process for corporate affairs.<sup>38</sup> The goals of a corporation can rarely be met by a single person. Regardless of how visionary or talented such a person is, the achievement of success is rarely something that can be placed on the shoulders of one person alone. The more centralized that decision making appears to be, in my view, the more important it is that others with decision-making power (such as a board of directors) must be vigilant in their oversight.

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<sup>37</sup> Technically, under Canadian law, this would likely be a violation of the duty of care, skill and diligence by any officer, director or any person carrying out the duties of such positions would owe to the corporation, and possibly others. Diligence likely requires that a person who holds this duty must show up for meetings. Early British case law did not suggest that this was the case. On this point, see *Re Cardiff Savings Bank*, [1892] 2 Ch 100 (Ch). The documents that were meant to form the foundation of the CBCA, *supra* note 32, showed an attempt to raise the level of the duties of care, skill, and diligence significantly. See RWV Dickerson, JL Howard & L Getz, *Proposals for a New Business Corporations Law for Canada* (1971), Volume I, at 83, para 242. See CBCA, para 122(1)(b).

Case law under the CBCA has followed the same basic idea. Recent case law suggests that the duties of care, skill, and diligence are objective in nature. See *Peoples Department Stores Inc (Trustee of) v Wise*, [2004] 3 SCR. 461, *per* Justices Major and DesChamps in joint reasons, writing for the Court.

Objectively, in my view, diligence requires a commitment to show up to meetings whenever reasonably possibly. Thus, currently, active work on the part of a director to show up for the meetings for he, she or they is available is objectively reasonable, and a matter of diligence, in my view. In other words, not showing up for meetings without excuse will make a director liable to the corporation, creditors, and possibly others who are negatively affected as a result of this negligent behaviour.

<sup>38</sup> All directors and officers of a corporation (and anyone else who fills similar roles, for that matter) owe a fiduciary duty to the corporation. The fiduciary duty requires a fiduciary (in this case, a corporate director or officer) forgo his, her, or their personal interest in favour of the interest of the beneficiary of the fiduciary duty (in this case, the corporation). See CBCA, *ibid*, para 122(1)(a).

One of the obligations of a fiduciary is to avoid self-dealing transactions with the beneficiary. See *UPM-Kymmene Corp v UPM-Kymmene Miramichi Inc*, [2002] OJ No 2412 (Sup Ct), *aff'd* [2004] OJ No 636 (CA). Under the former common law, there was no question as to the fairness of a self-dealing transaction. See *Aberdeen Railway Co v Blaikie Bros*, [1843-60] All ER 249 (HL(Scotland)). The CBCA (in particular, section 120 thereof) relaxes some of the strictness of this rule. However, the section requires, among other elements, both that: (a) the transaction be fair and reasonable to the corporation at the time it is entered into, and (b) either (i) the uninterested directors (that is, those directors without a conflict of interest) or (ii) two-thirds of the shareholders of the corporation approve the transaction.

In fact, the very existence of separation between officers of a corporation, on the one hand, and the board of directors, on the other, validates this view. While there can be a single-member board, it is very difficult for a single person to oversee all the operations and decision-making in a corporation once it reaches a large enough size. It is important to remember that the board will oversee the management of the corporation. If oversight is expected, this acknowledges that no single individual, no matter how talented, is infallible. The separation between day-to-day management (usually conducted by the officers of the corporation, as selected by the board<sup>39</sup>), on the one hand, and the board itself (which will generally meet anywhere between twice and eight times per year), on the other, is generally designed to establish different roles.

### ***B. The Need for Oversight***

At least in theory, the board does large-scale strategic thinking.<sup>40</sup> The officers are the instruments through which this strategic vision is put into practice. Why then, would there be a need to have officers as members of the board? In theory, the reason for this should be that the officers are better acquainted with the capacities of the corporation's workforce than is anyone else, including the outside or non-executive directors,<sup>41</sup> VanDuzer suggests

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<sup>39</sup> CBCA, *ibid* s 121.

<sup>40</sup> J Anthony VanDuzer, *The Essentials of Canadian Law – The Law of Partnerships & Corporations*, 4<sup>th</sup> ed (Toronto: Irwin Law, 2018), [VanDuzer] at 569.

<sup>41</sup> The first of these names (“outside directors”) is more common in North America. See VanDuzer, *ibid* at 583. The second alternative (“non-executive directors”) is more common in Europe. For example, see Sir Derek Higgs, *Review of the role and effectiveness of non-executive directors* (London, UK: The Department of Trade and Industry, 2003), available online: <https://webarchive.nationalarchives.gov.uk/ukgwa/20121212135622/http://www.bi.gov.uk/files/file23012.pdf>.

Technically, the two terms are not necessarily interchangeable, in the sense that there can be directors who are employees of the corporations who are not executives of the corporation. The CBCA seems to recognize this somewhat obliquely. See CBCA, *supra* note 32, at s-s 102(2). However, this is much more common in jurisdictions, such as Germany, where there are two boards, instead of a unitary board. In Germany, a majority of the upper supervisory board must be employees. See Claus Buhleier & Kai Bruehl, “The German Supervisory Board: A Practical Introduction for US Public Company Directors” (2021) at 5, online (pdf): [Deloitte < https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Risk/gx-german-supervisory-board-publication.pdf >](https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Risk/gx-german-supervisory-board-publication.pdf) [perma.cc/BB2T-CL2M].

that though this may be the role of the board of directors in theory, the reality in many corporations may be different than the theory. He writes as follows:<sup>42</sup>

Research has shown that outside directors tend to defer to management because of what Mace called a “culture of deference.” Outside directors are often picked by management and may receive substantial compensation from the corporation. Sometimes an outside director of one corporation is also the chief executive of another and may have picked the chief executive of the first corporation to be on their board. In this situation, each has a reciprocal interest in not challenging the other’s authority around the boardroom table. Similarly, it is common for professionals such as lawyers, financial advisers, and investment dealers to be on the boards of corporations that are their clients. For these directors, challenging management may put substantial fee revenue at risk. These reservations should not be taken as suggesting either that outside directors are incapable of meeting their obligations to the corporation or that substantial delegation to management is not permitted by the CBCA. As discussed [earlier in VanDuzer’s book], such delegation is expressly allowed. Nevertheless, there are factors militating against boards of directors playing the kind of effective supervisory role that the CBCA seems to contemplate, and corporate law rules which assume that they do, may be ineffective.

Whatever the reality, there is a separation between the duties of the board, on the one hand, and the duties of the officers, on the other, though the former may rely on the latter in executing those duties. This separation suggests that at least some oversight is expected by the board. The excerpt from *Bad Blood*<sup>43</sup> implies, if not says directly, this oversight was not being exercised at all by the board of Theranos. Where people of sterling reputation are brought onto a board, particularly where more than one of them has no particular expertise in the central cog in the value proposition of the corporation,<sup>44</sup> why then, are those people on the board? In my view,

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<sup>42</sup> VanDuzer, *ibid* at 583 [internal footnotes omitted].

<sup>43</sup> *Bad Blood*, *supra* 1.

<sup>44</sup> In my view, the primary value proposition of Theranos was the idea that by buying the Theranos product, patients could test their blood and catch and prevent serious disease and premature death. This is consistent with Holmes’s avowed purpose of ensuring that no one loses a loved one too soon. See *supra* note 14.

Theranos’s board included at various times, Channing Robertson, a well-regarded professor of engineering at Stanford University, General James Mattis (US Army, retired), the former Commander of U.S. Central Command, a command that includes the entire Middle East, and later Secretary of Defense under President Donald J Trump,

there are at least two reasons that need to be discussed. The first is reputational. The second is a desire by the board members to do oversight.

In terms of reputational reasons for placing members on the board, where a potential board member has a sterling reputation, there is often an association of that reputation with the reputation that can or will be ascribed to the company. In other words, a potential investor when looking at a board that contains people with sterling reputations might reasonably be heard to ask: “Person X is a board member. Person X has a reputation for making good decisions over an extended period of time. As a board member, Person X has access to information about the corporation which I do not. This information has convinced Person X of the viability of the business and the capacity of the executive team of the corporation to make the correct decisions to allow the business to flourish. Surely, the involvement of Person X provides me, as a potential investor, with a certain degree of comfort that the corporation at least has a high probability of delivering on its promises. Otherwise, Person X would not risk his, her or their reputation by becoming involved in a corporation that would take undue risk.”

While this reputational association may or may not be accurate (and generally is not justified in cases of corporate scandal<sup>45</sup>), the desire to achieve this association in the minds of investors may mean that there are people with reputational capital brought on to the board. However, these people may not have much knowledge of the actual technology that the corporation is trying to develop. This is not necessarily a bad thing. If the officers and other people who have significant technical knowledge have to explain to

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and George Shultz (the former U.S. Secretary of State under President Ronald Reagan). At most, only one of these (Robertson) might be considered as relevant to the engineering of the device that would be testing. The remainder of those mentioned would have neither the technical acumen nor the market expertise to meaningfully help the executives of the corporation.

<sup>45</sup> For an example of a Canadian scandal where it appears persons of high reputation were put on a board for reputational purposes, former Ontario Premier The Honourable David Peterson was embroiled in a scandal with YBM Magnex International Inc. See *In the Matter of The Securities Act, RSO 1990, c S5, as amended, and YBM Magnex International Inc., Harry W Antes, Jacob G Bogatin, Kenneth E Davies, Igor Fisherman, Daniel E Gatti, Frank S Greenwald, R Owen Mitchell, David R Peterson, Michael D Schmidt, Lawrence D Wilder, Griffiths Mcburney & Partners, National Bank Financial Corp(formerly known as First Marathon Securities Limited)* available online: <https://www.capitalmarketstribunal.ca/en/proceedings/ybm-magnex-international-inc-re/reasons-matter-ybm-magnex-0>.

neophytes what the technology does and how it does it, this may ensure that the technology can be easily understood by the target market. But this depends on the idea that the neophyte is willing to ask questions, so as to force those who are more knowledgeable to share that knowledge with the other members of the board.

In other words, the board members, regardless of their level of technical acumen, must be willing to actually oversee management. The idea that the board of Theranos never took any decision because its CEO so controlled the board that whatever her wish was, this quickly became the command of the board is antithetical to proper oversight of management by the board. Proper oversight is the reason that the board is in place. If the board is never willing to ask questions of management, it is not doing its job.

Oversight is particularly important in the face of a charismatic leader like Elizabeth Holmes. Near the end of his book, Carreyrou lists all of the prominent men who were taken in by her charismatic personality.<sup>46</sup> Put another way, the more one has faith in a particular individual, the more one should be cautious. Oversight is about evidence. Faith, on the other hand, is about belief in an individual or idea in the absence of evidence. While any idea requires a bit of faith at the beginning, to give a reasonable opportunity to see whether the idea has the possibility of success at the point where many people have invested millions of dollars in the idea, faith in an individual must be replaced by, or at least supplemented by, genuine evidence that does not depend on the individual.

In the case of Theranos, what makes this lack of oversight even more reprehensible is that the person who was most likely to need oversight (Elizabeth Holmes) seems to be fully aware that the board that she had selected would be either unwilling or unable to provide meaningful oversight. Put another way, it appears that the person who was meant to be overseen was fully aware that she had *carte blanche*, and that there was no meaningful oversight at all. Even if there were no meaningful object to the oversight, if the people to be overseen believed that they were subject to oversight, this might very well have rectified any potential misbehaviour. At Theranos, it appears that even the notional threat of oversight was known to be an empty one.

One additional point deserves to be mentioned here. An astute reader might point out that as the largest shareholder, Elizabeth Holmes could

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<sup>46</sup> Bad Blood, *supra* note 1, at 299.

clearly elect the board. If the current board did not do what Elizabeth Holmes wanted, she could simply replace them.<sup>47</sup> While this is likely practically true, such replacement would serve as a type of early-warning system for investors. When a leader cannot accept criticism, and takes steps to squelch dissent by replacing those who are supposed to provide oversight, or makes it clear that she does not accept oversight at all, the public dismissal of oversight should be a serious warning to all investors. In fact, if: (i) I were on the board, and (ii) had the reputation of those on the board of Theranos, and (iii) I was not allowed to do the type of oversight that I thought was either necessary or legally required, (iv) not only would I resign from the board, but (v) I would make this withdrawal as “noisy” as possible. My withdrawal would be meant to serve as that early warning to investors.

#### IV. “PRIVATE COMPANY, PUBLIC IMPACT”?

This section is about the regulatory approach to companies that are simultaneously both “private” and “public”. The former word is used in the sense of our securities law, in that it is exempt from the prospectus requirement<sup>48</sup> contained in, for example, the *Securities Act* of Ontario,<sup>49</sup> and similar statutes across the country, as well as similar rules provided by the US Securities and Exchange Commission (the “SEC”) under the auspices of the *Securities and Exchange Act of 1934*.<sup>50</sup> Somewhat paradoxically, I use the latter word in the sense of public participation with the power to influence legal developments, and negatively affect not only investors and employees but the general public as well.

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<sup>47</sup> See CBCA, *supra* note 32, s 109.

<sup>48</sup> Christopher C Nicholls, *The Essentials of Canadian Law - Securities Law*, 2<sup>nd</sup> ed (Toronto: Irwin Law, 2018) at 195-231.

<sup>49</sup> RSO 1990, c S5.

<sup>50</sup> *Securities and Exchange Act*, 15 USC § 78a (1934). To be clear, it is not our goal herein to compare or contrast the Canadian system of securities law and regulation with that of its neighbour to the south. Rather, we point this particular similarity to show that, whatever other differences there are in this area of law – the preeminent position of the SEC as the national regulator in the US, while Canada does not even have a single national regulator despite acknowledged constitutional authority to create one for some purposes (see *Reference re: Pan-Canadian Securities Regulation*, 2018 SCC 48 at para 129) is but one obvious example – these differences do not, in my view at least, detract in any meaningful sense from the lessons that can be drawn from the events covered by Carreyrou.

It is in this area that the term “unicorn”, as used in the title of this contribution, becomes the most relevant. In chapter 15 of his book, Carreyrou uses this term as its title.<sup>51</sup> Carreyrou writes about the term “unicorn” as follows:<sup>52</sup>

By the fall of 2013, money was flowing into the Valley [Silicon Valley in Northern California] ecosystem at such a dizzying pace that a new term was coined to describe the new breed of startups it was spawning. In an article on the technology news website TechCrunch on November 2, 2013, a venture capitalist named Aileen Lee wrote about the proliferation of startups valued \$1 billion<sup>[53]</sup>. She called them “unicorns.”

Despite their moniker, these tech unicorns were no myth: by Lee’s count, there were thirty-nine of them – a number that would soar past one hundred.

Instead of rushing to the stock market like their dot-com predecessors had in the late 1990s, the unicorns were able to raise staggering amounts of money privately and thus avoid the close scrutiny that came [sic]<sup>54</sup> with going public.

The poster child for the unicorns was Uber, the ride-hailing smartphone app cofounded by the hard-charging engineer Travis Kalanick. A few weeks before Elizabeth’s *Journal* interview, Uber had raised \$361 million at a valuation of \$3.5 billion. There was also Spotify, the music streaming service that in November 2013 raised \$250 million at a price that valued the whole company add \$4 billion.

These companies’ valuations would keep rising over the next few years, but for now they had been leapfrogged by Theranos. And the gap was about to get bigger.

It is understood that the suggestion that is about to be made may be considered provocative by some. In fact, it is hoped that it will be provocative. We hope it provokes discussion amongst those in both the academic and business worlds who are interested in these issues. We are going to suggest that when the investment in a corporation reaches a

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<sup>51</sup> Bad Blood, *supra* note 1, at 174.

<sup>52</sup> *Ibid*, at 178-179. [underlining added]

<sup>53</sup> We are am presuming that Carreyrou is basing his calculations in US Dollars. We make this presumption given that (i) Theranos was a US-based corporation; and (ii) Carreyrou was writing for a publication (the *Wall Street Journal*) also based in the US; and (iii) the US dollar is generally accepted as the currency for commerce.

<sup>54</sup> We believe that the term “would have come” is more accurate, given that the unicorns have, at least in most cases, avoided going public.

significant size, or its own valuation indicates that the corporation itself believes then it is of a particular size, even if the corporation does not otherwise meet criteria to be considered “public”, the obligation to disclose information similar to that for public corporations should be imposed. Figuring out what the number would be that would trigger the imposition of these obligations would potentially be a nuanced one. Nonetheless, in my view, we should not be afraid of nuance.

There may be those who would claim that this is without precedent, that placing a regulatory burden on the corporation simply because of its size is unjustified. However, in my view, competition law in Canada would suggest otherwise. The need to notify the government of certain types of transactions is built into the *Competition Act*.<sup>55</sup> If the assets of, sales in, from or into Canada of the parties to a transaction reach over a specific monetary threshold, in general, this can potentially activate a notification requirement with respect to the transaction.<sup>56</sup>

The reason I make this argument here is that in my view, Theranos was anything but “private”. Holmes clearly used connections to both former and (at the time) current government officials (Henry Kissinger,<sup>57</sup> George Shultz<sup>58</sup> and even then-Vice-President Joe Biden<sup>59</sup> come to mind in this regard) to give legitimacy to the corporation and its activities. One of the photographs in one edition of the book shows Holmes attending an official White House event during the Obama administration.<sup>60</sup> Theranos was able to use its influence in a way that caused the state of Arizona to change its laws in a way that allowed individuals to order their own blood tests, without going to a doctor.<sup>61</sup> This would clearly benefit Theranos, in that it

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<sup>55</sup> RSC 1985, c C-34.

<sup>56</sup> See, for example, sections 109 and 110 of the *Competition Act*, *ibid*.

<sup>57</sup> *Bad Blood*, *supra* note 1, at 181. Kissinger was the US Secretary of State under Presidents Richard M Nixon and Gerald R Ford. Kissinger also served as the National Security Adviser under President Nixon.

<sup>58</sup> *Ibid*, at 229. For a brief discussion of at least part of Shultz’s public service, see the main text associated with note 28, *supra*.

<sup>59</sup> *Ibid*, at 263. Joseph Robinette (“Joe”) Biden Jr was a US senator from Delaware from 1973 to 2009, and the Vice-President of the United States from 2009 to 2017, under President Barack Hussein Obama (the period referred to in the book). He is also the 46<sup>th</sup> and current President of the United States (2021-present).

<sup>60</sup> See First Vintage Books edition (January 2020, softcover) of *Bad Blood*.

<sup>61</sup> *Bad Blood*, *supra* note 1, at 259.



removed the middleman (the doctor) and allowed individuals to pay Theranos directly for tests that presumably, a doctor would not believe were medically necessary. The problem with this approach is not only the lack of an element medical necessity, however.

The real problem was that the technology that Theranos purported to use to produce these blood tests was inherently unreliable.<sup>62</sup> Needing a doctor to review the symptoms which a patient is suffering prior to ordering blood tests ensures that an expert is guiding the process. While the change to the law may well have served the bottom line of the corporation, it did not make quality healthcare more affordable, since the tests offered by Theranos were not of reliable quality.<sup>63</sup>

In the scenario that is being posited here, securities regulation is not simply in place to protect investors, though that is its primary purpose.<sup>64</sup> In our view, one of the secondary purposes of securities regulation is to force into the “marketplace of ideas”<sup>65</sup> those ideas that have been used to draw significant monies out of investors. When a corporation and its products attempt to engage with the public as a whole, particularly where the consequences if the company misbehaves would be not only financial, but fundamentally about a basic tenet of life as we know it (in the case of Theranos, obviously the issue would be the physical health of its customers), there is a strong public-policy reason to ensure that the quality of the product is tested not only by regulators, but it is also available to be tested by others.

Earlier, we used the term “marketplace of ideas”. Although this is typically referred to in free-speech cases, particularly in the US,<sup>66</sup> in our view, in situations such as this, the marketplace analogy and the importance of ideas and their rigorous testing by people operating in the real world becomes an integral component of ensuring that the ideas and technology

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<sup>62</sup> *Ibid*, at 226.

<sup>63</sup> *Ibid*.

<sup>64</sup> *Supra* note 48 at 27.

<sup>65</sup> David Schultz, “Marketplace of Ideas” (last modified June 2017), online: *Free Speech Center at Middle Tennessee State University* <<https://www.mtsu.edu/first-amendment/article/999/marketplace-of-ideas>> [<https://perma.cc/JU6P-88DJ>].

<sup>66</sup> Timothy J O’Neill, “Abrams v United States (1919)” (2009), online: *Free Speech Center at Middle Tennessee State University* <<https://mtsu.edu/first-amendment/article/328/abrams-v-united-states>> [<https://perma.cc/DV4G-KFSS>].

arising from them are in fact sound. By forcing inventors and other adventurers to have their ideas tested, we ensure that the results of technology are more difficult to manipulate.

Throughout the book, Carreyrou provides multiple examples of Elizabeth Holmes and her executives by any of the following methods: hiding the unreliability of the technology by providing false data in contrived test scenarios,<sup>67</sup> creating fake labs for VIP tours,<sup>68</sup> ignoring or otherwise dismissing issues of variance in runs designed to test the consistency of the machine,<sup>69</sup> or attempting to control the opportunity for regulators to examine the testing facilities.<sup>70</sup> Since Theranos controlled the testing, manipulating the results was easier than would otherwise be the case. If, on the other hand, society were to require more information to be provided as to the elements of the business, including, but not necessarily limited to, the actual state of the technology, this would make lying about the technology less likely to mislead the public. This would allow critics (or others) to use the technology in real-world situations in a testing scenario. In this case, any difficulties with the core of the business are more likely to be discovered more quickly than if this does not occur.

Paradoxically, it was in Arizona, where Theranos had had some its greatest successes in changing laws to allow individuals to order their own blood tests<sup>71</sup> that may have also been the state that led to its downfall. At least some doctors in the state were skeptical of the claims by Theranos. So, when patients got results that were not the same as the prior doctor-ordered tests of the same type, the doctors stepped forward to protect their patients.<sup>72</sup> The risks for the patients were clear, but there were risks for the doctors as well. If the patients had believed that the doctors were standing in the way of progress, the trust that is inherently necessary in the doctor-patient relationship could have been broken, exposing the patients to even greater risk. In other words, Elizabeth Holmes, despite her prison sentence,<sup>73</sup> may have been very fortunate indeed. It does not appear that

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<sup>67</sup> Bad Blood, *supra* note 1, at 7.

<sup>68</sup> *Ibid.*, at 253.

<sup>69</sup> *Ibid.*, at 190-191.

<sup>70</sup> *Ibid.*, at 221.

<sup>71</sup> *Ibid.*, at 259.

<sup>72</sup> *Ibid.*, at 257-258.

<sup>73</sup> *Supra* note 6.

any patients died as a result of her actions, though her connection to the suicide of Ian Gibbons remains morally ambiguous on this front<sup>74</sup> (though Holmes’s lack of legal culpability seems clear).

## V. CONCLUSION

In the end, there may be people who think that this was a fundamentally American tragedy, and that there is little for Canadian law to take away from it. As the preceding pages make clear, we disagree. We don't have our own version of Theranos before we take steps to avoid a meltdown of a single, allegedly “private” corporation that will have widespread economic and other effects. We can start talking about when a supposedly private business becomes powerful enough to warrant further government intervention. We can also talk about what we expect from directors of these large companies. This review is our attempt to both start and weigh in on the conversation that we believe that we, as a society, need to have.

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<sup>74</sup> See the text associated with notes 22-25, *supra*.

APPENDIX “A”

Date/Date Range	Event	Footnote
Late 2003 - Early 2004	Holmes drops out of Stanford at age 19; incorporates the company as “Real-Time Cures” before later changing the name to “Theranos”.	75
May 2004	Shaunak Roy is hired as the first employee and granted minority stake; Dr. Channing Robertson joins Theranos as an adviser.	76
2004	Theranos raises \$6 million (US) from investors who included venture capitalists and Holmes family connections.	77
December 2005	Theranos raises a further \$9 million (US) in second funding round; including from Don Lucas and Larry Ellison.	78
April 24, 2006	Richard Fuisz files patent application for physician alert mechanism that could be embedded in at-home blood testing devices - anticipating it could block Theranos and lead to his patent being acquired.	79

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<sup>75</sup> Bad Blood, *supra* note 1 at 14-15.

<sup>76</sup> *Ibid* at 14.

<sup>77</sup> *Ibid* at 16.

<sup>78</sup> *Ibid* at 20, 22.

<sup>79</sup> *Ibid* at 61.

November 2006	CFO Henry Mosely is fired for expressing concerns about falsehoods being conveyed to investors.	80
August 2007	Pfizer commissions Theranos for pilot project in Tennessee on cancer patients.	81
August 27, 2007	Theranos sues three former employees for stealing its IP. Theranos enlists the help of the FBI; see <i>Theranos Inc. v. Avidnostics Inc.</i> , California Superior Court in Santa Clara.	82
Late 2007	Employees including Gary Hewett, Edmond Ku and his whole team, are fired for expressing concerns;  Shaunak Roy departs Theranos because he is unsettled by turnover, toxic environment and lawsuit hysteria.	83
Summer 2007	Holmes recruits several Apple employees.	84
October 2007	Meeting of board compensation committee where Holmes made plan to create foundation for tax-planning purposes, giving her	85

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<sup>80</sup> *Ibid* at 7.

<sup>81</sup> *Ibid* at 23.

<sup>82</sup> *Ibid* at 25.

<sup>83</sup> *Ibid* at 28-29.

<sup>84</sup> *Ibid* at 30.

<sup>85</sup> *Ibid* at 36.

	more control; Avie Tevanian objects as a board member and was harassed, threatened and eventually forced to resign.	
March 2008	Todd Suredy and Michael Esquivel approach Tom Brodeen and Don Lucas (members of the Theranos board) to share concerns that revenue projections being shown to board were exaggerated.	86
March 2008	Emergency board meeting - the board considers evidence and votes to remove Holmes as CEO. Holmes convinces them to let her stay as CEO. She promptly fires Todd Suredy and Michael Esquivel.	87
Early 2009	Pfizer ends relationship with Theranos, underwhelmed with results of pilot project.	88
September 2009	Ramesh “Sunny” Balwani joins Theranos as Chief Operating Officer; he is Ms. Holmes then-boyfriend.	89
2010	Theranos enters into significant agreements with Walgreens and Safeway.	90
2011	Former US secretaries of state, George Shultz and Henry	91

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<sup>86</sup> *Ibid* at 50.

<sup>87</sup> *Ibid* at 51.

<sup>88</sup> *Ibid* at 74.

<sup>89</sup> *Ibid* at 68.

<sup>90</sup> *Ibid* at 87, 91.

<sup>91</sup> *Ibid* at 181.

	Kissinger join board, among other high- profile board members.	
October 29, 2011	Richard Fuisz served with lawsuit for allegedly stealing Theranos IP through his son, John.	92
August 13, 2012	Gary Yamamoto from Centers for Medicare and Medicaid Services arrives unannounced to inspect Theranos after receiving complaint.	93
Fall 2012-Spring 2013	Marketing campaign with Chiat\Day “Project Stanford” This was the same agency used by Apple under Steve Jobs as part of its marketing plan.	94
April 2013	Ian Gibbons takes his own life after being set to testify in the Fuisz case.	95
Summer 2013	Alleged “commercial launch” of Theranos technology	96
Summer 2013	Siemens ADVIA 1800 machines are hacked to make compatible with finger-stick blood samples.	97
September 9, 2013	Lucas Venture Group invited to invest up to \$15 million	98

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<sup>92</sup> *Ibid* at 132.

<sup>93</sup> *Ibid* at 126.

<sup>94</sup> *Ibid* at 150.

<sup>95</sup> *Ibid* at 148.

<sup>96</sup> *Ibid* at 159.

<sup>97</sup> *Ibid* at 169.

<sup>98</sup> *Ibid* at 177.

	(US) putting Theranos at a \$6 billion (US) valuation.	
November 2013	Inspector from the Laboratory Field Services division of the California Department of Public Health comes for a lab inspection; is purposely not shown the whole lab.	99
December 2013	Holmes forced the adoption of a board resolution assigning 100 votes to each of her shares; this is significant, as she now owned 99.7% of the voting rights in Theranos.	100
February 4, 2014	Partner Fund invests \$96 million (US) valuing Theranos at \$9 billion (US).	101
March 2014	Tyler Shultz submits an anonymous complaint about Theranos cheating the Proficiency-testing program.	102
March 2014	Richard and Joe Fuisz settle Theranos lawsuit, and they withdraw their patent.	103
2014	Holmes is on the cover of the “Forbes 400” issue of <i>Forbes</i> magazine, focused on richest people in America; explosion of media coverage; <i>Time</i> named her one of the hundred	104

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<sup>99</sup> *Ibid* at 189.

<sup>100</sup> *Ibid* at 298.

<sup>101</sup> *Ibid* at 183.

<sup>102</sup> *Ibid* at 195.

<sup>103</sup> *Ibid* at 203.

<sup>104</sup> *Ibid* at 208.



	most influential people in the world.	
February 2015	Article in the <i>New Yorker</i> criticized Theranos for lack of scientific data.	105
March 2015	Another funding round brings in \$430 million (US), including \$125 million (US) from Rupert Murdoch.	106
June 23, 2015	Meeting between <i>Wall Street Journal</i> and Theranos lawyers.	107
July 2015	The US Food and Drug Administration approves a Theranos proprietary finger-stick test for HSV-1.  A new law in Arizona is passed allowing citizens to get their blood tested without a doctor’s prescription; Theranos had done significantly lobbying in favour of this legislative change.	108
October 15, 2015	<i>Wall Street Journal</i> publishes a front-page story detailing Theranos’s fraudulent and misleading behaviour.	109
October 2015	The Food and Drug Administration releases findings that Theranos used	110

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<sup>105</sup> *Ibid* at 224.

<sup>106</sup> *Ibid* at 268.

<sup>107</sup> *Ibid* at 250.

<sup>108</sup> *Ibid* at 259.

<sup>109</sup> *Ibid* at 273.

<sup>110</sup> *Ibid* at 274.

	unapproved medical devices for testing.	
January 2016	US Centers for Medicare & Medicaid Services (CMS) releases a report detailing serious deficiencies at Theranos.	111
2016	Balwani takes the fall for the CMS report; he is fired; Theranos voids tens of thousands of patient tests.	112
June 12, 2016	Walgreens ends Theranos partnership and closes all its wellness centres.	113
July 2016	CMS bans Theranos from the laboratory testing business.	114
October 2016	Partner Fund Management sues Theranos for securities fraud; the case is later settled.	115
October 2016	Theranos closes down a lab it had previously operated in Arizona.	116
November 2016	Walgreens sues Theranos for breach of contract, seeking \$140 million	117
April 2017	Theranos settles with the Arizona Attorney General and pays \$4.65 million fine to partially reimburse citizens	118

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<sup>111</sup> *Ibid* at 285.

<sup>112</sup> *Ibid* at 289.

<sup>113</sup> *Ibid*.

<sup>114</sup> *Ibid*.

<sup>115</sup> *Ibid* at 292.

<sup>116</sup> *Ibid* at 293.

<sup>117</sup> *Ibid*.

<sup>118</sup> *Ibid* at 293.

	who received now-voided blood testing results.	
March 14, 2018	US Securities and Exchange Commission charges Theranos, Holmes and Balwani with fraud; Holmes stripped of her stake in and control of Theranos.	<sup>119</sup>

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<sup>119</sup> *Ibid* at 296.