

## Critical Issues Regarding the Employment of Blockchain in the Financial Credit Reporting Industry



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**ABSTRACT:** This paper aims to discuss the critical issues regarding the employment of blockchain by the credit reporting industry. Blockchain is a distributed database of bundled digital records that contains transactions that are typically available for public inspection. Blockchain has been marketed as a secure and safe means of storing data because of its distributed nature and because the data in a blockchain are immutable, meaning that it cannot be changed. Block chain also possesses the characteristic that no one individual can change or alter data once it has been recorded in a blockchain. The inability to change or delete data when it has been recorded is the core of the problem facing the credit reporting industry. The Fair Credit Reporting Act, the California Consumer Privacy Act, and other State privacy laws, the General Data Protection Regulation, and other privacy laws in foreign countries are at loggerheads with blockchain because they demand that consumers have the right to correct or delete their data. These laws will likely not change because of the very human desire for certain things to remain private. Although no technical solution is provided, the point of the paper is to demonstrate the need for blockchain to change technologically.

**KEYWORDS:** Blockchain, Credit Repair, Credit Repair Organizations Act of 1996 • Credit Reporting, Fair Credit Reporting Act Of 1970, Federal Reserve Regulation V, Human Trafficking, Right To Be Forgotten

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Donald L. Buresh earned his Ph.D. in engineering and technology management from Northcentral University. His dissertation assessed customer satisfaction for both agile-driven and plan-driven software development projects. Dr. Buresh earned a J.D. from The John Marshall Law School in Chicago, Illinois, focusing on cyber law and intellectual property. He also earned an LL.M in intellectual property from the University of Illinois Chicago Law School (formerly, The John Marshall Law School) and an LL.M. in cybersecurity and privacy from Albany Law School, graduating summa cum laude. Dr. Buresh received an M.P.S. in cybersecurity policy and an M.S. in cybersecurity, concentrating in cyber intelligence, both from Utica College. He has an M.B.A. from the University of Massachusetts Lowell, focusing on operations management, an M.A. in economics from Boston College, and a B.S. from the University of Illinois-Chicago, majoring in mathematics and philosophy. Dr. Buresh is a member of Delta Mu Delta, Sigma Iota Epsilon, Epsilon Pi Tau, Phi Delta Phi, Phi Alpha Delta, and Phi Theta Kappa. He has over 25 years of paid professional experience in Information Technology and has taught economics, project management, quality management, management of non-profits, negotiation skills, managerial ethics, and cybersecurity at several universities. Dr. Buresh is an avid Chicago White Sox fan and keeps active by fencing épée and foil at a local fencing club. Dr. Buresh is a member of the Florida Bar.

### LIST OF ABBREVIATIONS

Abbreviation	Description
ACDV	Automated Consumer Dispute Verification
AEPD	Agencia Española de Protección de Datos
AN	Audiencia Nacional
CCN	Corporate Credit Network
CCPA	Consumer Credit Protection Act of 1968
CCRRA	Consumer Credit Reporting Reform Act of 1996
CDC	Credit Data Corporation
CFPB	Consumer Financial Protection Bureau
CJEU	Court of Justice of the European Union
CNIL	Commission Nationale de l'Informatique et des Libertés

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CRA	Credit Reporting Agency
CROA	Credit Repair Organizations Act of 1996
Dodd-Frank	Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010
ECOA	Equal Credit Opportunity Act of 1974
EFTA	European Free Trade Association
Equifax	Equifax, Inc.
EU	European Union
EUCFR	European Union Charter of Fundamental Rights
Experian	Experian, PLC
FCRA	Fair Credit Reporting Act of 1970
FCRP	Federal Rules of Civil Procedure
FDCPA	Fair Debt Collection Practices Act of 1977
FIP	Fair Information Practices
FTC	Federal Trade Commission
FTSE	Financial Times Stock Exchange
GDPR	General Data Protection Regulation
GSCP	Goldman Sachs Capital Partners
GUS	The Great Universal Stores, Ltd.
IBN	Incorporation by Notice
LSE	London Stock Exchange
MDP	Madison Dearborn Partners
MTD	Motion to Dismiss
NYSE	New York Stock Exchange
OECD	Organisation for Economic Co-operation and Development
PII	Personally Identifiable Information
RCA	Retailers Commercial Agency
RCC	Retail Credit Company
Regulation V	Federal Reserve Regulation V
RJN	Request of Judicial Notice
Rule of 72	Rule of 72 states that if 72 is divided by an interest rate, the quotient is the number of years it takes for money to approximately double.
SMLSA	Spanish Ministry of Labor and Social Affairs
SOC	Standard Oil Company, Inc.
TILA	Truth in Lending Act of 1968
TransUnion	TransUnion, LLC
TRW	TRW, Inc.
TRW-ISSI	TRW Information Systems and Services, Inc.
UK	United Kingdom
UPS	United Parcel Service
USPS	United States Postal Service
UTCC	Union Tank Car Company

### INTRODUCTION

This paper aims to discuss the critical issues regarding the employment of blockchain by the credit reporting industry. The article is divided into six major sections. The first section addresses the federal laws and regulations regarding credit reporting. The next section talks about the preemption of state laws by the Fair Credit Reporting Act of 1970. The third section discusses credit reporting and the big three credit reporting agencies. The fourth section describes how credit reporting works and seven credit reporting legal cases in 2023. The fifth section defines blockchain and illustrates how the right to be forgotten and human trafficking seemingly violate blockchain's immutability characteristic. Finally, the paper concludes with the observations that the technological features of blockchain must change if it is to correctly model the right to be forgotten and the legal issues surrounding human

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trafficking. The essay provides no technical solution to the conundrum observed herein. The purpose of the paper is to demonstrate that the immutability of blockchain must change if it is to be used by credit reporting agencies without violating the law.

### FEDERAL LAWS AND REGULATIONS REGARDING CREDIT REPORTING

In this section, the Consumer Credit Protection Act (CCPA) of 1968, the Fair Credit Reporting Act (FCRA) of 1970, the Credit Repair Organizations Act (CROA) of 1996, and the Federal Reserve Regulation V (Regulation V) are discussed in turn.

#### Consumer Credit Protection Act of 1968

The CCPA is a federal law that Congress passed to protect consumers from banks, credit card companies, and other lenders.<sup>1</sup> The Act demands consumer lenders and auto-leasing companies disclose specific information to consumers. The CCPA obliges consumer lenders and auto-leasing firms to reveal the total cost of a loan or credit product, including how interest is calculated and any fees included.<sup>2</sup> The CCPA regulates credit reporting, prohibits deceptive advertising, and prevents discrimination by creditors. The law ensures that the terms of a loan are transparent to borrowers, particularly to those individuals who are not well-versed in banking and financing, by requiring financial institutions to explain financial terms in a language that the average consumer can easily understand. The CCPA was the basis for various consumer protection laws that covered lending, the disclosure of terms and conditions, and the collection and sharing of a consumer's credit and borrowing history.<sup>3</sup>

The Act's major provisions include Title I, which deals with consumer credit disclosure, also known as the Truth in Lending Act (TILA) of 1968. Title I of the CCPA contains chapters on credit transactions, advertising, billing, and consumer leases.<sup>4</sup> Title VI covers consumer credit reporting and is known as the Fair Credit Reporting Act of 1970.<sup>5</sup> Title VI ensures that consumer reporting agencies satisfy specific standards regarding the confidentiality, accuracy, relevance, and proper use of personally identifiable information (PII) they collect and maintain on consumers. Title VII is known as the Equal Credit Opportunity Act (ECOA) of 1974, which makes it illegal to discriminate against credit applicants based on race, sex, marital status, or age.<sup>6</sup> This essay aims to focus on the FCRA and its derivative statutes and regulations.

#### Fair Credit Reporting Act of 1970

The FCRA<sup>7</sup> was enacted to ensure further the accuracy, fairness, and privacy of personally identifiable information (PII) collected by credit reporting agencies (CRAs).<sup>8</sup> The FCRA amended 12 U.S.C.: Banks and Banking and 15 U.S.C.: Commerce and Trade<sup>9</sup> and is also known as Title VI of the CCPA.<sup>10</sup> CRAs collect financial information on individuals for credit card companies, banks, employers, landlords, and other interested parties. Although a complex statute that has been amended several times, the main purpose of the FCRA is to ensure that CRAs abide by reasonable procedures that safeguard the confidentiality, accuracy, and relevance of credit information. In furtherance of this goal, the FCRA created a framework, Fair Information Practices (FIP), for the collection, use, and removal of PII, including data security, use limitations, data destruction procedures, notice, consent by individuals, and accountability.<sup>11</sup> The FCRA was the first federal law to regulate personal information that was employed by businesses.<sup>12</sup>

Established in 1899, Retail Credit Co. was the first major credit reporting agency.<sup>13</sup> By the 1960s, CRAs were selling reports to insurers and employers that, in turn, used the reports to deny services and opportunities to individuals who could not find the information in their files.<sup>14</sup> At that time, investigators were required to fill derogatory information quotas, resulting in fabricated negative information and incomplete information. Investigators were also collecting "lifestyle" information, such as

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<sup>1</sup> Adam Hayes, What Is the Consumer Credit Protection Act (CCPA)? Definition, *Investopedia* (Jun. 30, 2022), available at <https://www.investopedia.com/terms/c/consumer-credit-protection-act-of-1968.asp>.

<sup>2</sup> *Id.*

<sup>3</sup> *Id.*

<sup>4</sup> DoJ Staff, Consumer Credit Protection Act - Public Law 90-321, Approved May 29, 1968 (82 Stat. 146, 15 U.S.C. 1601), *United States Department of Justice* (1976), available at <https://www.ojp.gov/ncjrs/virtual-library/abstracts/consumer-credit-protection-act-public-law-90-321-approved-may-29>.

<sup>5</sup> *Id.*

<sup>6</sup> *Id.*

<sup>7</sup> Pub. L. 91-508, available at <https://www.govtrack.us/congress/bills/91/hr15073/text>.

<sup>8</sup> EPIC Staff, The Fair Credit Reporting Act (FCRA), *Electronic Privacy Information Center* (n.d.), available at <https://epic.org/fcra/>.

<sup>9</sup> See 12 U.S.C. chapter 16 §§ 1830-1831, and 15 U.S.C. chapter 41 § 1681 et seq.

<sup>10</sup> DoJ Staff, *supra*, note 6.

<sup>11</sup> *Id.*

<sup>12</sup> *Id.*

<sup>13</sup> *Id.*

<sup>14</sup> *Id.*

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sexual orientation, marital status, drinking habits, and even cleanliness.<sup>15</sup> Many times, this information was relayed to law enforcement and unauthorized persons. Public scrutiny by Congress of the industry resulted in CRAs becoming regulated.

In 1970, Rep. Leonor Sullivan (D-MO) and Sen. William Proxmire (D-WI) guided the FCRA into law.<sup>16</sup> The FCRA was dramatically reformed by the Consumer Credit Reporting Reform Act (CCRRA) of 1996,<sup>17</sup> where the amendment permitted affiliate sharing of credit reports, prescreening of credit reports (unsolicited credit offers to specific consumers), and limited preemption of strong state credit laws. Essentially, CCRRA exploited the Supremacy Clause of the Constitution,<sup>18</sup> by diluting strong state credit laws. In 2003, Congress enacted the Fair and Accurate Credit Transactions Act (FACTA) of 1996.<sup>19</sup> The Act again preempted state privacy laws but allowed individuals to obtain a free credit report annually.<sup>20</sup> Thus, it can be seen that the purpose of the CCRRA and the FACTA was to weaken the FCRA, thereby shifting the pendulum somewhat back to the pre-1970 credit reporting situation. The idea was to restrict the individual rights described in the FCRA so that, once again, businesses could potentially discriminate against individuals.

### Credit Repair Organizations Act of 1996

The CROA<sup>21</sup> is a “federal law that was passed in 1996 in reaction to deceptive practices from companies that were preying on unsuspecting consumers.”<sup>22</sup> The Act aimed to protect consumers against unfair and deceptive business practices by credit repair organizations. Errors that a credit repair can correct are:<sup>23</sup>

- Accounts that do not belong to an individual;
- Bankruptcy or other legal actions that an individual did not incur;
- Misspellings and other incorrect information;
- Negative marks that are greater than seven years old; and
- Debts that cannot be validated and verified.

Credit repair services can range from \$70 to \$150 and may take several months.<sup>24</sup> Credit repair services may also be bundled with other financial services, such as credit monitoring or access to credit scores, thereby increasing the expense of credit repair.<sup>25</sup>

The CROA requires that credit repair companies observe the following rules:<sup>26</sup>

- Consumers have three business days to cancel a contract without charge;
- Companies cannot guarantee that they can remove information from a credit report;
- Companies cannot advise an individual to make false statements;
- Companies cannot suggest that an individual change their identity; and
- Consumers cannot be charged a fee for services yet to be fully rendered.

It is the last issue that spelled the demise of the credit repair industry. Before the CROA became law, credit repair companies could ask a customer to pay upfront for the credit repair service. The request was made because individuals with poor credit ratings were usually some of the least likely people to pay for credit repair services. Bankruptcy, criminal, and divorce attorneys demand payment upfront because if services are not rendered in a fashion that is acceptable to a client, an attorney would probably not be paid. A similar argument was held for credit repair companies.

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<sup>15</sup> *Id.*

<sup>16</sup> *Id.*

<sup>17</sup> Pub. L. 104-208, available at <https://www.congress.gov/104/plaws/publ208/PLAW-104publ208.pdf>.

<sup>18</sup> LII Staff, Supremacy Clause: Article VI, para. 2, *Legal Information Institute* (n.d.), available at [https://www.law.cornell.edu/wex/supremacy\\_clause](https://www.law.cornell.edu/wex/supremacy_clause).

<sup>19</sup> Pub. L. 108-159, available at <https://www.govinfo.gov/link/statute/117/1999>.

<sup>20</sup> *Id.*

<sup>21</sup> 15 U.S.C. Chapter 41, Subchapter II-A: Credit Repair Organizations, available at <https://uscode.house.gov/view.xhtml?req=granuleid%3AUSC-prelim-title15-chapter41-subchapterII-A&num=0&edition=prelim>.

<sup>22</sup> Eric Hansen, What Is the Credit Repair Organizations Act?, *Upsolve* (Oct. 1, 2021), available at <https://upsolve.org/learn/what-is-the-credit-repair-organizations-act/#:~:text=The%20Credit%20Repair%20Organizations%20Act%20is%20a%20federal%20law%20that,practices%20by%20credit%20repair%20organizations>.

<sup>23</sup> Bev O'Shea, & Amanda Barroso, Should You Use a Credit Repair Service?, *Nerd Wallet* (Sep. 22, 2023), available at <https://www.nerdwallet.com/article/finance/credit-repair/#:~:text=Credit%20repair%20can%20cost%20around,re%20accurate%2C%20timely%20and%20verifiable>.

<sup>24</sup> *Id.*

<sup>25</sup> *Id.*

<sup>26</sup> CNBC Staff, Credit Repair Services Can Dispute Credit Report Errors for You, but Beware of Scams and High Fees, *CNBC* (Apr. 21, 2023), available at <https://www.cnbc.com/select/how-do-credit-repair-services-work/>.

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### Federal Reserve Regulation V

Regulation V aims to “protect the confidential information of consumers. In particular, it aims to protect the privacy and accuracy of the information contained in consumer credit reports.”<sup>27</sup> The Federal Reserve originally oversaw Regulation V by the Federal Reserve, whose purpose is to protect consumer privacy.<sup>28</sup> The regulation directly deals with consumer credit information, particularly information employed to generate credit reports.<sup>29</sup>

In July 2011, the regulatory role was transferred to the Consumer Financial Protection Bureau (CFPB),<sup>30</sup> which was created by the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank) of 2010.<sup>31</sup> The purpose of the CFPB is to help consumers make informed financial choices, protect consumers from predatory companies and practices, and stimulate financial education.<sup>32</sup> In 2020, the Supreme Court ruled that CFPB’s structure violated the separation of powers clause by stating that the CFPB director could only be removed for cause, such as inefficiency, neglect of duty, and malfeasance in office.<sup>33</sup> The court decided that the President could remove the CFPB director for any reason because the executive department oversees the CFPB.<sup>34</sup>

Although Regulation V affects banks that belong to the Federal Reserve, it also deals with parties that collect and employ consumer credit information.<sup>35</sup> Traditionally, consumer credit information is used to decide whether an individual may be given credit cards or home mortgages.<sup>36</sup> However, credit reports are also used to screen employment candidates.<sup>37</sup>

Credit information is widely shared among financial institutions, which creates many opportunities for it to be incorrect or lost.<sup>38</sup> When considering the growth of identity theft and the Internet, this fact can have detrimental effects on individuals.<sup>39</sup> In mitigating this risk, Regulation V demands that an organization that supplies information to a credit reporting agency provide accurate information.<sup>40</sup> For example, information given to a credit reporting agency includes whether individuals make payments on time, the amount of the outstanding balance paid, and the length of time the debts have been owed.<sup>41</sup> Under Regulation V, consumers can dispute information on their credit report that they believe has been inaccurately recorded or improperly handled by a financial institution.<sup>42</sup>

### STATE LAWS AND PREEMPTION WITH REGARD TO CREDIT REPORTING

These days, the surveillance of the behavior of individuals is at a historical apex. In an effort to increase profits and control conduct, companies and governments are engaged in active reconnaissance of the things that people say and do.<sup>43</sup> Given the intrusive nature encountered by Americans as they go about their daily lives, Chopra observed that it is critical that the federal government and the states protect citizens from data misuse and abuse.<sup>44</sup> When enacted in 1970, the FCRA defined the allowable uses of information in credit reports, by establishing guidelines for credit reporting agencies to follow and a process whereby individuals and businesses could dispute the information in their credit reports.<sup>45</sup> The FCRA provided the states with the flexibility to enact laws that reflected the challenges and risks that affected their local economies and citizens. The FCRA preempts a narrow range of state

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<sup>27</sup> Jason Fernando, Regulation V: What It Is, How It Works, Example, *Investopedia* (Feb. 25, 2021), available at <https://www.investopedia.com/terms/r/regulation-v.asp#:~:text=Regulation%20V%20is%20a%20regulation,Federal%20Reserve%20to%20the%20CFPB>.

<sup>28</sup> *Id.*

<sup>29</sup> *Id.*

<sup>30</sup> *Id.*

<sup>31</sup> Jim Probasco, Consumer Financial Protection Bureau (CFPB) Overview, *Investopedia* (Sep. 27, 2023), available at <https://www.investopedia.com/terms/c/consumer-financial-protection-bureau-cfpb.asp>.

<sup>32</sup> *Id.*

<sup>33</sup> *Seila Law LLC v. Consumer Financial Protection Bureau*, 591 U.S. \_\_\_\_ (2020), available at <https://supreme.justia.com/cases/federal/us/591/19-7/#tab-opinion-4267244>.

<sup>34</sup> *Id.*

<sup>35</sup> Jason Fernando, *supra*, note 29.

<sup>36</sup> *Id.*

<sup>37</sup> *Id.*

<sup>38</sup> *Id.*

<sup>39</sup> *Id.*

<sup>40</sup> *Id.*

<sup>41</sup> *Id.*

<sup>42</sup> *Id.*

<sup>43</sup> SHOSHANA ZUBOFF, *THE AGE OF SURVEILLANCE CAPITALISM: THE FIGHT FOR A HUMAN FUTURE AT THE NEW FRONTIER OF POWER* (Profile Books 2019).

<sup>44</sup> CFPB Staff, CFPB Affirms Ability for States to Police Credit Reporting Markets, *Consumer Financial Protection Bureau* (Jun. 28, 2022) available at <https://www.consumerfinance.gov/about-us/newsroom/cfpb-affirms-ability-for-states-to-police-credit-reporting-markets/>.

<sup>45</sup> *Id.*

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laws. In contrast, states retain broad authority to protect their citizens from harm due to credit reporting issues.<sup>46</sup> State laws are also not preempted unless they conflict with the FCRA or are included in narrow preemption categories enumerated by the statute.<sup>47</sup> For example, a state could prevent a credit reporting agency from including medical debt data for a specific period of time after the debt is incurred. A state could avert eviction or rental arrears information from appearing on a credit report.<sup>48</sup>

### General Principles of Preemption

When dealing with state law preemption by the FCRA, the two guiding principles that determine the scope of the law are:<sup>49</sup>

- Under 15 U.S.C. 1681t(b)(1), state laws are not preempted unless they are “with respect to any subject matter regulated under” certain sections or subsections of the FCRA; and
- Under 15 U.S.C. 1681t(b)(5), only those state laws “with respect to the conduct required by” certain sections or subsections of the FCRA are preempted.

The first principle addresses the preemption of state law from the perspective of the **subject matter** being regulated, whereas the second principle concentrates on the preemption of state law based on the **conduct** being described in the FCRA. Section 1681t(b)(1) possesses 11 subsections where each subsection follows the same syntactical construction.<sup>50</sup> Each subsection preempts State laws with respect to any subject matter regulated under an enumerated subsection of the FCRA.<sup>51</sup>

After an enumerated section, the phrase “relating to” further tightens the enumerated action. For example, section 1681(b)(1)(E) preempts State laws “with respect to any subject matter regulated under section 1681c, or information contained in consumer reports. Thus, preemption under section 1681t(b)(1) depends on the meaning of both phrases.<sup>52</sup> In other words, State laws are not preempted unless they relate to any subject matter regulated under the enumerated sections of the FCRA.<sup>53</sup> Additionally, a State law is preempted if it also falls within the “relating to” clause. Thus, both the “with respect to” and the “relating to” clauses act together to narrowly focus the subject matter of an FCRA subsection.<sup>54</sup> Whether a given State law is “with respect to any subject matter regulated under” the enumerated sections of the FCRA depends on the text of the State law and the facts of the case.

The Congressional purpose of 15 U.S.C. 1681t(b)(5) is evident when its content is viewed from a textualist perspective.<sup>55</sup> According to Blaker, the theory of textualism “gives priority in statutory and constitutional interpretation to the relevant texts.” Textualism typically rejects searching for legislative intentions or statutory purposes that are not contained in the text. When the meaning of the text is clear, textualists reject the appeal to other sources to alter the meaning of the text, even when there are inconsistencies between the textual meaning and the legislative purpose.

15 U.S.C. 1681t(b)(5) has nine subsections, where each subsection adheres to the same syntax; namely, State laws are preempted to the extent they are “with respect to” the conduct required by the specific provision.<sup>56</sup> For instance, 15 U.S.C. 1681t(b)(5)(E) preempts State laws “with respect to” conduct stated in section 1681j(a), which requires national credit reporting and specialty consumer reporting agencies to provide free annual credit reports to consumers. A State law requiring credit reporting agencies to provide consumer-free credit reports twice a year would probably fall within the subsection.<sup>57</sup> However, if a State law ignores “the conduct required by” the subsection (in this instance, section 1681j(a)), then the State law would not be preempted.<sup>58</sup> Another example is that section 1681j(a) has no requirements regarding the language, say other than English, contained in a credit report and would not be preempted by section 1681t(b)(5)(E).<sup>59</sup>

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<sup>46</sup> *Id.*

<sup>47</sup> *Id.*

<sup>48</sup> *Id.*

<sup>49</sup> CFPB Staff, The Fair Credit Reporting Act’s Limited Preemption of State Laws, Consumer Financial Protection Bureau (Jul. 11, 2022), available at <https://www.federalregister.gov/documents/2022/07/11/2022-14150/the-fair-credit-reporting-acts-limited-preemption-of-state-laws#:~:text=States%20play%20an%20important%20role,certain%20categories%20of%20State%20laws>.

<sup>50</sup> *Id.*

<sup>51</sup> *Id.*

<sup>52</sup> *Id.*

<sup>53</sup> *Id.*

<sup>54</sup> *Consumer Data Industry Association v. Frey*, 26 F.4th 1 (1st Cir. 2022), available at <https://casetext.com/case/consumer-data-indus-assn-v-frey-1> (here, the plaintiffs argued that section 1681t(b)(1)(E) preempts any State laws “relating to information contained in consumer reports,” whether or not the law is “with respect to any subject matter regulated under” section 1681c).

<sup>55</sup> Donald L. Buresh, The Use of Intentionalism, Textualism, Purposivism, Lenity, and the Absurd Doctrine When Evaluating Legislative Intent and Legislative History, 6 *International Journal of Social Science and Human Research* 12 (Dec. 2023), 7332-44, available at DOI: 10.47191/ijsshr/v6-i12-19.

<sup>56</sup> CFPB Staff, *supra*, note 51.

<sup>57</sup> *Id.*

<sup>58</sup> *Id.*

<sup>59</sup> *Id.*

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### Categories of Preempted State Laws

The 11 subsections of 15 U.S.C. 1681t(b)(1) or the eleven categories of preempted subject matter include:<sup>60</sup>

- **Subsection (c) or (e) of section 1681b**, relating to the prescreening of consumer reports;
- **Section 1681i**, relating to the time that a consumer reporting agency must take any action, including notifying a consumer or other person regarding the disputed accuracy of information in a consumer's file, where there is an exception for laws in effect on September 30, 1996;
- **Subsections (a) and (b) of section 1681m**, relating to the duties of a person who takes any adverse action against a consumer;
- **Section 1681m(d)**, relating to the duties of persons who employ a consumer's credit report in a credit or insurance transaction that is not started by a consumer, where there is a firm offer of credit or insurance;
- **Section 1681c**, relating to information contained in consumer reports, where there is an exception for laws in effect on September 30, 1996;
- **Section 1681s-2**, relating to the responsibilities of persons who furnish information to consumer reporting agencies, where there are exceptions for enumerated State laws;
- **Section 1681g(e)**, relating to information available to victims under section 1681g(e);
- **Section 1681s-3**, relating to the exchange and use of information when making a marketing solicitation;
- **Section 1681m(h)**, relating to the duties of users of consumer reports to provide notice of terms in specific credit transactions;
- **Subsections (i) and (j) of section 1681c-1**, relating to security freezes; or
- **Subsection (k) of section 1681c-1**, relating to credit monitoring of active duty military consumers.

The nine subsections of 15 U.S.C. 1681t(b)(5) or the nine categories of preempted conduct include:<sup>61</sup>

- **Section 1681c(g)**, relating to the truncation of credit card and debit card numbers;
- **Section 1681c-1**, relating to identity theft prevention, fraud alerts, and active duty alerts;
- **Section 1681c-2**, relating to the blocking of information resulting from identity theft;
- **Section 1681g(a)(1)(A)**, relating to a request by a consumer not to disclose in a credit report the first five digits of their social security number;
- **Section 1681j(a)**, relating to the charges for specific disclosures ;
- **Subsections (e), (f), and (g) of section 1681m**, relating to the red flag guidelines and regulations required, the prohibition on sale or transfer of debt caused by identity theft, and debt collector communications concerning identity theft, respectively;
- **Section 1681s(f)**, relating to the coordination of consumer complaint investigations;
- **Section 1681s-2(a)(6)**, relating to the duties of furnishers upon notice of identity theft-related information; or
- **Section 1681w**, relating to the disposal of records.

Thus, when analyzing whether a state law is preempted by the FCRA, one must first determine whether the law deals with a given subject matter or conduct. If the subject matter of the State law is at issue, then one must decide if one or more of the preemption categories above applies. If so, the FCRA preempts the State law, and if not, the State stands, provided that it does not speak to any of the nine conduct prohibitions. If the State law addresses a person's conduct, then one must decide if any of the nine preemptions above apply. If so, the State law is preempted by the FCRA, and if not, the State law holds. The analysis can get complicated if the State law contains prohibited subject matter and conduct provisions. It is possible that parts of the State law may remain in force, provided those parts are not preempted by the FCRA's subject matter or conduct provisions.

### Problems with the Fair Credit Reporting Act

The problem with the FCRA is that it is complicated and difficult to understand. When creating a potential State credit reporting law, State legislators must traverse 20 different possible preemptions to see if the text of the law is superseded by the FCRA. This is an onerous process due to the specific nature of the federal statute. The FCRA goes into great detail regarding what is acceptable behavior for credit reporting agencies and their furnishers. The reason for the detail is likely because in the past, credit reporting agencies and their furnishers were creatively involved in circumventing the rights of consumers. The credit reporting agencies and their furnishers were likely lax in collecting consumer data, thinking more about profits earned from their customers than the integrity of the data being collected, stored, used, disseminated, and possibly even deleted. The point behind the FCRA seems to have been to codify the confidentiality, integrity, and availability of PII. In other words, data is like any other product in the sense that must possess a pre-specified level of quality to have value.

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<sup>60</sup> *Id.*

<sup>61</sup> *Id.*

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### THE THREE MAJOR CREDIT REPORTING AGENCIES

In this section, credit reporting is defined and examples of what information may be in a credit report are given. The three major credit agencies, Equifax, Inc., Experian PLC, and TransUnion LLC, are discussed in some depth.

#### What Is a Credit Report?

A credit report is a statement that contains information about an individual's credit activity and current credit conditions, such as loan paying history and the status of credit accounts.<sup>62</sup> Most individuals have credit reports kept by the three major credit reporting agencies, Equifax, Experian, and TransUnion. These organizations collect and store financial data about individuals that are provided to them by lenders, credit card companies, and other financial entities.<sup>63</sup> Creditors are not legally mandated to report a credit transaction of every credit reporting agency. This means that some credit reporting agencies will possess individual credit information that is not present at other credit agencies.<sup>64</sup>

Lenders employ credit reports to assist them in deciding whether to loan someone money to make a purchase and to determine if one is continuing to satisfy the terms and conditions of an existing credit account.<sup>65</sup> Other firms may inquire about a person's credit report to decide whether to offer an individual insurance, rent a house or apartment, supply cable television, Internet, or utility or cell phone service. A credit report can also be employed to make employment decisions.<sup>66</sup>

#### What Does a Credit Report Contain?

Credit reports usually contain the following information about an individual: name and names used with credit accounts including nicknames, current and former addresses, birth date and sometimes death date, social security number, and current and previous telephone numbers.<sup>67</sup> For credit accounts, a credit report may include current and previous credit accounts, including the type of account such as mortgages installment payments, revolving credit cards etc., credit limit or current amount of credit, account balances, account payment histories, the date the account was opened and closed, and the name of the creditors.<sup>68</sup> Other entries could cover missed payments, loans sent to collections agencies, information on overdue child support payments, liens, foreclosures, bankruptcies, civil suits and judgments, and a list of firms that have accessed a credit report.<sup>69</sup>

#### The Major Credit Reporting Agencies in the United States

The three major credit reporting agencies in the United States are Equifax, Inc. (Equifax), Experian, PLC (Experian), and TransUnion, LLC (TransUnion). Each credit reporting agency is discussed one after the other.

#### Equifax, Inc.

Equifax Inc. is an American multinational consumer credit reporting agency that has its headquarters in Atlanta, Georgia.<sup>70</sup> The company was founded in 1899 by Cator and Guy Woolford in Atlanta, Georgia, as Retail Credit Company (RCC).<sup>71</sup> After 21 years, the firm had offices across the United States and Canada.<sup>72</sup> By the 1960s, RCC was one of the country's largest credit bureaus, storing information of millions of Americans and Canadians.<sup>73</sup> At the time, providing reports to insurance companies about individuals applying for new life, auto, fire, and medical insurance policies was a major line of business.<sup>74</sup> The company also investigated insurance claims and created employment reports when individuals sought new jobs, where most of credit work was performed by Retailers Commercial Agency (RCA).

In the 1960s and 70s, RCC collected facts, statistics, inaccuracies, and rumors about a person's life, including their marital troubles, jobs, school history, childhood, sex life, and political activities.<sup>75</sup> Allegedly, the company rewarded its employees for

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<sup>62</sup> CFPB Staff, What Is a Credit Report?, *Consumer Financial Protection Bureau* (Jan. 29, 2024), available at <https://www.consumerfinance.gov/ask-cfpb/what-is-a-credit-report-en-309/>.

<sup>63</sup> *Id.*

<sup>64</sup> *Id.*

<sup>65</sup> *Id.*

<sup>66</sup> *Id.*

<sup>67</sup> *Id.*

<sup>68</sup> *Id.*

<sup>69</sup> *Id.*

<sup>70</sup> The Economist Staff, How to Protect Yourself Against the Theft of Your Identity, *The Economist* (Sep. 14, 2017), available at <https://www.economist.com/finance-and-economics/2017/09/14/how-to-protect-yourself-against-the-theft-of-your-identity>.

<sup>71</sup> Krista Reese, Equifax, *New Georgia Encyclopedia* (Jun. 28, 2023), available at <https://www.georgiaencyclopedia.org/articles/business-economy/equifax>.

<sup>72</sup> RAYMOND ANDERSON, *THE CREDIT SCORING TOOLKIT* (Oxford University Press 2007), available at <https://books.google.com/books?id=7LIGfPvOJLoC&q=by+1920%2C+equifax+had+offices+throughout+the+United+States+and+Canada&pg=PA49#v=onepage&q&f=false>.

<sup>73</sup> Simson Garfinkel, Separating Equifax from Fiction, *Wired* (Sep. 1, 1995), available at <https://www.wired.com/1995/09/equifax/>.

<sup>74</sup> *Id.*

<sup>75</sup> *Id.*



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gathering derogatory information on consumers, particularly people of color, gays, queers, and other LGBTQ+ individuals.<sup>76</sup> In 1970, RCC computerized its records, an act that led to increased availability of the PII it stored. The Congressional hearings prior to the passage of the FCRA likely prompted RCC to change its name in 1975 to Equifax, Inc., thereby enriching its image.<sup>77</sup>

Equifax collects volumes of information on individuals and companies for its customers, including:<sup>78</sup>

- 152 million active employment records and 604 million total employment records for verifications of employment and income from 2.6 million different United States employers.
- More than 1.6 billion tradelines with information on 240 million or more consumers;
- 180 million incarceration records and 600 million court records;
- Access to 130 million degrees from 2,700 colleges and universities;
- Information on 80 million unbanked, underbanked, and credit rebuilding consumers;
- Data on balances, deposits and withdrawals from more than 7,700 participating U.S. financial institutions, allowing access to 99% of the U.S. population;
- Wealth information with \$24 trillion in anonymized assets and investments; and
- 56 billion consumer identity interactions.

Given the plethora of information amassed by the organization, in September 2017, Equifax announced that it was the victim of a cybersecurity breach, where 145.5 million consumers in the United States were affected.<sup>79</sup> The data stolen included full names, Social Security numbers, birth dates, addresses, and driver license numbers.<sup>80</sup> Equifax admitted that at least 209,000 credit card credentials were acquired in the attack.<sup>81</sup> On March 1, 2018, Equifax revealed that an additional 2.4 million were affected by the breach.<sup>82</sup> The hackers are able to remain in the Equifax systems for 134 days.<sup>83</sup>

Currently, Equifax sells credit monitoring and fraud prevention services directly to businesses, including banks, credit unions, government agencies, healthcare providers, personal finance firms, retailers, utilities, and other financial institutions.<sup>84</sup> Equifax has over 15,000 employees worldwide and does business in 24 countries in North America, South America, Europe, and Asia Pacific with \$5.122 billion in annual revenue in 2022.<sup>85</sup> Equifax stock is traded on the New York Stock Exchange (NYSE) under the symbol EFX.<sup>87</sup>

### Experian, PLC

Experian, PLC (Experian) is a multinational organization that specializes in data analytics and consumer credit reporting, and is headquartered in Dublin, Ireland.<sup>88</sup> The company is rooted in Credit Data Corporation (CDC), a credit data collection and reporting business that was acquired by TRW, Inc. (TRW) in 1968.<sup>89</sup> CDC was then renamed TRW Information Systems and

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<sup>76</sup> *Id.*

<sup>77</sup> *Id.*

<sup>78</sup> Equifax Staff, Equifax: 2022 Annual Report, *Equifax, Inc.* (Feb. 23, 2023), available at <https://assets.equifax.com/marketing/US/assets/equifax-2022-annual-report-web.pdf>.

<sup>79</sup> Rick Smith, Chairman and CEO of Equifax, on Cybersecurity Incident Involving Consumer Data. *Unlisted*, YouTube (Sep. 7, 2017), available at <https://www.youtube.com/watch?v=bh1gzJFVFLc>.

<sup>80</sup> *Id.*

<sup>81</sup> *Id.*

<sup>82</sup> Reuters, Equifax Identifies Additional 2.4 Million Customers Hit by Data Breach, *NBC News Business* (Mar. 1, 2018), available at <https://www.nbcnews.com/business/business-news/equifax-identifies-additional-2-4-million-customers-hit-data-breach-n852226>.

<sup>83</sup> Fred Bals, Equifax, Apache Struts, and CVE-2017-5638 Vulnerability, *Synopsys* (Sep. 15, 2017), available at <https://www.synopsys.com/blogs/software-security/equifax-apache-struts-vulnerability-cve-2017-5638.html>.

<sup>84</sup> Investopedia Team, How Do Credit Bureaus Make Money?, *Investopedia* (Apr. 22, 2024), available at <https://www.investopedia.com/ask/answers/102814/how-do-credit-bureaus-make-money.asp#:~:text=The%20three%20major%20credit%20bureaus,other%20businesses%20that%20grant%20credit>.

<sup>85</sup> Equifax Staff, We Help People Live Their Financial Best, *Equifax, Inc.* (2024), available at <https://www.equifax.com/about-equifax/who-we-are/#:~:text=As%20a%20global%20data%2C%20analytics,commerce%2C%20and%20government%20agencies%2C%20make>.

<sup>86</sup> Macro Trends Staff, Equifax Revenue 2010-2023 | EFX, *Macro Trends* (2024), available at <https://www.macrotrends.net/stocks/charts/EFX/equifax/revenue#:~:text=Equifax%20revenue%20for%20the%20twelve,a%204.03%25%20increase%20from%202021>.

<sup>87</sup> Equifax Staff, *supra*, note 80.

<sup>88</sup> Experian Staff, Our Locations, *Experian, PLC* (2024), available at <https://www.experian.com/corporate/experian-locations>.

<sup>89</sup> DAVIS DYER, TRW: PIONEERING TECHNOLOGY + INNOVATION SINCE 1900 (Harvard Business Review Pres 1998).

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Services, Inc. (TRW-ISSI).<sup>90</sup> In November 1996, TRW-ISSI was sold to Bain Capital and Thomas H. Lee Partners<sup>91</sup> In December 1996, the two companies sold Experian to The Great Universal Stores, Ltd. (GUS) in Manchester, England, a retail conglomerate with millions of customers who paid for goods on credit.<sup>92</sup> GUS then merged Experian with its own credit information business, Corporate Credit Network (CCN), which was the largest credit reporting company in the United Kingdom (UK) at the time.<sup>93</sup> In October 2006, Experian legally separated from GUS and was listed on the LSE.

Currently, Experian collects and maintains information on more than 1 billion people and firms, including 235 million United States consumers and over 25 million United States businesses. The company employs 22,400 people with 152,000 clients in 32 countries, earning \$6.288 billion of revenue in 2022.<sup>94</sup> <sup>95</sup> Experian also sells decision analytics and marketing consulting to companies, including fingerprinting and targeting.<sup>96</sup> The company's consumer services include online access to one's credit history, and sells products geared to prevent fraud and identity theft.<sup>97</sup> The firm is listed on the London Stock Exchange (LSE) and on the Financial Times Stock Exchange (FTSE) 100 Index. Experian partners with the United States Postal Service (USPS) in address validation.<sup>98</sup>

### TransUnion, LLC

TransUnion, LLC (TransUnion) is a credit reporting agency headquartered in Chicago, Illinois.<sup>99</sup> The firm was created in 1968 as a holding company for Union Tank Car Company (UTCC), thereby making it a descendant of Standard Oil Company, Inc. (SOC).<sup>100</sup> In 1969, the company purchased the Credit Bureau of Cook County (CBC), which collected and maintained 3.6 million credit accounts.<sup>101</sup> In 1981, The Marmon Group, founded by Jay Pritzker and Robert Pritzker in 1953 and currently owned by Berkshire Hathaway of Warren Buffett fame,<sup>102</sup> bought TransUnion for \$688 million.<sup>103</sup> In 2012, TransUnion was acquired for \$3 billion by Goldman Sachs Capital Partners (GSCP) and Advent International from Madison Dearborn Partners (MDP).<sup>104</sup> At the time, Penny Pritzker, the sister of J.B. Pritzker, the current governor of Illinois, was the chairperson of TransUnion.<sup>105</sup>

In October 2013, TransUnion offered CreditVision, a product that predicted consumer repayment and debt behavior.<sup>106</sup> In 2014, the company initiated ResidentCredit, a product where landlords could report monthly data about their tenants.<sup>107</sup> The reporting data includes the amount each tenant pays, the timeliness of a tenant's last payment, and any remaining balance a tenant

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<sup>90</sup> Alex Marthews, & Catherine Tucker, Privacy Policy and Competition, *Brookings Institution* (2019), available at <https://www.brookings.edu/wp-content/uploads/2019/12/ES-12.07.19-Marthews-Tucker.pdf>.

<sup>91</sup> Los Angeles Times Staff, Experian Investors Reap Substantial Rewards, *Los Angeles Times* (Nov. 15, 1996), available at <https://www.latimes.com/archives/la-xpm-1996-11-15-fi-64791-story.html>.

<sup>92</sup> Nigel Cope, GUS Shares Soar on Pounds 1Bn Acquisition, *The Independent* (Nov. 15, 1996), available at <https://www.independent.co.uk/news/business/gus-shares-soar-on-pounds-1bn-acquisition-1352446.html>.

<sup>93</sup> Bloomberg News, Large British Retailer to Buy U.S. Credit-Data Company, *The New York Times* (Nov. 15, 1996), available at <https://www.nytimes.com/1996/11/15/business/large-british-retailer-to-buy-us-credit-data-company.html>.

<sup>94</sup> Experian Staff, About Us, *Experian, PLC* (2024), available at <https://www.experianplc.com/about-us/index>.

<sup>95</sup> Macro Trends Staff, Experian Revenue 2011-2023 | EXPGY, *Macro Trends* (2023), available at <https://www.macrotrends.net/stocks/charts/EXPGY/experian/revenue#:~:text=Experian%20revenue%20for%20the%20twelve,a%2017.05%25%20increase%20from%202021>.

<sup>96</sup> David Ingram, & Julia Fioretta, Facebook Cuts Ties to Data Brokers in Blow to Targeted Ads, *Reuters* (Jan. 25, 2022), available at <https://www.reuters.com/article/idUSKBN1H41KV/>.

<sup>97</sup> Experian Staff, Experian's Principle Business Groups, *Experian, PLC* (2024), available at <https://www.experian.com/corporate/principal-businesses>.

<sup>98</sup> Experian Staff, Address Validation, *Experian, PLC* (2024), available at <https://www.experian.com/small-business/address-validation>.

<sup>99</sup> TransUnion Staff, Terms of Use, *TransUnion, LLC* (Mar. 11, 2019), available at <https://www.transunion.com/legal/terms-of-use#:~:text=You%20should%20send%20any%20notices,.%2C%20Chicago%2C%20IL%2060661>.

<sup>100</sup> Library of Congress Staff, A Union Tank Line Railroad Tank Car That Once Carried Oil for a Subsidiary of the Standard Oil Company, Displayed at the Mid-Continent Railway Museum, an Outdoor, "Living Museum" and Operating Railroad that Has (as of 2016) Operated Since 1963 in North Freedom, Wisconsin, Library of Congress (n.d.), available at <https://www.loc.gov/item/2016630929/>.

<sup>101</sup> Brian O'Connell, What Are the Three Credit Bureaus and Why Do They Matter?, *The Street* (Mar. 19, 2019), available at <https://www.thestreet.com/personal-finance/three-credit-bureaus-14878504>.

<sup>102</sup> MHI Staff, Winning a Better Way, *Marmon Holdings, Inc.* (2024), available at <https://www.marmon.com/about-us/>.

<sup>103</sup> LAWRENCE A. CUNNINGHAM, BERKSHIRE BEYOND BUFFETT: THE ENDURING VALUE OF VALUES (New York Columbia Business School 2014).

<sup>104</sup> Ben Protes, Advent and Goldman to Buy TransUnion in \$3 Billion Deal, *The New York Times* (Feb. 17, 2012), available at [https://archive.nytimes.com/dealbook.nytimes.com/2012/02/17/advent-and-goldman-to-buy-transunion-in-3-billion-deal/?\\_r=1](https://archive.nytimes.com/dealbook.nytimes.com/2012/02/17/advent-and-goldman-to-buy-transunion-in-3-billion-deal/?_r=1).

<sup>105</sup> *Id.*

<sup>106</sup> ROHIT GUPTA, REWARD AND DONATION CROWDFUNDING: A COMPLETE GUIDE FOR EMERGING STARTUPS (Notion Press 2018).

<sup>107</sup> TransUnion Staff, TruVision ResidentCredit, *TransUnion, LLC* (2024), available at <https://www.transunion.com/product/residentcredit>.

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currently owes a landlord.<sup>108</sup> On June 25, 2015, TransUnion became a publicly traded company under the symbol TRU.<sup>109</sup> In 2023, TransUnion decided to rebrand its existing B2B products into seven business lines, including TruAudience, TruValidate, TruContact, TruVision, TruIQ, TruEmpower, and TruLookup.<sup>110</sup>

In 2002, the court awarded Judy Thomas of Klamath Falls, Oregon, \$5.3 million in a lawsuit against TransUnion because it took six years for the company to remove incorrect information in her credit report, a clear violation of the FCRA.<sup>111</sup> In March 2015, Equifax, Experian, and TransUnion settled with the New York Attorney General by agreeing to help consumers with errors and red flags on credit reports by using trained employees to respond when a consumer reports an error on their credit report.<sup>112</sup> In January 2017, TransUnion and Equifax were fined \$5.5 million and ordered to pay \$17.6 million in restitution by the CFPB for deceiving customers about the usefulness of credit scores and credit-related products.<sup>113</sup> In June 2017, a California jury returned a \$60 million verdict against TransUnion because individuals were falsely reported on a federal government list of terrorists and other security threats.<sup>114</sup> In 2018, of all the complaints filed with the CFPB, 34 percent were directed at Equifax, Experian, and TransUnion.<sup>115</sup> In 2022, Rohit Chopra, a CFPB Director, observed that TransUnion is an “out-of-control repeat offender that believes it is above the law.”<sup>116</sup> It is the smallest of the three largest credit agencies.

### CREDIT REPORTING AND REPAIR

In this section, credit reporting and credit repair are discussed, as well as seven 2023 credit reporting cases. The purpose of the final subsection is to reveal various credit reporting and repair issues so that the limitations of blockchain can be more easily understood.

#### How Credit Reporting and Repair Work

One of the critical characteristics of the FCRA was that a CRA has 30 days to investigate and resolve a credit reporting dispute.<sup>117</sup> If the investigation failed to verify the accuracy of a derogatory being disputed, a CRA was mandated to remove the derogatory from an individual’s credit report. This fact prompted the credit repair industry to emerge. Companies were formed that offered individuals the service of contesting derogatory information for a price. The process consisted of advertising credit repair services, typically in a local newspaper. Interested individuals would then contact the company, asking the firm to repair their credit. Ethical organizations would make a presentation and have the client sign a contract, giving the entity the power of attorney to act in the name of the individual to repair the person’s credit. After an individual received their credit report, the credit repair firm would be given the reports and then write letters to the three major CRAs (i.e., Equifax, Experian, and Trans Union) denying every derogatory (e.g., bankruptcies, charge-offs, tax liens, etc.) in the individual’s credit report. If the derogatory was verified in 30 days, the derogatory remained on the report. If the CRA was unable to verify the derogatory because the company that instigated the derogatory failed to inform the CRA within 30 days, the CRA removed the derogatory from the individual’s report.<sup>118</sup>

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<sup>108</sup> *Id.*

<sup>109</sup> AI Staff, TransUnion, *Advent International* (n.d.), available at [https://www.adventinternational.com/investments/case-studies/case-study/?case\\_study\\_id=transunion#:~:text=TransUnion%20went%20public%20in%202015,its%20%2425.40%20IPO%20share%20price](https://www.adventinternational.com/investments/case-studies/case-study/?case_study_id=transunion#:~:text=TransUnion%20went%20public%20in%202015,its%20%2425.40%20IPO%20share%20price).

<sup>110</sup> Julie Muhn, TransUnion Rebrands Business Solutions, *Finovate* (Feb. 21, 2023), available at <https://finovate.com/transunion-rebrands-business-solutions/>.

<sup>111</sup> Kathy Kristof, Jury Awards \$5.3 Million for Credit Report Errors, *Los Angeles Times* (Jul. 31, 2002), available at <https://www.latimes.com/archives/la-xpm-2002-jul-31-fi-credit31-story.html>.

<sup>112</sup> Ben Rooney, Agencies Have to Address Credit Report Complaints, *CNN Money* (Mar. 9, 2015), available at <https://money.cnn.com/2015/03/09/pf/credit-reporting-agencies-settlement/>.

<sup>113</sup> CFPB Staff, CFPB Orders TransUnion and Equifax to Pay for Deceiving Consumers in Marketing Credit Scores and Credit Products, *Consumer Financial Protection Bureau* (Jan. 3, 2017), available at <https://www.consumerfinance.gov/about-us/newsroom/cfpb-orders-transunion-and-equifax-pay-deceiving-consumers-marketing-credit-scores-and-credit-products/>.

<sup>114</sup> Dena Aubin, TransUnion Hit with \$60 Million Jury Verdict over Blacklist Reports, *Reuters* (Jun. 21, 2017), available at <https://www.reuters.com/article/transunion-verdict-idUSL1N1J1ZA/>.

<sup>115</sup> Kate Gibson, Credit Bureaus Draw the Most Consumer Complaints to the CFPB, *CBS News Money Watch* (May 9, 2019), available at <https://www.cbsnews.com/amp/news/credit-bureaus-draw-the-most-consumer-complaints-to-the-cfpb/>.

<sup>116</sup> CFPB Staff, CFPB Charges TransUnion and Senior Executive John Danaher with Violating Law Enforcement Order, *Consumer Financial Protection Bureau* (Apr. 12, 2022), available at <https://www.consumerfinance.gov/about-us/newsroom/cfpb-charges-transunion-and-senior-executive-john-danaher-with-violating-law-enforcement-order/#:~:text=“TransUnion%20is%20an%20out-of,of%20operating%20its%20businesses%20lawfully.”>.

<sup>117</sup> Pub. L. 91-508, *supra*, note 9.

<sup>118</sup> See generally, Take Charge America Team, What Happens During the Credit Repair Process, *Take Charge America* (n.d.), available at <https://www.takechargeamerica.org/what-happens-during-the-credit-repair-process/#:~:text=The%20credit%20repair%20company%20looks,to%20remove%20the%20negative%20entries>.

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Now, it should be noted that an individual can repair their own credit report. The problem with this idea is that most individuals are entirely ignorant of the financial industry in general and the credit reporting process in particular. Most Americans are too involved in their day-to-day activities of earning a living and supporting a family. Also, K-12 and even colleges are seemingly loathe to educate students in the intricacies of being financially responsible, even when it has been statistically demonstrated that when students are financially savvy, their ability to save and progress in life increases.<sup>119</sup>

It should be remembered that it is not in the best interest of companies is to ensure that their customers are financially responsible. The reason is that the more an individual is financially irresponsible, the more goods they buy on credit, the larger the debt (price of the good plus interest) for years to come.<sup>120</sup> The rate of interest for purchasing goods using a credit card can be extremely high, averaging approximately 20 percent or more annually.<sup>121</sup>

The Rule of 72 states that if 72 is divided by an interest rate, the quotient is approximately the number of years it takes money to double.<sup>122</sup> For example, if the interest rate is 6 percent, money doubles every 12 years ( $= 72 / 6$  percent). However, if the interest rate is 20 percent, which is the average interest rate for credit cards, money doubles every 3.6 years. Thus, it is no wonder why companies are so eager to get young people into debt. Young people are just starting in life and have little resources to service the debt, let alone start a family or purchase a home. This situation could be construed to be debt slavery or debt bondage.<sup>123 124</sup>

There are two ways out of debt slavery or debt bondage. The first method involves aggressively limiting one's expenditures in the short run.<sup>125</sup> This draconian methodology demands substantial discipline on the part of an individual. Unfortunately, most people are not trained from an early age to limit their expenditures. On the contrary, in United States, consumption is the norm.<sup>126</sup> In other words, this method is difficult to implement, if only because people are not trained at an early age to be frugal or be creative with their limited resources.

One reason why companies encourage consumption is because of the Paradox of Thrift.<sup>127 128</sup> In economics, the Paradox of Thrift states that "personal savings are a net drag on the economy during a recession."<sup>129</sup> The theory assumes that prices do not clear (i.e., the demand and supply curve do not intersect to form an equilibrium) or that producers do not adequately respond to changing economic conditions, contrary to classical economic theory. The Paradox of Thrift was popularized by the British economist Lord John Maynard Keynes.<sup>130</sup> Keynes' economic theories have dominated economic discourses for over 80 years.

Individuals who were naively enticed by businesses to over-extend themselves financially due to their financial ignorance can either endure the slings and arrows of their outrageous financial behavior or try something completely different. Enter credit repair. Before the CROA was enacted, it was much easier for individuals to get out from under their bondage and go forward with their lives. Credit repairs do not remove existing debt, but it may give individuals a second chance to turn around their financial lives, presuming that they learned to take on future debt responsibly.

### 2023 Credit Reporting Legal Cases

There are seven notable FCRA cases in 2023 that are examined in this subsection.<sup>131</sup> The point of the review is to help understand litigation concerns regarding blockchain with credit reporting. Each case is evaluated in turn.

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<sup>119</sup> FEC Staff, Why Isn't Personal Finance Taught in School?, *Financial Educators Council* (n.d.), available at <https://www.financialeducatorsCouncil.org/why-isnt-personal-finance-taught-in-school/>.

<sup>120</sup> Noreen B, Financial Irresponsibility, *Credit Ninja* (Aug. 30, 2023), available at <https://www.creditninja.com/blog/financial-irresponsibility/#:~:text=Some%20people%20just%20don't,about%20their%20overall%20financial%20situation.>

<sup>121</sup> Bankrate Staff, Current Credit Card Interest Rates, *Bankrate* (Nov. 8, 2023), available at <https://www.bankrate.com/finance/credit-cards/current-interest-rates/>.

<sup>122</sup> Will Kenton, The Rule of 72: Definition, Usefulness, and How to Use It, *Investopedia* (Mar. 9, 2023), available at <https://www.investopedia.com/terms/r/ruleof72.asp>.

<sup>123</sup> See generally, Gerald D. Jaynes, Debt Slavery, *Encyclopedia Britannica* (updated Jul. 27, 2023), available at <https://www.britannica.com/topic/debt-slavery>,

<sup>124</sup> Armstrong Williams, How Debt Is Becoming a New Form of Modern Slavery, *The National Interest* (Jul. 30, 2019), available at <https://nationalinterest.org/blog/buzz/how-debt-becoming-new-form-modern-slavery-70186>.

<sup>125</sup> *Id.*

<sup>126</sup> See generally, Marc Davis, The Spending Habits of Americans, *Investopedia* (Oct. 17, 2023), available at <https://www.investopedia.com/financial-edge/0512/the-spending-habits-of-americans.aspx>.

<sup>127</sup> PAUL KRUGMAN, & ROBIN WELLS, *ECONOMICS* (Worth Publishers 5th ed. Nov. 2017).

<sup>128</sup> James Chen, Paradox of Thrift: Definition in Economics, Examples, Criticisms, *Investopedia* (Nov. 20, 2020), available at <https://www.investopedia.com/terms/p/paradox-of-thrift.asp>.

<sup>129</sup> *Id.*

<sup>130</sup> JOHN MAYNARD KEYNES, *THE GENERAL THEORY OF EMPLOYMENT, INTEREST AND MONEY* (Macmillan Publishers 1936).

<sup>131</sup> David N. Anthony, Timothy J. St. George, & Scott Kelly, The 7 Most Notable FCRA Cases of 2023 So Far, *Troutman Pepper* (Aug. 31, 2023), available at <https://www.troutman.com/insights/the-7-most-notable-fcra-cases-of-2023-so-far.html>.

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### **Sessa v. Linear Motors, LLC**

The issue in *Sessa* is whether furnishers that provide credit reports or credit reporting agencies are independently or collectively responsible for settling questions about the legal validity of disputed accounts, particularly when a furnisher is contractually responsible for providing the credit reporting agency with correct and accurate information about an individual.<sup>132</sup> The plaintiff asserted that the credit reporting agency did not accurately report her debt obligations regarding her motor vehicle lease.<sup>133</sup> The U.S. District Court for the Southern District of New York opined that credit reporting agencies are not liable when the accuracy of a credit entry demands a legal determination about the debt contained in a credit report.<sup>134</sup>

In July 2023, the Second Circuit vacated the district court's decision, observing that "there is no bright-line rule, providing, as the District Court concluded, that only purely factual or transcription errors are actionable under the [FCRA]." <sup>135</sup> The Second Circuit also wrote that "inaccurate information reported on a consumer's credit report must be objectively and readily verifiable to be actionable under section 1681e(b)." <sup>136</sup> The Second Circuit agreed with the CFPB's attempt in its amicus brief to the FCRA's responsibilities.

### **Belair v. Holiday Inn Club Vacations, Inc.**

The issue in *Belair* was whether a debt from a contract dispute was owed to the defendant.<sup>137</sup> The U.S. Middle District of Florida concluded that because contract disputes are legal rather than factual, the plaintiff's FCRA dispute was not actionable under Section 1681s-2(b), and thus granted summary judgment in favor of Holiday Inn.<sup>138</sup> On April 14, 2023, the CFPB and the Federal Trade Commission (FTC) filed an amicus brief in *Belair*.<sup>139</sup> On appeal, the Eleventh Circuit found that the district court erred in evaluating the FCRA's inaccuracy requirement.<sup>140</sup> In the amicus brief, the CFPB asked the Eleventh Circuit to reverse the district court's judgment and to rule that furnishers are required to conduct reasonable investigations of factual and legal issues involved in a consumer dispute.

### **Department of Agriculture Rural Development Rural Housing Service v. Kirtz**

On February 24, 2024, the Supreme Court affirmed the decision of the Third Circuit in *Kirtz* that a consumer may sue any federal agency for defying the terms of the FCRA.<sup>141</sup> The case was reviewed by the Court because the Third and Seventh Circuits permitted FCRA litigation against the government, whereas the Fourth and Ninth Circuits took the opposite position.<sup>142</sup> Justice Gorsuch wrote the majority opinion for the Court.

The information in a credit report can determine almost everything that an individual can do, from securing a credit card, purchasing a home, obtaining a new job, or starting a small business.<sup>143</sup> In adopting the FCRA, Congress recognized the importance of accurate credit reporting. In its current form, the FCRA permits consumers to sue private lenders that willfully or even negligently give false information about them to credit reporting agencies.<sup>144</sup> The issue in the case was whether the federal government, one of the country's largest lenders, can be sued by individuals when it provides false information to credit reporting agencies or whether sovereign immunity applies and individuals are barred from filing suit.<sup>145</sup> The Court opined that in this instance, the federal government was just as liable as a private lender.

### **Frazier v. Dovenmuehle Mortgage, Inc.**

Frazier received a home mortgage loan where Dovenmuehle was the sub-servicer. In October 2015, Frazer did not make her monthly payments. However, she settled her debt successfully via a short sale that closed in January 2016. Frazier was then denied a new mortgage because her Equifax credit report stated that she had late payments after the short sale. Frazier disputed this

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<sup>132</sup> *Sessa v. Trans Union, LLC*, No. 22-87 (2d Cir. 2023), available at <https://law.justia.com/cases/federal/appellate-courts/ca2/22-87/22-87-2023-07-17.html>.

<sup>133</sup> *Id.*

<sup>134</sup> *Id.*

<sup>135</sup> *Id.* at 7.

<sup>136</sup> *Id.* at 9.

<sup>137</sup> *Belair v. Holiday Inn Club Vacations, Inc.*, U.S. M.D. Fla., Orlando Div, Case No. 6:21-cv-165-WWB-DCI, available at <https://www.consumerfinancialserviceslawmonitor.com/wp-content/uploads/sites/880/2023/02/Belair-v.-Holiday-Inn-Club-Vacations-Inc.-2022-U.S.-Dist.-LEXIS-235853-002.pdf>.

<sup>138</sup> *Id.*

<sup>139</sup> *Belair v. Holiday Inn Club Vacations, Inc.*, No. 23-10101, amicus brief filed (11th Cir. Apr. 20, 2023) available at [https://files.consumerfinance.gov/f/documents/cfpb\\_belair-amicus-brief\\_2023-04.pdf](https://files.consumerfinance.gov/f/documents/cfpb_belair-amicus-brief_2023-04.pdf)

<sup>140</sup> Brief for Appellant at 17-18, *Belair v. Holiday Inn Club Vacations, Inc.*, No. 23-10101 (11th Cir. Apr. 13, 2023).

<sup>141</sup> *Department of Agriculture Rural Development Rural Housing Service v. Kirtz*, 601 U.S. \_\_\_\_ (2024), available at <https://supreme.justia.com/cases/federal/us/601/22-846/#tab-opinion-4847578>.

<sup>142</sup> *Id.*

<sup>143</sup> *Id.*

<sup>144</sup> *Id.*

<sup>145</sup> *Id.*

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information, and to confirm the accuracy of its records, Equifax sent Dovenmuehle four Automated Consumer Dispute Verification (ACDV) forms in 2019-20. Frazier contended that the amended codes that Equifax was given by Dovenmuehle for Pay Rate and Account History were incorrect. Frazier sued under the FCRA 15 U.S.C. 1681, opining that Dovenmuehle had not conducted a reasonable investigation of the disputed data and had given false and misleading information to the credit reporting agencies, resulting in continued inaccuracies in her credit report.<sup>146</sup>

The Seventh Circuit affirmed a summary judgment for the defendant in a suit brought by Frazier under Section 1681s-2(b), claiming no reasonable jury would find that Dovenmuehle had provided the credit reporting agencies with material incorrect or misleading information.<sup>147</sup> The decision of the Seventh Circuit showed that the courts rely on an objective standard in deciding whether data is materially misleading and actionable under FCRA even when the automated credit dispute verification response resulted in the credit reporting agency inaccurately reporting that the consumer was delinquent on a debt. In other words, the completeness or accuracy of an automated credit dispute verification response is predicated on an objective perspective of the information provided furnisher rather than a credit reporting agency's subjective interpretation of consumer data or report. The liability of a furnisher under Section 1681s-2(b) does not change because a credit reporting agency inaccurately interprets an automated credit dispute verification response by a furnisher.<sup>148</sup>

### **Wynn v. United Parcel Service Inc.**

In Wynn, the plaintiff alleged that United Parcel Service (UPS) did not comply with the FCRA when it included extraneous information in its disclosure. UPS moved to dismiss (MTD) the complaint under Federal Rules of Civil Procedure (FCRP) Rule 12(b)(6), or failure to state a claim on which relief can be granted.<sup>149</sup> UPC also moved for a request of judicial notice (RJV) or incorporation by notice (IBN) of three California cases and the FCRA disclosure and authorization forms the credit reporting agency gave to Wynn, who opposed both the MTD and the RJV.<sup>150</sup>

The plaintiff alleged that UPS violated the stand-alone disclosure requirement of Section 1681(b)(2)(A) after the company received Wynn's credit report as part of her employment application. The plaintiff also opined that UPS's disclosure form violated the FCRA because it misstated the law regarding whether the FCRA demanded employers get authorization before obtaining each consumer report.<sup>151</sup> Because the Ninth Circuit had yet to address whether an employer can obtain more than one credit report, the court relied on Third Circuit case law and an FTC staff opinion letter that held that Section 1681b (b)(2)(A)(i) permitted an employer to get several consumer reports predicated on a single blanket authorization, provided that the authorization happened before the reports were procured.<sup>152</sup> Wynn appealed to the Ninth Circuit but the case is still pending.

### **Ingram v. Experian Information Solutions Inc.**

In Ingram, the issue is whether furnishers are obliged to investigate frivolous disputes.<sup>153</sup> Ingram found on his credit report a fraudulent Comcast account in his name at an address where he never resided. Ingram filed a direct dispute with Comcast, including a notarized FTC fraud and identity theft affidavit. However, Ingram never provided the affidavit to the company. Without determining whether the account was opened fraudulently, Comcast referred the information to Waypoint and then reported the delinquent account to Experian. After the derogatory appeared on Ingram's credit report, he challenged the item with an indirect dispute with Experian. Experian then forwarded the dispute to Waypoint.<sup>154</sup>

An employee for Waypoint updated Ingram's address, confirmed the account name and made no further investigations. Waypoint continued to erroneously report the Comcast account with a balance of \$769. Ingram argued that his credit score deteriorated when he was denied an apartment rental and a loan application. Ingram filed suit under the FCRA and the Fair Debt Collection Practices Act (FDCPA).<sup>155</sup>

The Third Circuit opined that Waypoint had a duty to investigate Ingram's dispute even though he did not provide direct evidence to Experian. The Court observed that Waypoint could have requested direct evidence from Ingram, treating the indirect

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<sup>146</sup> *Frazier v. Dovenmuehle Mortgage, Inc.*, No. 22-2570 (7th Cir. 2023), available at <https://law.justia.com/cases/federal/appellate-courts/ca7/22-2570/22-2570-2023-07-05.html>.

<sup>147</sup> *Id.*

<sup>148</sup> *Id.*

<sup>149</sup> *Wynn v. United Parcel Service, Inc.*, Case No. 21-cv-10029-CRB (U.S. Dist. Ct. N.D. Calif 2023), available at <https://caselaw.findlaw.com/court/us-dis-crt-n-d-cal/2191721.html>.

<sup>150</sup> *Id.*

<sup>151</sup> *Id.*

<sup>152</sup> *Id.*

<sup>153</sup> *Ingram v. Experian Information Solutions, Inc.*, No. 21-2430 (3d Cir. 2023), available at <https://law.justia.com/cases/federal/appellate-courts/ca3/21-2430/21-2430-2023-10-02.html>.

<sup>154</sup> *Id.*

<sup>155</sup> *Id.*

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dispute as a direct dispute. The Court reversed the district court's summary judgment, remanding the case back to the district court to determine whether Waypoint's behavior was reasonable.<sup>156</sup>

### Phoenix Financial Services LLC

On June 8, 2023, the CFPB issued an order against Phoenix Financial Services, LLC, a debt collector in Indiana that mainly collects past-due medical debts while providing credit reporting agencies with consumer financial information.<sup>157</sup> In violation of Sections 1681s-2(a) and (b) of the FCRA, the CFPB found that; (1) Phoenix had not created reasonable written policies and procedures regarding the accuracy and integrity of consumer information it furnished CRAs, (2) did not conduct reasonable investigations of consumer disputes, and (3) did not report the results of direct dispute investigations to consumers.<sup>158</sup>

The FPB also uncovered that Phoenix violated the FDCPA by sending debt collection letters to consumers before they received verification of the debt within the 30 verification period and that the furnisher claimed that consumers owed debts when there was no reasonable basis to make this representation.<sup>159</sup> The CFPB opined that matching personally identifiable information (PII) against data in its system was insufficient because it assumed that the information in Phoenix's system was accurate.<sup>160</sup> In other words, Phoenix instructed its employees to conduct a circular and cursory of customer data. Finally, the CFPB observed that Phoenix had an insufficient number of employees to deal with the volume of customer disputes.<sup>161</sup>

The FCPB order demanded that Phoenix refund all monies paid to Phoenix on an unverified debt from January 1, 2017, to the date that a consumer received an unlawful debt Collection letter disputing the alleged debt. The order obliged Phoenix not to engage in such behavior in the future and pay a \$1.675 million penalty.<sup>162</sup>

## BLOCKCHAIN ISSUES IN CREDIT REPORTING

This section addresses three topics: a definition of blockchain, the right to be forgotten and blockchain, and human trafficking and blockchain. The critical issue in the second and third subsections is that a blockchain is immutable, meaning that the data in a blockchain cannot be changed or deleted. Each topic is discussed in turn.

### What Is Blockchain?

According to Hayes, a blockchain is a "distributed database or ledger shared among a computer network's nodes."<sup>163</sup> Black's Law Dictionary defines a blockchain as a "string of bundled digital records of completed cryptocurrency transactions during a specified time on a network collectively forming a ledger that is open to public view."<sup>164</sup> According to Swan, a blockchain is a digital open electronic ledger that stores data about the purchases and sales of digital assets, allegedly permanently and securely.<sup>165</sup>

When reconsidering Hayes' definition of a blockchain, a distributed database is a "database that consists of two or more files located in different sites on either the same network or entirely different networks."<sup>166</sup> Parts of the database are typically stored in multiple physical locations, where the processing occurs among the various database nodes or computers.<sup>167</sup> A ledger is a "book in which a company or organization writes down the amounts of money it spends and receives."<sup>168</sup> In terms of blockchains, a distributed database is another name for a book where the entries of money spent and received are written down. Also, in this instance, an organization can be a natural person, a sole proprietorship, a partnership, an association, or a corporate entity.

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<sup>156</sup> *Id.*

<sup>157</sup> CFPB Staff, Phoenix Financial Services, LLC, *Consumer Financial Protection Bureau* (June 8, 2023), available at <https://www.consumerfinance.gov/enforcement/actions/phoenix-financial-services-llc/>.

<sup>158</sup> *Id.*

<sup>159</sup> *Id.*

<sup>160</sup> *Phoenix Financial Services, LLC*, No. 2023-CFPB-0004 (June 8, 2023), available at

[https://files.consumerfinance.gov/f/documents/cfpb\\_phoenix-financial-services-llc\\_consent-order\\_2023-06.pdf](https://files.consumerfinance.gov/f/documents/cfpb_phoenix-financial-services-llc_consent-order_2023-06.pdf).

<sup>161</sup> *Id.*

<sup>162</sup> *Id.*

<sup>163</sup> Adam Hayes, Blockchain Facts, What Is It, How It Works, and How It Can Be Used, *Investopedia* (Dec. 15, 2023), available at <https://www.investopedia.com/terms/b/blockchain.asp>.

<sup>164</sup> BLOCKCHAIN, BLACK'S LAW DICTIONARY (Thomson West 11th ed. 2019).

<sup>165</sup> EDWARD J. SWAN, CYBERCURRENCY LAW (Wolters Kluwer 2023).

<sup>166</sup> Lindsay Moore, Distributed Database, *Tech Target* (Sep. 2018), available at <https://www.techtarget.com/searchoracle/definition/distributed-database>.

<sup>167</sup> Adam Hayes, *supra*, note 165.

<sup>168</sup> Ledger, *Collins Dictionary* (n.d.), available at

<https://www.collinsdictionary.com/dictionary/english/ledger#:~:text=A%20ledger%20is%20a%20book,accounts%20More%20Synonyms%20of%20ledger>.

## Critical Issues Regarding the Employment of Blockchain in the Financial Credit Reporting Industry

### The Right to Be Forgotten

The right to be forgotten is a notion that the European Union (EU) has put into practice.<sup>169</sup> The issue resulted from individuals' desire to decide how to live their lives independent of electronic technology that perpetually or periodically collects data about their past without any ability to control the process.<sup>170</sup> This subsection discusses the Internet and privacy in general, what privacy means in the United States, what privacy means in the EU, the Costeja González case, and the conflict between blockchain and the right to be forgotten.

### Privacy and the Internet

When information is recorded in a computer, whether or not it is PII, it remains and is stored in a digital form essentially forever.<sup>171</sup> Years ago, before the proliferation of personal computers and cell phones, conversations were verbal and not recorded. Before the beginning of 2003, Facebook,<sup>172</sup> Instagram,<sup>173</sup> Skype,<sup>174</sup> Twitter,<sup>175</sup> or similar software applications did not exist. If verbal conversations were recorded at all, they were chronicled using sophisticated electronic equipment.<sup>176</sup> Except for violating the civilized rules of etiquette, most people were content in the knowledge that what was said to another person would disappear as the sounds of their voice dissipated into the air or became the topic of gossip by busybodies who had nothing better to do with their time. All this changed with the advent of computers and the Internet.

As the Internet intruded into everyday life, people naturally wanted to communicate with one another using their computers and cell phones.<sup>177</sup> At the beginning of the millennium, computers, cell phones, and other recording devices were relatively inexpensive.<sup>178</sup> These machines were also intensively marketed to the general public, arguing that one could not thrive in the electronic age without them.<sup>179</sup> However, in their stampede to amass huge profits, companies did not reveal their hidden agenda.<sup>180</sup> Everything that was said, typed, or written down using one of these machines was stored somewhere in a database.<sup>181</sup> Conversations that would previously dissolve into the atmosphere were now being documented for seemingly an eternity.<sup>182</sup> This simple consequence had dramatic ramifications on individual rights to privacy.<sup>183</sup> Anything recorded using a computer or a cell phone could now be accessed at any time in the future, even decades later when individuals were different people.<sup>184</sup>

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<sup>169</sup> Julia Powles & Enrique Chaparro, *How Google Determined Our Right to Be Forgotten*, THE GUARDIAN, (Feb. 18, 2015), available at <https://www.theguardian.com/technology/2015/feb/18/the-right-be-forgotten-google-search> and Paul Chadwick, *Should We Forget about the 'Right to Be Forgotten'?*, THE GUARDIAN, (Mar. 5, 2018), available at <https://www.theguardian.com/commentisfree/2018/mar/05/right-to-be-forgotten-google-europe-ecj-data-spain>.

<sup>170</sup> Alessandro Manteler, *Corrigendum to "The EU Proposal for a General Data Protection Regulation and the Roots of the 'Right to Be Forgotten'"*, 29 COMPUTER L. AND SEC. REV. 5, (Oct. 2013), available at [https://ac.els-cdn.com/S026736491300109X/1-s2.0-S026736491300109X-main.pdf?\\_tid=d11ae1fc-851a-4a1b-ac84-67ef2c0389ad&acdnat=1532803088\\_48ff203c0cf905edd8984c7d6b3699c](https://ac.els-cdn.com/S026736491300109X/1-s2.0-S026736491300109X-main.pdf?_tid=d11ae1fc-851a-4a1b-ac84-67ef2c0389ad&acdnat=1532803088_48ff203c0cf905edd8984c7d6b3699c).

<sup>171</sup> Scott Maucione, *Can Digital Data Last Forever?*, FEDSCOOP, (Nov. 8, 2013), available at <https://www.fedscoop.com/can-digital-data-last-forever/>.

<sup>172</sup> Sara Phillips, *A Brief History of Facebook*, THE GUARDIAN, (Jul. 25, 2007), available at <https://www.theguardian.com/technology/2007/jul/25/media.newmedia>. Facebook officially began in February 2004 when Mark Zuckerberg, its founder, was an undergraduate majoring in psychology at Harvard University.

<sup>173</sup> Raisa Bruner, *A Brief History of Instagram's Fateful First Day*, TIME, (Jul. 16, 2016), available at <http://time.com/4408374/instagram-anniversary/>. Instagram officially began on October 6, 2010.

<sup>174</sup> Doug Aamoth, *A Brief History of Skype*, TIME, (May 10, 2011), available at <http://techland.time.com/2011/05/10/a-brief-history-of-skype/>.

<sup>175</sup> Amanda MacArthur, *The Real History of Twitter, In Brief*, LIFEWIRE, (Updated Apr. 27, 2018), available at <https://www.lifewire.com/history-of-twitter-3288854>. Twitter, Inc. was founded on Mar. 21, 2006.

<sup>176</sup> *25 Products That Changed Recording*, SOUND ON SOUND (SOS), (Nov. 2010), available at <https://www.soundonsound.com/reviews/25-products-changed-recording>.

<sup>177</sup> Amanda Lenhart, Mary Madden, Aaron Smith, & Alexandra Macgill, *Communications and Social Media*, PEW RESEARCH CENTER, (Dec. 19, 2007), available at <http://www.pewinternet.org/2007/12/19/communications-and-social-media/>.

<sup>178</sup> *Cell Phone Cost Comparison Timeline*, TECHNOLOGY.ORG, (Sep. 18, 2017), available at <https://www.technology.org/2017/09/18/cell-phone-cost-comparison-timeline/>.

<sup>179</sup> Sophia Fedeli & Katerina Eva Matsa, *Use of Mobile Devices for News Continues to Grow, Outpacing Desktops and Laptops*, PEW RESEARCH CENTER, (Jul. 17, 2018), available at <http://www.pewresearch.org/fact-tank/2018/07/17/use-of-mobile-devices-for-news-continues-to-grow-outpacing-desktops-and-laptops/>.

<sup>180</sup> Douglas A. McIntyre & Thomas C. Frohlich, *10 Most Profitable Companies in the World*, USA TODAY, (Oct. 24, 2015), available at <https://www.usatoday.com/story/money/personalfinance/2015/10/24/24-7-wall-st-most-profitable-companies/74501312/>.

<sup>181</sup> Andy Beckett, *The Dark Side of the internet*, THE GUARDIAN, (Nov. 25, 2009), available at <https://www.theguardian.com/technology/2009/nov/26/dark-side-internet-freenet>.

<sup>182</sup> *Id.*

<sup>183</sup> *Id.*

<sup>184</sup> *Id.*



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### What Privacy Means in the United States

In the United States, the right to privacy is neither stated in the Constitution nor any of its amendments.<sup>185</sup> The right to privacy is a right that is implied from the rights that are expressed in the Constitution and by statutory law.<sup>186</sup> This means that the right to privacy is defined differently, depending on the individual that creates the definition.

The first right-to-privacy definition came from Louis D. Brandeis, who later became a Supreme Court Justice, and Samuel D. Warren when they wrote a Harvard Law Review article in 1890 entitled: *The Right to Privacy*.<sup>187</sup> In the article, Warren and Brandeis defined privacy as “the right to be let alone.”<sup>188</sup> Currently, according to Merriam-Webster’s Dictionary, privacy is the “quality or state of being apart from company or observation” or the “freedom from unauthorized intrusion.”<sup>189</sup> Black’s Law Dictionary defines privacy as: “[t]he right that determines the nonintervention of secret surveillance and the protection of an individual’s information.”<sup>190</sup> In Black, the definition is broken up into four parts. First, physical privacy is: “[a]n imposition whereby another individual is restricted from experiencing an individual or a situation.”<sup>191</sup> Second, delusional privacy is “[t]he imposition of a restriction that is exclusive to an entity.”<sup>192</sup> Third, informational privacy is: “[t]he prevention of searching for unknown information.”<sup>193</sup> Finally, dispositional privacy is; “[t]he prevention of attempts made to get to know the state of mind of an individual.”<sup>194</sup>

The reasonable expectation of privacy is a legal test that was used in *Katz*<sup>195</sup> in determining whether the Fourth Amendment applies. It is related to the right to privacy but different from the right to privacy. The right to privacy is a much more expansive notion and is present in many legal systems. There are two kinds of expectations of privacy. First, there is an objective expectation of privacy or an expectation of privacy that society commonly recognizes and may be protected by law.<sup>196</sup> Second, a subjective expectation of privacy is an opinion by a person about whether a specific circumstance is private.<sup>197</sup> For example, an individual has a reasonable expectation of privacy in public places that public or private institutions provide to ensure privacy. These places include hotel rooms<sup>198</sup>, public restrooms, portions of jails<sup>199</sup>, or a public phone booth.<sup>200</sup> One prominent exception to a reasonable expectation of privacy is an observation made during lawful aerial surveillance that does not use highly technical equipment.<sup>201</sup>

### What Privacy Means in the European Union

In the EU, the American Court’s reasonable expectation of privacy test is irrelevant. Instead, the EU currently uses the General Data Protection Regulation (GDPR) that superseded Directive 95/46/EC when determining whether an individual’s rights

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<sup>185</sup> Tim Sharp, *Right to Privacy: Constitutional Rights & Privacy Laws*, LIVE SCIENCE, (Jun. 12, 2013), available at <https://www.livescience.com/37398-right-to-privacy.html>.

<sup>186</sup> *Id.*

<sup>187</sup> Samuel D. Warren & Louis L. Brandeis, *The Right to Privacy*, 4 HARVARD LAW REVIEW 5 (Dec. 15, 1890), available at [http://groups.csail.mit.edu/mac/classes/6.805/articles/privacy/Privacy\\_brand\\_warr2.html](http://groups.csail.mit.edu/mac/classes/6.805/articles/privacy/Privacy_brand_warr2.html).

<sup>188</sup> *Id.*

<sup>189</sup> *Privacy*, MERRIAM-WEBSTER’S DICTIONARY [ONLINE], (n.d.), available at <https://www.merriam-webster.com/dictionary/privacy>.

<sup>190</sup> *Privacy*, BLACK’S LAW DICTIONARY [ONLINE], (n.d.), available at [https://www.westlaw.com/Browse/Home/SecondarySources/BlacksLawDictionary?transitionType=Default&contextData=\(sc.Default\)&VR=3.0&RS=cblt1.0](https://www.westlaw.com/Browse/Home/SecondarySources/BlacksLawDictionary?transitionType=Default&contextData=(sc.Default)&VR=3.0&RS=cblt1.0).

<sup>191</sup> *Id.*

<sup>192</sup> *Id.*

<sup>193</sup> *Id.*

<sup>194</sup> *Id.*

<sup>195</sup> *Katz v. U.S.*, 389 U.S. 347, 361 (1967), available at <https://supreme.justia.com/cases/federal/us/389/347/#tab-opinion-1946919> (here, the plaintiff had a reasonable expectation of privacy while making a call in phone booth. The reasonable expectation of privacy was created by Justice John Harlan in his concurrence.).

<sup>196</sup> *Expectation of Privacy*, LEGAL INFORMATION INSTITUTE, CORNELL UNIVERSITY, (n.d.), available at [https://www.law.cornell.edu/wex/expectation\\_of\\_privacy](https://www.law.cornell.edu/wex/expectation_of_privacy).

<sup>197</sup> *Id.*

<sup>198</sup> Jason C. Miller, *Do Not Disturb: Fourth Amendment Expectations of Privacy in Hotel Rooms*, 7 SETON HALL CIR. REV. 2, (Dec. 2010), available at [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1718669](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1718669).

<sup>199</sup> PAUL BERGMAN & SARA J. BERMAN-BARRETT, *CRIMINAL LAW HANDBOOK: KNOW YOUR RIGHTS, SURVIVE THE SYSTEM* 38, 63 (NOLO 18th ed. 2018).

<sup>200</sup> *Katz v. United States* at 361, *supra*, note 197.

<sup>201</sup> *Dow Chemical v. United States*, 476 U.S. 227 (1986), available at <https://supreme.justia.com/cases/federal/us/476/227/#tab-opinion-1956603> (here, there was no reasonable expectation of privacy by the plaintiff when the government conducted aerial surveillance). Also see *Florida v. Riley*, 488 U.S. 445 (1989), available at <https://supreme.justia.com/cases/federal/us/488/445/> (here, the Court held that police officials do not need a warrant to observe an individual’s property from public airspace).

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to privacy have been violated.<sup>202</sup> The significant differences are striking. In the United States, a citizen only has a reasonable expectation of privacy in their home.<sup>203</sup> With the introduction of Alexa, Amazon's so-called "smart speaker," a reasonable expectation of privacy in a home is quickly disappearing.<sup>204</sup> In contrast, the EU is traveling a different road. The EU is tipping the balance for an individual's rights of privacy against a search engine's economic interests and the public's right to know.<sup>205</sup>

In contrast to the United States Constitution, the European Union Charter of Fundamental Rights (EUCFR) explicitly respects private and family life and protects personal data.<sup>206</sup> Title II Article 7 states that "[e]veryone has the right to respect for his or her private and family life, home and communications."<sup>207</sup> Title II Article 8 affirms that "[e]veryone has the right to the protection of personal data concerning him or her."<sup>208</sup> Article 8 further expounds on an individual's right to privacy by declaring that "[s]uch data must be processed fairly for specified purposes and by the consent of the person concerned or some other legitimate basis laid down by law. Everyone has the right to access data which has been collected concerning him or her, and the right to have it rectified."<sup>209</sup> Article 8 concludes by noting that "[c]ompliance with these rules shall be subject to control by an independent authority."<sup>210</sup>

When Articles 7 and 8 of Title II of the EUCFR are compared to the OECD Guidelines,<sup>211</sup> it is evident that Articles 7 and 8 are consistent with these standards.<sup>212</sup> Title II Article 7 satisfies the data quality principle by ensuring that the data is accurate, complete, and current because it addresses a person's private family life.<sup>213</sup> The fundamental characteristic that an organization controlling personal information must demonstrate is that it respects individual or family privacy rights and the data generated therein.<sup>214</sup> Title II Article 8 Section 1 is also consistent with the OECD data quality principle for the same reason.<sup>215</sup> Title II Article 8 Section 2 encompasses the collection limitation principle, the purpose specification principle, the openness principle, and the individual participation principle. Data must be processed fairly for specified purposes with the consent of the person whose data is at issue.<sup>216</sup> Title II Article 8 Section 3 included the security safeguard principle and the accountability principle because accountability and

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<sup>202</sup> EU Directive 95/46/EC is also known as the "Data Protective Directive." Its purpose is to protect individuals regarding the processing of their personal information. Although the Directive was adopted in 1995, it has been recently superseded by the General Data Protection Regulation that was adopted in April 2016, becoming enforceable in May 2018.

<sup>203</sup> *What Is the "Reasonable Expectation of Privacy"?*, FINDLAW, (n.d.), available at <https://injury.findlaw.com/torts-and-personal-injuries/what-is-the--reasonable-expectation-of-privacy--.html>.

<sup>204</sup> Amazon.com, *Set Up Your Amazon Echo (1st Generation)*, AMAZON PRIME, (n.d.), available at <https://www.amazon.com/gp/help/customer/display.html?nodeId=201601770>.

<sup>205</sup> *Information society, privacy and data protection*, EUROPEAN UNION AGENCY FOR FUNDAMENTAL RIGHTS, (n.d.), available at <http://fra.europa.eu/en/theme/information-society-privacy-and-data-protection>.

<sup>206</sup> *Id.*

<sup>207</sup> *EU Charter of Fundamental Rights: Article 7 - Respect for private and family life*, EUROPEAN UNION AGENCY FOR FUNDAMENTAL RIGHTS, (n.d.), available at <http://fra.europa.eu/en/charterpedia/article/7-respect-private-and-family-life>.

<sup>208</sup> *EU Charter of Fundamental Rights: Article 8 – Protection of personal data*, EUROPEAN UNION AGENCY FOR FUNDAMENTAL RIGHTS, (n.d.), available at <http://fra.europa.eu/en/charterpedia/article/8-protection-personal-data>.

<sup>209</sup> *Id.*

<sup>210</sup> *Id.*

<sup>211</sup> The OECD Guidelines include:

- **Collection limitation principle** – Ensures that the collection of personal data is lawful;
- **Data Quality principle** – Specifies that the use of personal information should be accurate, complete, and current;
- **Purpose specification principle** – States that the purpose of collecting personal information should be explicit before the data is collected;
- **Security safeguards principle** – Requires that personal information should be reasonably protected against the risks of destruction, disclosure loss, modification, unauthorized access, and use;
- **Openness principle** – Demands that the practices and policies in collecting personal information must readily available;
- **Individual participation principle** – Requires that individuals have the right to acquire their personal information that was collected or verify that the data exists; and
- **Accountability principle** – Warrants that data control organizations are accountable for complying with the above principles.

<sup>212</sup> *30 Years After: The Impact of the OECD Privacy Guidelines*, JOINT ICCP-WPISP ROUNDTABLE, (Mar. 10, 2010), available at <https://www.oecd.org/sti/ieconomy/44946479.doc>.

<sup>213</sup> *Id.*

<sup>214</sup> *Id.*

<sup>215</sup> *Id.*

<sup>216</sup> *Id.*

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safeguarding individual personal information are intertwined.<sup>217</sup> Thus, when taken together, Title II Articles 7 and 8 satisfy the OECD privacy guidelines.

### Google Spain SL and Google, Inc. v. Agencia Española de Protección de Datos and Mario Costeja González

In Costeja González, the Court of Justice of the European Union (CJEU) held that Google Spain SL and Google, Inc. must eradicate links to web pages that are freely accessible worldwide when individuals whose PII is contained therein demand that the links be removed.<sup>218</sup> The result of the CJEU ruling was that an internet search engine must address the demands of individuals who ask that links be eliminated to freely accessible web pages when a third party conducts a search based on the individual's name.<sup>219</sup> The eradication reasons included situations where the search results are facially inadequate, no longer relevant, or excessive given the amount of time that has elapsed.<sup>220</sup> If the search engine refused to honor the request, an individual could petition the EU courts to redress grievances.<sup>221</sup> The courts reserve the right to overrule the decision of the search engine.<sup>222</sup>

In 1998, La Vanguardia, a Spanish newspaper, published two announcements regarding a forced sale of properties from social security debts.<sup>223</sup> The announcements were posted per the Spanish Ministry of Labor and Social Affairs (SMLSA) to entice people to bid on the properties in an auction.<sup>224</sup> The announcements were also published on the newspaper's website.<sup>225</sup>

One of the properties belonged to Mario Costeja González, and he was specifically named in one of the announcements.<sup>226</sup> In November 2009, Costeja González requested that his name be no longer part of the Google database. Costeja González wanted his name removed because the forced sale occurred nearly ten years earlier and was no longer relevant. La Vanguardia denied the request because the newspaper believed that erasing Costeja González's data was improper. After all, the SMLSA had ordered that his name be published.<sup>227</sup>

In February 2010, Costeja González contacted Google Spain SL requesting that the search engine remove the links.<sup>228</sup> Google Spain SL alerted Google, Inc., asking for guidance. Costeja González then filed a complaint with the Spanish Data Protection Agency, or the Agencia Española de Protección de Datos (AEPD), requesting that La Vanguardia, and Google Spain SL or Google, Inc. delete the links. On July 30, 2010, the AEPD rejected the complaint against La Vanguardia but endorsed the complaint against Google Spain SL and Google, Inc. Google Spain SL and Google, Inc. appealed the National High Court decision of Spain, or the Audiencia Nacional (AN). Google Spain SL and Google, Inc. argued that:<sup>229</sup>

- EU Directive 95/46/EC did not have jurisdiction over Google, Inc.;
- No data processing occurred;
- If data processing did occur, neither Google, Inc. nor Google Spain SL were data controllers; and
- Costeja González had no right to ask the search engine to remove the offending links.

The AN issued a stay pending a preliminary decision from the CJEU based on EU Directive 95/46/EC. In February 2013, the case was heard by the CJEU, and on May 13, 2014, the CJEU published its judgment.<sup>230</sup>

The CJEU concluded that Google Spain SL and Google, Inc.'s reasons were not compelling.<sup>231</sup> The Court opined that Google, Inc. was responsible for removing Costeja González's data. Costeja González's property's forced sale should be electronically forgotten because the information was no longer relevant.<sup>232</sup> The CJEU also held that Article 14(a)<sup>233</sup> of EU Directive

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<sup>217</sup> *Id.*

<sup>218</sup> *Press Release 7014: An internet search engine operator is responsible for the processing that it carries out of personal data which appear on web pages published by third parties*, COURT OF JUSTICE OF THE EUROPEAN UNION, (May 13, 2014), available at <https://curia.europa.eu/jcms/upload/docs/application/pdf/2014-05/cp140070en.pdf>.

<sup>219</sup> *Id.*

<sup>220</sup> *Id.*

<sup>221</sup> *Id.*

<sup>222</sup> *Id.*

<sup>223</sup> *Id.*

<sup>224</sup> *Id.*

<sup>225</sup> *Id.*

<sup>226</sup> *Id.*

<sup>227</sup> *Id.*

<sup>228</sup> *Id.*

<sup>229</sup> *Id.*

<sup>230</sup> *Id.*

<sup>231</sup> David Streitfeld, *European Court Lets Users Erase Records on Web*, THE NEW YORK TIMES, (May 13, 2014), available at <https://www.nytimes.com/2014/05/14/technology/google-should-erase-web-links-to-some-personal-data-europes-highest-court-says.html>.

<sup>232</sup> *Id.*

<sup>233</sup> *EU Directive 95/46/EC - The Data Protection Directive: Chapter II - General Rules on the Lawfulness of the Processing of Personal Data*, DATA PROTECTION COMMISSION, (n.d.), available at <https://www.dataprotection.ie/docs/EU-Directive-95-46-EC-Chapter-2/93.htm>.

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95/46/EC, as related to Articles 7(e) and 7(f) permitted Costeja González to object to the search engine keeping his data online. Furthermore, Article 12(b) allowed Costeja González to ask the search engine to remove his data.<sup>234</sup>

The decision was significant because it balances an individual's right to privacy and the EU's data protection laws against the public's right to know.<sup>235</sup> What the ruling did not do is remove the data instantaneously without considering due process issues.<sup>236</sup> The opinion also distinguished between public and private individuals.<sup>237</sup> In general, the CJEU held that individual privacy rights supersede a search engine operator's economic interests, including the public's right to know.<sup>238</sup> The CJEU aptly observed that had Costeja González been a public figure, the balance would have tilted in the other direction.<sup>239</sup>

After the case concluded, Google published an online form whereby an EU citizen or a European Free Trade Association (EFTA) national could ask Google to remove links, presuming that the data was inadequate, irrelevant, no longer relevant, or excessive.<sup>240</sup> On the first day that the form was published, Google received over 12,000 requests to remove specific links from the company's search engine.<sup>241</sup> The consumer advocacy group Consumer Watchdog subsequently invited Google to extend these European rights to users in the United States by filing a complaint with the FTC.<sup>242</sup> However, a similar holding in the United States by the Supreme Court or a comparable legislative action by Congress seems dim because of the possibility of violating the First Amendment.<sup>243</sup>

### Blockchain and the Right to Be Forgotten

The EU's right to be forgotten privacy law and the immutable characteristic of blockchains are on a collision course.<sup>244</sup> It is an instance of an irresistible force encountering an immovable object. The EU's right to be forgotten has existed for over a decade and was codified in Directive 95/46/EC and now in the GDPR. In contrast, the global blockchain market will likely grow in the 2020s from about \$6 billion to \$160 billion in 2029.<sup>245</sup> The issue is that a blockchain's distributed ledgers contain data that cannot be deleted or changed. This immutable characteristic of blockchain facilitates efficient supply chain management, product traceability, and proof of identity, along with numerous other business applications.<sup>246</sup> With blockchain, EU regulators are being forced to grapple with who controls a blockchain and who is liable if something goes wrong and the data is incorrect. It should be remembered that most of the data in blockchains are PPI, which triggers the application of the GDPR.<sup>247</sup> The pressing question in the EU is whether blockchain is legal or illegal, and the answer depends on how blockchain is employed.<sup>248</sup>

A major problem with public blockchains is that it does not conform with the principle of minimality, where Article 5(1)(c) of the GDPR and Article 4(1)(c) of Regulation (EU) 2018/1725 say that personal data must be "adequate, relevant and limited to what is necessary in relation to the purposes for which they [data] are processed."<sup>249</sup> In a blockchain, a data subject cannot change or delete inaccurate data or no longer relevant data.<sup>250</sup> Because anyone can join a public blockchain, it is impossible to identify a

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<sup>234</sup> *Id.*

<sup>235</sup> *Press Release 7014, supra*, note 220.

<sup>236</sup> *Streitfeld, supra*, note 233 at 80.

<sup>237</sup> *Id.* at 97.

<sup>238</sup> *Id.* at 80.

<sup>239</sup> *Id.* at 80.

<sup>240</sup> Jennifer Golbeck, *Google to Remove Revenge Porn from Search Results*, FUTURETENSE, (Jun. 19, 2015), available at [http://www.slate.com/blogs/future\\_tense/2015/06/19/google\\_announces\\_plan\\_to\\_remove\\_revenge\\_porn\\_from\\_search\\_results.html](http://www.slate.com/blogs/future_tense/2015/06/19/google_announces_plan_to_remove_revenge_porn_from_search_results.html).

<sup>241</sup> Rose Powell, *Google Receives 12,000 Requests to Be 'Forgotten' on First Day*, THE SUNDAY MORNING HERALD, (Jun. 01, 2014), available at <https://www.smh.com.au/technology/google-receives-12000-requests-to-be-forgotten-on-first-day-20140601-zru3g.html>.

<sup>242</sup> James Eng, *Consumer Watchdog: Google Should Extend 'Right To Be Forgotten' to U.S.*, NBC NEWS, (May 31, 2014), available at <https://www.nbcnews.com/tech/internet/consumer-watchdog-google-should-extend-right-be-forgotten-u-s-n388131>.

<sup>243</sup> Rebeca Heilweil, *How Close Is an American Right-To-Be-Forgotten?*, FORBES, (Mar. 4, 2018), available at <https://www.forbes.com/sites/rebeccaheilweil/2018/03/04/how-close-is-an-american-right-to-be-forgotten/#5a6c15bf626e>.

<sup>244</sup> Stephen Gardner, & Andrea Vittorio, *Blockchain's Forever Memory Confounds EU 'Right to Be Forgotten'*, *Bloomberg Law* (Aug. 3, 2022), available at <https://news.bloomberglaw.com/privacy-and-data-security/businesses-adopting-blockchain-question-eus-strict-privacy-law/>.

<sup>245</sup> *Id.*

<sup>246</sup> *Id.*

<sup>247</sup> See note 134 regarding the General Data Protection Regulation that was adopted by the European Union in April 2016 and became enforceable in May 2018.

<sup>248</sup> Stephen Gardner, & Andrea Vittorio, *supra*, note 246.

<sup>249</sup> EU Staff, *Data Minimization*, *European Data Protection Supervisor* (n.d.), available at [https://www.edps.europa.eu/data-protection/data-protection/glossary/d\\_en#:~:text=Data%20minimization&text=The%20data%20minimisation%20principle%20is,for%20which%20they%20are%20processed%20](https://www.edps.europa.eu/data-protection/data-protection/glossary/d_en#:~:text=Data%20minimization&text=The%20data%20minimisation%20principle%20is,for%20which%20they%20are%20processed%20).

<sup>250</sup> Stephen Gardner, & Andrea Vittorio, *supra*, note 246.

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central data controller (human being) who is responsible for compliance. The lack of human control over data is a major headache for EU regulators who want to know who is responsible if the blockchain goes wrong.<sup>251</sup>

According to France's Commission Nationale de l'Informatique et des Libertés (CNIL), the CNIL found in 2018 that storing PII on a blockchain should be restricted to "commitments" or hashes.<sup>252</sup> The CNIL also stated that nonpublic blockchains with a limited number of users are preferred over public blockchains.<sup>253</sup> In 2017, Hungary's data protection authority issued blockchain guidance that was superseded by the GDPR in May 2018. Since 2017, Hungary's law have received general consultation requests from data controllers regarding blockchain, but have yet to receive any complaints from data subjects.<sup>254</sup> Although there are some blockchain areas that need more theoretical analysis, the fixed nature of blockchain is a challenge for modifying and deleting PII as required by the GDPR. The issue with blockchain is that data can be anonymized, pseudonymized, or hashed, but that does not mean that the data is not recoverable. Competent hackers and other bad actors can penetrate the blockchain veil.<sup>255</sup>

Finally, the problem with private networks is that they do not scale and that large private blockchains present challenging governance issues.<sup>256</sup> In contrast, public blockchains could promote decentralized identity, where individuals maintain identity credentials in digital wallets and employ various transactions, such as purchasing a nonfungible token, recording a real property purchase, accessing online government services, or providing proof of age.<sup>257</sup> Decentralized identity could be appealing as an alternative to identity cards issued by most EU countries. The problem with decentralized identity is that data subjects would have to actively manage their credentials to ensure that they do not fall into the hands of criminals.<sup>258</sup>

### Human Trafficking Concerns

In this subsection, credit reporting and human trafficking are discussed in general, followed by a brief discussion about how blockchains should be employed when dealing with human trafficking.

### Human Trafficking in General

The CFPB recently discovered that CRAs and furnishers have not followed a rule that was implemented in June 2022 to help survivors of human trafficking.<sup>259</sup> The rule requires that CRAs block from credit reports any adverse information that comes from human trafficking. Specifically, the CFPB unearthed that firms failed to: (1) block information about identity theft predicated on overly broad criteria, (2) inform consumers when blocks were denied or rescinded, (3) provide identity theft victims with a summary of their rights, and (4) timely block all human trafficking information identified by consumers.<sup>260</sup> The CFPB also learned that:<sup>261</sup>

- Consumer reporting companies failed to block or remove information related to identity theft and human trafficking;
- Consumer reporting companies accepted information from unreliable furnishers;
- Furnishers provided information to consumer reporting companies that were known to be false; and
- Furnishers did not follow requirements for dispute investigations and identity theft.

The corrective actions taken by CRAs and furnishers have been positive. The CFPB required CRAs to revise their compliance processes so that they process all human trafficking block requests.<sup>262</sup> The CFPB demanded that furnishers delete all accounts that were deemed to have been opened fraudulently.

In general, the CFPB has engaged in regulatory and enforcement actions to fortify consumer reporting and furnishing systems. The CFPB has conducted rulemaking efforts to remove many kinds of medical debts from credit reports.<sup>263</sup> The CFPB also published advisory opinions on dealing with inaccurate background check reports and slovenly credit file sharing practices.<sup>264</sup> In particular, in November 2023, the CFPB ordered Toyota Motor Credit to pay \$60 million in fines for illegal lending and credit

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<sup>251</sup> *Id.*

<sup>252</sup> *Id.*

<sup>253</sup> *Id.*

<sup>254</sup> *Id.*

<sup>255</sup> *Id.*

<sup>256</sup> *Id.*

<sup>257</sup> *Id.*

<sup>258</sup> *Id.*

<sup>259</sup> CFPB Staff, CFPB Finds Violations of Credit Report Accuracy Requirements, Including for Survivors of Human Trafficking, *Consumer Financial Protection Bureau* (Apr. 8, 2024), available at <https://www.consumerfinance.gov/about-us/newsroom/cfpb-finds-violations-of-credit-report-accuracy-requirements-including-for-survivors-of-human-trafficking/>.

<sup>260</sup> *Id.*

<sup>261</sup> *Id.*

<sup>262</sup> *Id.*

<sup>263</sup> *Id.*

<sup>264</sup> *Id.*

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reporting. In October 2023, the CFPB and the FTC found that Trans Union had conducted illegal rental background checks and credit reporting practices, ordering the CRA to pay a \$23 million fine.<sup>265</sup>

### Blockchain and Human Trafficking

Much like the right to be forgotten, blockchains employed by CRAs must address how to block identity theft information from being accessed as well as blocking all human trafficking information identified by consumers.<sup>266</sup> The collision course is similar in that an immovable object is seemingly meeting an irresistible force. If CRA's decide to implement blockchain as a mechanism for storing consumer credit data, they must necessarily solve the inaccurate data problem and the data deletion problem as mandated by the FCRA. This does not appear to be an easy task, because the immutability characteristic of blockchain likely must change. At this stage, how this apparent contradiction to be resolved is unknown. The only advice that one can give is that blockchain technology must follow a Hegelian dialectic, where the thesis and antithesis are synthesized into a new entity.<sup>267</sup> It is the Hegelian process of becoming rather than the Aristotelian notion of being that should be at work here.<sup>268</sup>

### CONCLUSION

Based on the analysis contained herein, it appears that blockchain may be applied by the credit reporting industry, provided that individuals have the opportunity to remove specific data as prescribed by law. The privacy laws of the United States and the EU will likely not change to accommodate blockchain technology, where the blocks in a blockchain are immutable and the data remains forever. The more likely scenario is that the blockchain technology will change to satisfy the law, and in particular, the FCRA. The alternative is that credit reporting agencies and their furnishers will not be able to implement blockchain legally. If credit reporting agencies and their furnishers decide that blockchain technology is the wave of the future, they will likely run afoul of United States and EU law. This is an unacceptable position.

The theoretical foundation and implementation of blockchain must adapt to the legal realities of society. Any solutions to the impasse between the FCRA, the GDPR, and the privacy laws in other countries<sup>269</sup> and blockchain should appear in short order. The irresistible force of blockchain will likely drive the change. Companies are seeing the advantages of implementing blockchain. The law will more than probably show them the disadvantages. It is the nature of the beast.

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<sup>265</sup> *Id.*

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<sup>269</sup> Donald L. Buresh, *supra*, note 2.

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