REINVENTING CREDIT DATA SHARING REGULATION

LEON YEHUDA ANIDJAR & INBAR MIZRAHI-BOROHOVICH*

ABSTRACT

This Article is devoted to exploring the benefits and risks involved in the credit information sharing system by proposing a novel regulatory methodology. Specifically, we introduce a personalized scheme designed to regulate sharing, scoring and use of personal data. This contextual framework is grounded on three fundamental principles: the identity of the credit consumer, including his personal and socio-economic background; the purpose for which the consumer asks for credit provided by the lender; and the complexity of a given credit transaction. Furthermore, to ensure a fair balance between protecting privacy rights of consumers and enabling efficient and competitive practices of personal credit data sharing in the global markets, we suggest that ex-ante rulemaking and ex-post enforcement mechanisms should be designed according to their relative effectiveness. Consequently, in a case where ex-ante strategies fail in providing adequate protection for privacy rights, a more comprehensive ex-post approach should be carried out to achieve proper protection for individual rights; and where it is observed that ex-post policies provide an optimal deterrence against privacy violations, a more lenient approach regarding ex-ante rulemaking should be adopted. Our proposal contributes to creating an optimal equilibrium synergy of regulatory networks responsible for regulating the credit data sharing systems.

I. INTRODUCTION

The consumer credit data industry first evolved in the United States in the 1820s following a dramatic transformation in consumption culture and standards and merchandising practices. Most of the original credit bureaus were cooperatives or nonprofit ventures established by local merchants to combine the credit histories of their consumers and to assist in collections activities. Other credit bureaus were founded by local finance companies or by the local chamber of commerce.[1] Later on, this industry formed unique

* Dr. Leon Yehuda Anidjar holds a doctoral degree in Law from The Hebrew University of Jerusalem and is currently a doctoral candidate at the Rotterdam School of Management, Erasums University. Inbar Mizrahi-Borohovich is a doctoral candidate at the Federmann School of Public Policy and Government at the The Hebrew University of Jerusalem. We thank Professor David Levi-Faur, Dr. Michal Lavi, Karni Chagal-Feferkorn, and Dr. Maytal Gilboa for their very valuable comments and suggestions on earlier drafts of this paper.

[1] Robert M. Hunt, *A Century of Consumer Credit Reporting in America* 10–11 (FRB Phila., Working

mechanisms to share consumer credit information in different regions of the country, which was accomplished, in part, through the establishment of Associated Credit Bureaus, Inc.[2] The Associated Credit Bureaus developed the procedures and arrangements that enabled the sharing of credit records between agencies across the country. Their bureau membership increased quickly; in 1916 there were fewer than 100 bureaus, but by 1927 there were 800 bureaus and by 1955 the number of bureaus doubled.[3] When credit bureaus were strengthened, large agencies began establishing foreign branches in countries with close trade relations with the United States, such as Canada, Britain, and eventually, other European countries.

In the 1970s and 1980s, credit bureaus experienced unusually rapid growth due to the introduction of retail installment credit and revolving credit accounts.[4] This growth continued in the 1990s due to the automation of mortgage underwriting. By the early 1970s, the industry comprised over 2250 local or regional firms.[5] With the development of computer databases, public credit card issuers, and programmed underwriting, the threshold of technological investment needed to distribute credit reports developed.[6] This evolution required offering nationwide coverage of consumer credit information which caused many of the local or regional firms to sell their records to major national bureaus.[7] Today, the consumer reporting landscape includes large national bureaus with various credit and personal information, such as payday loans, utility and telephone accounts, medical information, employment history, residential history, check writing history, insurance claims, etc.[8] Throughout the last century, credit bureaus carried out an essential role in developing the consumer credit markets that were perceived as necessary for the flourishment of international economic exchanges. However, the widespread practice of credit data sharing, particularly in the era of the big data revolution, dramatically expanded the range of information gathered on credit consumers. Often, these practices substantially impair individual constitutional rights and cause adverse distributive consequences.[9] In this Article, we reevaluate the benefits and risks involved in the credit information sharing system by proposing a novel regulatory approach for designing the legal regimes that regulate the permissible collecting, scoring, and use of personal information by financial institutions and credit bureaus in the United States and Europe. Specifically, our mission is to construct a nuanced balance between consumers' privacy

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Paper No. 05-13, 2005), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=757929.

[2] *Id.* at 11.

[3] *Id.*

[4] THOMAS A. DURKIN ET AL., CONSUMER CREDIT AND THE AMERICAN ECONOMY 246–48 (2014).

[5] CFPB, KEY DIMENSIONS AND PROCESSES IN THE U.S. CREDIT REPORTING SYSTEM: A REVIEW OF HOW THE NATION'S LARGEST CREDIT BUREAUS MANAGE CONSUMER DATA 7 (2012), https://files.consumerfinance.gov/f/201212_cfpb_credit-reporting-white-paper.pdf.

[6] *Id.*

[7] *Id.* ("the development of computer databases, nationwide credit card issuers, and automated underwriting, the threshold of technological investment required to distribute credit reports increased, as did the importance of offering nationwide coverage. Many of the local bureaus sold their records to the major national bureaus.").

[8] Hunt, *supra* note 1, at 16–17.

[9] For a broad disscussion on the distinctive effects of artificial intelligence in the era of Big Data, see, for example, Nizan Geslevich Packin & Yafit Lev Aretz, *Learning Algorithms and Discrimination*, *in* RESEARCH HANDBOOK OF ARTIFICIAL INTELLIGENCE 88 (Woodrow Barfield & Ugo Pagallo eds., 2018); Talia B. Gillis & Jann Spiess, *Big Data and Discrimination*, 86 U. CHI. L. REV. 459, 478 (2019) https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3204674.

interest, justice and fairness, and the importance of preserving competition in the household's credit market by suggesting tailored mechanisms for sharing consumers' personal information.

We advance the following arguments. First, the current regulation of permissible data collection, scoring, and use should be redesigned to reflect the roles of individuals, markets, and states in establishing fair and efficient credit markets in the United States and Europe. Particularly, we introduce a contextual methodology to regulatory design that is grounded on three interrelated principles: the identity of the credit consumer including his personal and socio-economic background, the purpose for which the consumer asks for credit provided by the lender, and the complexity of a given credit transaction. This personalized methodology will allow jurists and policymakers to tailor proportional practices to simultaneously promote privacy, fairness and efficiency of global markets.

Second, we demonstrate why other branches of commercial laws such as corporate and tax laws should adopt a stakeholder's perspective for regulating the internal conduct of credit bureaus and financial institutions. Specifically, embracing a stakeholder's perspective for regulating the relations between different power holders in such organizations may induce them to pay close attention to privacy and fairness considerations of credit consumers.

Lastly, we explain how our analysis should be integrated in the conventional theory of the regulatory state. The term regulatory state refers to "modern states [that] are placing more emphasis on the use of authority, rules, and standard-setting, partially displacing an earlier emphasis on public ownership, public subsidies, and directly provided services."[10] We argue that to encourage regulatory cooperation and mutual faith, ex-ante rulemaking and ex-post enforcement mechanisms carried out by numerous administrative authorities should be redesigned according to their relative efficiency. We term the desirable interaction between these agencies as an "optimal equilibrium synergy of regulatory networks." In particular, we argue that when ex-ante policies fail to provide sufficient protection for privacy rights, more extensive ex-post methods should be implemented to achieve valuable protection for individual rights. Where it is observed that ex-post policies provide an optimal deterrence against privacy breaches, a more flexible approach regarding ex-ante rulemaking should be chosen.

This Article is structured as follows. Part I discusses the benefits and challenges associated with the credit information sharing systems around the world. Part II briefly discusses the regulatory approaches in relation to privacy protection and the legal arrangements for preventing abuse of consumers' personal data in the credit information sharing system adopted in Anglo-American law and the European Union ("EU"). In Part III, we lay down a novel regulatory approach that aims to increase privacy and fairness for credit consumers based on a reconceptualization of the roles individuals, markets, and states play in establishing fair practices of gathering, scoring, and use of personal information through different branches of laws. Part IV

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[10] CHRISTOPHER HOOD ET AL., REGULATION INSIDE GOVERNMENT: WASTE-WATCHERS, QUALITY POLICE, AND SLEAZEBUSTERS 3 (1999).

proposes an original concept for advancing cooperation between different regulatory agencies charged with protecting consumer rights in the credit information markets around the world. In our view, in the age of regulatory authorities' diffuseness, an optimal balance of synergy will be achieved only after a closer study of the effectiveness of ex-ante and ex-post power authorities in regulating consumers credit information markets through different branches of commercial law. We then summarize our conclusions.

II. CONSUMER CREDIT INFORMATION SHARING INDUSTRY: BENEFITS AND CHALLENGES

Consumer credit data refers to the practice by which third party organizations collect, process, and sell information about potential borrowers to assess their financial trustworthiness. The collection of financial data is used to evaluate the specific level of risk that a person brings to a particular transaction and therefore this collection is considered useful in the battle against the increasing over-indebtedness of borrowing individuals.[11] With the development of the retail and mortgage credit markets, consumers are becoming increasingly indebted, and this concerns both businesses and policy-makers. Following the financial crisis of 2008, protecting consumers in financial markets has become a popular issue on the public agenda and there is a consensus on the need for additional safeguards to stem the social problems that the crisis exacerbated.[12] Figure 1 describes the EU household debt as the percentage of the countries' nominal gross domestic product ("GDP") from 2006 to 2017.[13]

The EU's household debt accounted for 51.74% of the country's Nominal GDP in December 2006. This raised to a ratio of 54.44% in the global financial crisis days of between 2009 and 2010, and then declined to a rate of 50.00% in December 2017. Aggregating data in centralized databases is one solution that provides sophisticated lenders with a more

[11] Alberto Bennardo, Marco Pagano & Salvatore Piccolo, *Multiple Bank Lending, Creditor Rights, and Information Sharing*, 19 REV. FIN. 519, 523 (2015).

[12] Federico Ferretti, *The Over-Indebtedness of European Consumers Under EU Policy and Law*, in COMPARATIVE PERSPECTIVES OF CONSUMER OVER-INDEBTEDNESS – A VIEW FROM THE UK, GERMANY, GREECE, AND ITALY 11 (Federico Feretti, ed., 2016).

[13] CEIC Data, https://www.ceicdata.com/en/indicator/european-union/household-debt--of-nominal-gdp.

accurate picture of the consumers' financial obligations towards other financial institutions, which enables them to identify actual and potential over-indebtedness of borrowers.[14] In the past, lenders typically conducted their own risk assessment and applicant screening; however, following the development of increasingly sophisticated information technologies and the expansion of international financial markets, these activities were outsourced to intermediary entities traditionally known as Credit Reference Agencies, Credit Bureaus, or National Credit Registries. In more recent years, new business models have evolved and new ventures acting as data brokers have also entered the market.

The potential utilization of credit data and scores is extensive. Citizens' personal information might be traded not only with a variety of lenders, such as banks, credit card companies, and mortgage companies, but also in some instances with employers, medical insurers, landlords, and governmental authorities. Also, innovation in credit scoring has been taken to a new level of complexity. Major banks and credit-reporting agencies, as well as a variety of start-ups, have begun developing methods of mining consumer behavior online, tracking consumers' purchasing habits, and using the creditworthiness of friends and associates for insight into individuals' creditworthiness.

A. THE BENEFITS OF THE CREDIT INFORMATION SHARING PRACTICES

The economic literature identifies several advantages of credit data sharing systems. First, trading in consumer data may significantly increase competition in the households and small businesses credit market. Granting credit is argued to be based on the lender's ability to assess the probability that the borrower would not be able to fully repay the loan. Information gaps between borrowers and lenders make it difficult for the lenders to assess this risk and price it accordingly. In countries where the credit market is concentrated, in which only a few financial institutions hold most of the consumer information, the exchange of information on applicants or customer relationships with other financial institutions reduces the information monopoly of individual lenders and lessens the competitive advantage of major players.[15] Furthermore, it encourages new market entrants, who are competitively disadvantaged compared to other financial institutions who have gathered information in their own databases through years of experience and business practice in the credit market. Therefore, the availability of accurate and complete personal information could incentivize new players to enter the market.

Second, access to consumer credit data—especially to information about the financial standing, payments, and other details that do not indicate a default or a late payment—might allow a more efficient allocation of credit because of lenders' ability to price the risk more accurately.[16] When

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[14] FEDERICO FERRETTI, THE LAW AND CONSUMER CREDIT INFORMATION IN THE EUROPEAN COMMUNITY 23 (2008).

[15] Federico Ferretti, *The Never-Ending European Credit Data Mess*, EUROPEAN CONSUMER ORGANISATION (BEUC) 1, 13 (2017), https://www.beuc.eu/publications/beuc-x-2017-111_the-never-ending-european-credit-data-mess.pdf.

[16] MICHAEL A. TURNER & ROBIN VARGHESE, THE ECONOMIC CONSEQUENCES OF CONSUMER

information is shared, lenders are able to better discern an individual's risk profile rather than price credit based on an average interest rate that mirrors all borrowers pooled experience.[17] In other words, lenders can use better methods for distinction between good borrowers and bad ones. Therefore, lower-risk borrowers would be offered more advantageous prices while risky borrowers would be charged a higher interest rate or be excluded from the market.[18] As a result, practices of data collection, processing, and use can also be useful in tackling the over-indebtedness problems as they provide criteria for responsible lending.

Third, access to consumer credit data significantly increases credit access for underprivileged social segments such as lower income households, racial/ethnic minorities, women, and the young, while reducing the share of non-performing loans in a portfolio.[19] Furthermore, empirical research indicates that including non-financial payment data, such as energy utility and telephone payment data, in consumer credit files significantly improves credit access for lower income Americans, members of minority communities, and younger and elderly Americans.[20] Collecting information from alternative sources, like infrastructure and telecom companies, is shown to potentially help credit providers to better assess their clients' risk level, allowing a better credit scoring for populations who could not be scored when information was collected from financial entities only. In these cases, lenders chose not to grant credit and these people were considered credit excluded. Therefore, collecting information from alternative sources enables credit scoring for the credit excluded populations and extending credit access to all populations.[21]

Fourth, credit data assists with the prevention of moral hazards by consumers. When the credit history of every borrower is known to all lenders, the borrowers have a stronger incentive to meet all their obligations because they know that failure to repay their loans will harm their reputation among all lenders, while meeting their obligations will provide a better reputation and better credit terms from all lenders.[22] Therefore, information exchanges among lenders play a central role as a borrowers' discipline device. Each borrower would know that a default in re-payment harms their reputation with all the other potential lenders on the market, resulting in more costly credit. Therefore, information exchanges increase borrower discipline

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CREDIT INFORMATION SHARING: EFFICIENCY, INCLUSION, AND PRIVACY 22–24 (2010), https://www.oecd.org/internet/ieconomy/46968830.pdf.

[17] Craig McIntosh, Alain De Janvry & Elisabeth Sadoulet, *How Rising Competition Among Microfinance Institutions Affects Incumbent Lenders*, 115 ECON. J. 987, 993–97 (2005).

[18] John M. Barron & Michael Staten, *The Value of Comprehensive Credit Reports: Lesson from the US Experience*, *in* REPORTING SYSTEMS & THE INTERNATIONAL ECONOMY 273 (Margaret J. Miller ed., 2003).

[19] FERRETTI, *supra* note 14, at 24–26.

[20] MICHAEL A. TURNER ET AL., A NEW PATHWAY TO FINANCIAL INCLUSION: ALTERNATIVE DATA, CREDIT BUILDING, AND RESPONSIBLE LENDING IN THE WAKE OF THE GREAT RECESSION 16–17 (2012), https://www.perc.net/wp-content/uploads/2013/09/WEB-file-ADI5-layout1.pdf. Though, one cannot underestimate the deep concern in the essence of the prediction itself. Since all forecasts look to the past to make inferences about future events, any method of prediction will extend the inequalities of the past into the future. *See, e.g.*, Sandra G. Mayson, *Bias In, Bias Out*, 128 YALE L. J. 2218 (2019), https://www.yalelawjournal.org/article/bias-in-bias-out.

[21] TURNER ET AL., *supra* note 20, at 10–13.

[22] A. Jorge Padilla & Marco Pagano, *Sharing Default Information as a Borrower Discipline Device*, 44 EUR. E. REV. 1951, 1954 (2000).

and reduce moral hazard because failure to repay a debt with one lender would result in sanctions by all or many others.[23]

Fifth, research indicates that financial institutions with access to consumers' credit data better assist borrowers in dealing with different financial crises, such as dismissal, illness, disability, and death. A credit data sharing system limited to negative information might not be able to provide immediate recourse to borrowers facing such crises. Collecting positive information, however, might allow banking institutions to be more attentive to borrowers' various financial crises and more open to renegotiating past credit terms. Thus, collecting positive information will provide immediate response to temporary financial distress.[24]

B. THE CHALLENGES OF CREDIT INFORMATION SHARING PRACTICES

Although the credit data sharing industry may provide the necessary conditions for economic flourishment, at the same time it involves risks for individual rights and may cause adverse distributive outcomes, which regulatory agencies have advanced considerable efforts to address.

First, collecting data represent a threat to the privacy of individuals, especially, in an age of ever-advancing sophisticated information technologies. Cheap and accessible technology can automatically create new sources of data by matching and merging data from different sources and disclosing information to a potentially unlimited number of third parties for a growing number of purposes. When financial information is collected without explicit consent, consumers cannot control the use of their personal information. This means that people are no longer independent.[25] They are classified and tagged, unable to influence their classification and without any means to object their tagging.[26]

Second, the literature further claims that the scoring algorithms have extremely problematic distributive effects. Borrowers with a high credit score might receive better credit terms, while the credit terms given to borrowers with a problematic credit history may be inferior to those they had been given prior to the sharing of their personal information. Moreover, credit data collection systems may cause excluded clients to get credit at a

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[23] FERRETTI, *supra* note 14, at 12–13; Tullio Jappelli & Marco Pagano, *The Role and Effects of Credit Information Sharing*, *in* THE ECONOMICS OF CONSUMER CREDIT 347 (G. Bertola, R. Disney & C. Grant eds., 2006).

[24] *See generally* RICHARD DISNEY, SARAH BRIDGES & JOHN GATHERGOOD, DRIVERS OF OVER-INDEBTEDNESS: REPORT TO THE DEPARTMENT FOR BUSINESS, ENTERPRISE AND REGULATORY REFORM (2008), http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.514.9586&rep=rep1&type=pdf; Gianni Betti et al., *Consumer Over-Indebtedness in the EU: Measurement and Characteristics*, 34 J. ECON. STUD. 136 (2007); Ana Del Río & Garry Young, *The Determinants of Unsecured Borrowing: Evidence From the BHPS,* 16 APPLIED FIN. ECON. 1119 (2006). APOSTOLOS FASIANOS ET AL., HOUSEHOLD INDEBTEDNESS AND FINANCIAL FRAGILITY ACROSS AGE COHORTS, EVIDENCE FROM EUROPEAN COUNTRIES (2014), https://www.boeckler.de/pdf/v_2014_10_30_fasianos.pdf. This study indicates that age, income, employment, and financial asset holdings are the most significant determinants of secured and unsecured debt of households, while peer income effects, among others is a robust determinant of financially stressed households. *Id*.

[25] *See generally* ALAN F. WESTIN, PRIVACY AND FREEDOM (5th prtg. 1967).

[26] *See generally* Michal S. Gal, *Algorithmic Challenges to Autonomous Choice*, 23 MICH. TECH. L. REV. 59 (2018) (discussing how technological advances in data collection, data science, artificial intelligence, and communications systems are replacing human choice with regard to various transactions and actions).

higher interest rate. Additionally, credit scoring can lead to a rationalization of discrimination against excluded populations. Credit bureaus might exclude certain populations due to objective risk, the perception of which stems from discriminative social conditions.[27] This may result in exclusion of consumers from essential financial services to the potential detriment of their social standing, dignity, and liberty as citizens and as human beings.[28]

Third, the lack of transparency in the scoring of personal information is also problematic. The methodology is usually not disclosed, and it is far from clear who has access to consumers' private information.[29] Because proprietary algorithms are considered trade secrets the precise scoring techniques are not disclosed to the public. Many consumers struggle to challenge the outcomes of the scoring process because they lack the relevant information concerning the process' methods.[30] For instance, the German credit sharing industry is controlled by the *Schufa*, the Protective Society for General Credit Assurance.[31] Recently, the German Supreme Court determined that the *Schufa* is required to disclose to borrowers all of the information stated by the Federal Data Protection Act.[32] However, it is not required to disclose the statistical model on which the credit scoring is based on because it is perceived as a protected trade secret of the *Schufa*.[33]

Fourth, another concern is that borrower information generated by credit companies is not accurate and therefore harmful to borrowers' credit scores.[34] Credit companies lack the necessary incentive to invest in the required resources (beyond the essential ones) to ensure the accuracy and integrity of clients' credit scoring.[35] Specifically, economic research shows that the competitive advantage of access to exclusive information often incentivizes financial institutions to provide inaccurate information on a client's credit history.[36] Thus, financial institutions might compromise borrowers' ability to turn to other financial institutions to negotiate on better credit terms.

Fifth, in many countries, credit data and credit scores are processed not only by financial institutions to evaluate the risks associated with a credit transaction, but also by other entities like employers and landlords for background checks on applicants. For example, many insurance companies

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[27] *See generally* Luke Herrine, *Credit Reporting's Vicious Cycles*, 40 N.Y.U. REV. L. & SOC. CHANGE 305 (2016).

[28] FERRETTI, *supra* note 14, at 56.

[29] For an extensive discussion of these unlawful practices, see FRANK PASQUALE, THE BLACK BOX SOCIETY: THE SECRET ALGORITHMS THAT CONTROL MONEY AND INFORMATION 101–41 (2015).

[30] FERRETTI, *supra* note 14, at 16.

[31] For a historical and institutional analysis of credit information sharing industry in Germany, see Larry Frohman, *Virtually Creditworthy: Privacy, the Right to Information, and Consumer Credit Reporting in West Germany, 1950–1985*, *in* THE DEVELOPMENT OF CONSUMER CREDIT IN GLOBAL PERSPECTIVE: BUSINESS, REGULATION, AND CULTURE 129 (Jan Logemann ed., 2012).

[32] *See* Press Release, Bundesgerichtshof, Bundesgerichtshof entscheidet über Umfang einer von der SCHUFA zu erteilenden Auskunft [Federal Court Decides on the Extent of Information to be Provided by SCHUFA] (Jan. 28, 2014), http://juris.bundesgerichtshof.de/cgi-bin/rechtsprechung/document.py?Gericht=bgh&Art=en&sid=2ef8cefa03b7d0493f54c1bc71ee0a53&anz=1&pos=0&nr=66583&linked=pm&Blank=1.

[33] For a full discussion, see Nils Zurawski, *Exercising Access Rights in Germany*, *in* 34 THE UNACCOUNTABLE STATE OF SURVEILLANCE: EXERCISING ACCESS RIGHTS IN EUROPE 109, 113–14 (Clive Norris et al. eds., 2017).

[34] NICOLA JENTZSCH, FINANCIAL PRIVACY: AN INTERNATIONAL COMPARISON OF CREDIT REPORTING SYSTEMS 243–45 (2nd ed. 2007).

[35] Michael E. Staten & Fred H. Cate, *Does the Fair Credit Reporting Act Promote Accurate Credit Reporting?* (Joint Ctr. for Hous. Studies of Harvard Univ., Working Paper Series BABC 04-14, 2004).

[36] Jappelli & Pagano, *supra* note 23, at 348.

use credit scoring to determine their clients' insurance premiums, and landlords ask to see potential renters' credit scoring, as do employers when recruiting new employees. Thus, the credit data sharing system might deepen socioeconomic gaps by excluding people negatively affected by the current methods of credit scoring from participation in their country's economy and society.[37]

Sixth, borrowers are often unaware of their statutory rights and therefore cannot defend their rights. One way to overcome this challenge is by augmenting proper financial education mechanisms for borrowers.[38] On the other hand, the collection of negative information will not necessarily lead to a better or more accurate assessment of the risks involved in the credit transaction due to negative bias whereby negative information has a more significant effect on the lender's assessment than neutral or positive knowledge.[39]

To conclude, even though the credit data sharing has obvious economic advantages such as increasing credit market competition in the banking system, decreasing overleveraging, and reducing insolvency rates, these practices harm the borrowers' right to privacy and might exclude vulnerable populations from receiving decent credit, housing, and employment. In the next parts of this Article, we wish to address these difficulties by suggesting a fresh new regulatory approach.

III. THE LEGAL FRAMEWORK FOR PROTECTING PRIVACY RIGHTS OF CONSUMERS IN THE CREDIT INFORMATION SHARING SYSTEM

A. THEORETICAL BACKGROUND

The constitutional right to privacy is traditionally conceived as the "right to be let alone."[40] Locke's liberal theory of property and individual rights asserts the negative freedom of personal rights, such as the freedom to protect aspects of private life from third party intrusion by requiring explicit consent.[41] Accordingly, the social theorist Donald W. Ball proclaims "[privacy is the] ability to engage in activities without being observed."[42] This notion of privacy may be compared with the law of trespass, which prohibits an unauthorized intrusion onto another's property and grants the

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[37] *See generally* Lea Shepard, *Seeking Solutions to Financial History Discrimination*, 46 CONN. L. REV. 993 (2014); Tal Z. Zarsky, *Understanding Discrimination in the Scored Society*, 89 WASH. L. REV. 1375 (2014).

[38] Adi Osovsky, *The Misconception of the Consumer as a* Homo Economicus*: A Behavioral Economic Approach to Consumer Protection in the Credit-Reporting System*, 46 SUFFOLK U. L. REV. 881, 925–32 (2013).

[39] Elizabeth A. Kensinger, *Negative Emotion Enhances Memory Accuracy: Behavioral and Neuroimaging Evidence,* 16 CURRENT DIRECTIONS IN PSYCHOL. SCI. 213, 214 (2007); Paul Rozin & Edward B. Royzman, N*egativity Bias, Negativity Dominance, and Contagion*, 5 PERSONALITY & SOC. PSYCHOL. REV. 296, 297 (2001).

[40] Samuel D. Warren & Louis D. Brandeis, *The Right to Privacy*, 4 HARV. L. REV. 193, 195 (1890).

[41] Ruth Gavison, *Privacy and the Limits of Law*, 89 YALE L.J. 421, 446–47 (1980); Ari E. Waldman, *Privacy as Trust: Sharing Personal Information in a Networked World*, 69 U. MIAMI L. REV. 559, 571 (2015).

[42] Donald W. Ball, *Privacy, Publicity, Deviance and Control*, 18 PAC. SOC. REV. 259, 260 (1975).

owner of the land the right to exclude others and to determine who shall be granted entry.[43]

Others, however, argue that individuals do not own information about themselves and so in reality no proprietary rights exist on personal information.[44] Although personal information pertains to an individual, it does not belong to him or her in any restrictive sense. Therefore, collecting and processing such data may be legitimate as long as the process complies with legal procedure. According to this framework, data protection laws aim to protect individuals not against data processing *per se* but against the unjustified collection, storage, use, and dissemination of their data.[45]

Philosophers and scholars like Kant have argued that the right to privacy is an essential condition for the flourishment of independence, autonomy, personhood, and the respect of individuals as ends in themselves.[46] Independence and autonomy mean each individual has the right to choose what the public will know about his personal life. However, juries and policymakers cannot derive practical solutions to critical problems in privacy law from such philosophical conjectures.[47] Notwithstanding, the debate over the policy implications of the right for privacy has become a proxy for broader societal choices about fairness, equity, equality, and power.[48]

Several benchmark theories of privacy could shed light on the legitimacy of the practices of collecting, scoring, and using credit information. Helen Nissenbaum's contextual integrity theory offers a conceptual framework that couples the protection of private information and the norms of information flow within specific contexts.[49] In order to identify whether the introduction of a new practice or technology into a given social context violates the governing informational norms, the contextual integrity theory rejects the conventional distinction between public and private information.[50] Instead, this theory suggests that information-sharing actions present themselves in a "plurality of distinct realms," all of which are governed by norms of information flow that define the outlines of our fundamental entitlements regarding personal information.[51] The theory differentiates between two classes of the informational norm: norms of appropriateness and norms of flow or distribution. Norms of appropriateness determine whether information of a particular type or nature is appropriate to be disclosed in a

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[43] Waldman, *supra* note 41, at 571 ("The legal implication of this theory is to conceive of a right to privacy as a right to exclude, which reflects the Lockean origins of the argument.")

[44] Jerry Kang & Benedikt Buchner, *Privacy in Atlantis*, 18 HARV. J.L. & TECH. 229, 235 (2004).

[45] Maurizio Borghi, Federico Ferretti & Stavroula Karapapa, *Online Data Processing Consent Under EU Law: A Theoretical Framework and Empirical Evidence from the UK*, 21 INT'L J.L. & INFO. TECH. 109, 116 (2013).

[46] Waldman, *supra* note 41, at 581–82. *See generally* ARTHUR RIPSTEIN, FORCE AND FREEDOM: KANT'S LEGAL AND POLITICAL PHILOSOPHY (2009); Andrea Sangiovanni, *Rights and Interests in Ripstein's Kant*, *in* FREEDOM AND FORCE: ESSAYS ON KANT'S LEGAL PHILOSOPHY 77, 85–86 (Martin J. Stone & Sari Kisilevsky eds., 2017).

[47] Waldman, *supra* note 41, at 563.

[48] *See generally* Jules Polonetsky, Omer Tene & Evan Selinger, *Consumer Privacy and the Future of Society*, *in* THE CAMBRIDGE HANDBOOK OF CONSUMER PRIVACY 3 (Evan Selinger, Jules Polonetsky & Omer Tene eds., 2018).

[49] *See generally* HELEN NISSENBAUM, PRIVACY IN CONTEXT: TECHNOLOGY, POLICY, AND THE INTEGRITY OF SOCIAL LIFE (2010).

[50] Kirsten E. Martin & Helen Nissenbaum, *Measuring Privacy: An Empirical Test Using Context to Expose Confounding Variables*, 18 COLUM. SCI. & TECH. L. REV. 176, 190 (2016).

[51] Helen Nissenbaum, *Privacy as Contextual Integrity*, 79 WASH. L. REV. 119, 137 (2004).

given context.[52] Norms of flow consider whether the distribution of information conforms to contextual norms of information flow.[53] Accordingly, privacy is invaded at the breach of informational norms.[54] Therefore, when confronted with specific information sharing, we should consider them as respecting or violating privacy rights according to whether they conform to expectations of flow within a given context.[55]

Recently, Jack Balkin suggested that law should consider service providers as "information fiduciaries" that have "special duties to act in ways that do not harm the interests of the people whose information they collect, analyze, use, sell, and distribute."[56] Accordingly, "in the digital age, because we trust them with sensitive information, certain types of online service providers take on fiduciary responsibilities."[57] Balkin provides a number of general principles to define the information fiduciary duty, such as the notion that a company is an information fiduciary "when the affected individuals reasonably believe that it will not disclose or misuse their personal information based on existing social norms of reasonable behavior, existing patterns of practice, or other objective factors that reasonably justify their trust."[58]

In the same vein, Waldman argued that privacy laws regulating data aggregation and disclosure of personal information about each individual should be designed to protect relationships of trust.[59] According to this view, a behavior becomes an invasion of trust when it violates the trust we have that others will behave in expected ways.[60] Under the conception of privacy as trust, gathering credit information and sharing it with third parties is allowed only when each of us explicitly approves the collection of personal data and gives our permission for a specific utilization.

Therefore, to achieve trust between consumers and private or public credit bureaus, the laws that regulate credit data sharing should permit the collection and sharing of personal data with several lenders only for specific

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52 Helen Nissenbaum, *Respecting Context to Protect Privacy: Why Meaning Matters*, 22 SCI. & ENGINEERING ETHICS 831, 839–40 (2015).

53 NISSENBAUM, *supra* note 49, at 9.

Aiming at descriptive accuracy, the theory articulates a model wherein informational norms are defined by three key parameters: information types, actors, and transmission principles. It postulates that whether a particular flow, or transmission of information from one party to another is appropriate depends on these three parameters, namely, the type of information in question, about whom it is, by whom and to whom it is transmitted, and conditions or constraints under which this transmission takes place. *Id.*

54 *Id.* at 140.

55 Martin & Nissenbaum, *supra* note 50, at 191–92.

56 Jack M. Balkin, *Information Fiduciaries and the First Amendment*, 49 U.C. DAVIS L. REV. 1183, 1186 (2016).

57 *Id.* at 1221.

58 *Id.* at 1224; *see* Ariel Dobkin, *Information Fiduciaries in Practice: Data Privacy and User Expectations,* 33 BERKELEY TECH. L.J. 1, 17–47 (2018). The author argues that companies breach their fiduciary duty when they abuse users' trust by: (1) using their data to manipulate them; (2) using their data to discriminate against them; (3) sharing their data with third parties without their consent; or (4) violating their own privacy policies. *Id.*

59 *See* Neil M. Richards & Woodrow Hartzog, *Taking Trust Seriously in Privacy Law*, 19 STAN. TECH. L. REV. 431 (2016). *See generally* ARI EZRA WALDMAN, PRIVACY AS TRUST: INFORMATION PRIVACY FOR AN INFORMATION AGE (2018).

60 Waldman, *supra* note 41, at 598 ("data gathering, aggregation, categorization, and subsequent disclosure to third parties could not constitute invasion of privacy . . . because we already gave up control when we disclosed details about ourselves to banks, consumer website, and governmental agencies. Rather, this process may be perceived as invasion of our privacy because subsequent action taken with our data violates the expectation we had of the behavior of third parties in whom we entrusted our data.").

purposes essential to the realization of significant policy goals and authorized by the consumer in advance. Furthermore, to maintain trust in the credit data sharing industry, laws should form a direct association between the authorized personal information which may be collected and the economic and social purposes the state would like to accomplish. In other words, the law of privacy should permit the collection and use of personal data only when it is essentially required to achieve a specific policy aim.[61]

In the next part, we discuss significant differences among nations concerning the regulatory approaches with respect to privacy protection and the means available to consumers for preventing abuse of their personal information. We will concentrate on the different regulatory approaches embraced by European, English, and American laws.

B. THE EUROPEAN LEGAL APPROACH

1. A (Very) Brief Review of the Consent Mechanism in the GDPR's Provisions

Most European countries collect both positive and negative information about borrowers' financial behavior through Private Credit Bureaus ("PCBs") and Central Credit Registers ("CCRs").[62] In the past, the process of gathering, using, and scoring financial data was generally regulated by individual European countries.[63] However, the European Union ("EU") enacted the General Data Protection Regulation ("GDPR"), considered one of the most important privacy reforms in the history of Europe.[64] It is regarded as the most comprehensive and forward-looking piece of legislation to approach the challenges involved in protecting different kinds of personal information in the digital era. We shall briefly review the main provision related to our discussion.

Article 4 of the GDPR defines several important overarching concepts. Accordingly, "personal data" refers to any information relating to an identified or identifiable natural person (the 'data subject').[65] A data subject is one who can be identified, directly or indirectly, by reference to a name, number, location data, or an online identifier, or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person.[66] Moreover, the GDPR embraced a broad definition for the concept of "processing" personal data that includes any operation or set of operations performed on personal data or sets of

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[61] FERRETTI, *supra* note 14, at 6.

[P]ersonal data may become the gateway of the economic and social life of people determining, inter alia, access conditions to services and consequently they may play a role in inclusion or exclusion in society in a broad sense. Therefore, the data need to be reliable and proportionate to achieve well identified policy objectives in the general interest. *Id.*

[62] *Id.* at 27–31. *See generally* Margaret J. Miller, *Credit Reporting Systems around the Globe: The State of Art in Public Credit Registries and Private Credit Reporting Firms*, *in* REPORTING SYSTEMS AND THE INTERNATIONAL ECONOMY 25 (Margaret J. Miller ed., 2003).

[63] Ferretti, *supra* note 12, at 151–76.

[64] Regulation 2016/679 of the European Parliament and of the Council of 27 April 2016 on the Protection of Natural Persons with regard to the Processing of Personal Data and on the Free Movement of such Data, and Repealing Directive 95/46/EC (General Data Protection Regulation), 2016 J.O. (L 119) 1 (EU) [hereinafter GDPR].

[65] *Id.* at art. 4(1).

[66] *Id.* at recital 26.

personal data, whether or not by automated means, such as data collection, recording, organization, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction.[67]

The most relevant provision for our purpose is Article 6 of the GDPR which requires one of a group of conditions to be met before personal data may be processed.[68] The best-known ground for lawful processing is that the data subject has given his or her consent for the use of his or her personal information.[69] The fundamental feature of consent is that it should result from the free choice of the individual. Consent is meaningless if people have no option but to consent in order to obtain a service.[70]

However, there are many situations where there is an imbalance of power between the data subject and the data processor. Therefore, some scholars have stated that for the notion of consent to operate as a valid source of personal accountability, an individual has to be in a strong bargaining position when dealing with a commercial business or public organization.[71] The GDPR requires freely given consent. Where there is an apparent imbalance between the data subject and the controller, particularly where the controller is a public authority, the GDPR rejects the notion that the data subject is able to freely consent.[72] Moreover, blanket consent is presumed not to be freely given.[73] Separate consent must be given to different personal data processing operations and whenever a contractual agreement depends on consent, even if consent is not necessary for performance.[74]

Furthermore, the processing of personal data by a data controller can also be legitimate when it is necessary for contract performance. Personal data may be processed if the "processing is necessary for the performance of a contract to which the data subject is a party or in order to take steps at the request of the data subject prior to entering into a contract."[75] Personal data may also be processed if "necessary for compliance with a legal obligation to which the controller is subject."[76] Processing can be lawful if "necessary in order to protect the vital interests of the data subject or of another natural person."[77] This legal bar could be raised, for example, when processing is "necessary for humanitarian purposes, including for monitoring epidemics and their spread or in situations of humanitarian emergencies, in particular in situations of natural and man-made disasters."[78] Alternatively, a controller

[67] *Id*. at art. 4(2). The GDPR recommends pseudonymization as a security measure. *Id*. at art. 4(5), recitals 28–29.

[68] *See* Chris Jay Hoofnagle et al., *The European Union General Data Protection Regulation: What It Is and What It Means*, 28 INFO. & COMMS. TECH. L. 65, 79–82 (2019).

[69] GDPR at arts. 4(11), 6(1), 7(3); recitals 32–33, 42–43. For a detailed discussion on the role of consent in law, see DERYCK BEYLEVELD & ROGER BROWNSWORD, CONSENT IN THE LAW (2007).

[70] Borghi, Ferretti & Karapapa, *supra* note 45, at 123.

[71] *Id*. at 125; Sheldon Leader, *Inflating Consent, Inflating Function, and Inserting Human Rights*, *in* CAPITALISM AND HUMAN RIGHTS 28 (Janet Dine & Andrew Fagan eds., 2006).

[72] GDPR at art. 6(1)(a), recital 43.

[73] *Id*.

[74] *Id*.

[75] *Id*. at art. 6(1)(b).

[76] *Id*. at art. 6(1)(c).

[77] *Id*. at art. 6(1)(d); *see id*. at recitals 46, 112.

[78] *Id*. at recital 46.

may process personal data if it is "necessary for the performance of a task carried out in the public interest or in the exercise of official authority vested in the controller."[79]

Article 6(1)(f) articulates a commercially relevant, but controversial condition; it states that processing may be carried out if "necessary" for the data processor's "legitimate interests," except when these interests are dismissed by the interests or fundamental rights and freedoms of the data subject, taking into consideration the reasonable expectations of data subjects based on their relationship with the processor.[80] The circumstances in which the processor can rely on "legitimate interests" in order to be able to process personal data are highly debated.[81]

The *Google Spain* case offered the most significant interpretation of the term "legitimate interests." Google argued that the collection and processing of personal data in its search engines were lawful under the condition of Article 6's "legitimate interests."[82] Although the court emphasized that relying solely on the "economic interest" of the operator will not be enough, the court accepted Google's claim since there were also "legitimate interest[s] of internet users potentially interested in having access to that information."[83] However, "the economic interest of Google could well have been trumped by the rights of users who did not wish information about them to be indexed, had it not been for the general public interest of all users in being able to access information on the Internet via search engines."[84]

The GDPR provides data subjects a protected right to object to processing on considerations relating to their particular state.[85] If a data controller relies on a legal basis of necessity for public interest or a legitimate interests provision,[86] data subjects have a right to object. The data controller must explicitly bring the objection right to the attention of the data subject.[87] If the data subject exercises its right to object, the data controller must stop the processing. However, the right to object is not absolute; after the data subject objects, the data controller may continue the processing if it can prove compelling legitimate grounds for the processing that supersedes the interests of the data subject.[88] A state body that processes personal data can override the data subject's objection for public interest reasons.[89]

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[79] *Id*. at art. 6(1)(e). *See id*. at recital 45.

[80] *Id*. at recitals 47–50; *see* Hoofnagle et al., *supra* note 68, at 80–81.

[81] See, for example, the British ICO interpretation of the term 'legitimate interests' in the following address: https://ico.org.uk/for-organisations/guide-to-the-general-data-protection-regulation-gdpr/legitimate-interests/.

[82] Case C-131/12, Google Spain SL v Agencia Española de Protección de Datos (May 13, 2014), http://curia.europa.eu/juris/document/document.jsf?text=&docid=152065&doclang=EN [hereinafter Google Spain].

[83] *Id*. at ¶ 81.

[84] Lilian Edwards, *Data Protection: Enter the General Data Protection Regulation*, *in* LAW, POLICY AND THE INTERNET (Lilian Edwards ed., 2018), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3182454.

[85] GDPR at arts. 5, 14, 21(1).

[86] *Id*. at arts. 6(1)(2), 6(1)(f).

[87] *Id*. at arts. 5, 14, and 21(1).

[88] *Id*. at art. 21(1).

[89] Hoofnagle et al., *supra* note 68, at 90–91.

2. Sketching the Limits of the Opt-In Regime Embodied in the GDPR's Provisions

The EU has adopted an opt-in regime, which shifts the burden to the data controller to demonstrate that he or she received the explicit permission for processing personal data under the consent mechanism. This approach is consistent with the "liberal autonomy principle that seeks to place the individual at the center of decision-making about personal information use."[90] Also, this notion aims "to create a sense of European citizenship through development and enforcement of European constitutional rights."[91] The GDPR approach may be consistent with empirical studies that indicate that there is vast public support for adopting stronger protection laws to privacy rights.[92] Generally, respondents express deep concern for privacy, opposition toward growing surveillance and data practices, and objection to online tracking and behavioral advertising.[93] Policymakers should, however, be aware of several negative consequences resulting from opt-in rules for data privacy, even if such a regime, accompanied by a genuinely consensual mechanism, provides better protection of constitutional rights.

Often, opt-in requirements frame consumer choices in directions that lead to less-than-optimal data sharing. For example, studies demonstrated that opt-in rules restrict market innovation. Goldfarb and Tucker found that privacy regulations can negatively change the efficacy of online advertising, restricting the Internet's primary financing device.[94] Specifically, Goldfarb and Tucker analyzed the impact of the EU's Privacy and Electronic Communications Directive ("2002/58/EC"), which restricts advertisers' ability to collect and use information about consumers for targeted advertising. The authors found that after the opt-in policy went into effect, the result was an average reduction in the effectiveness of online ads by approximately 65 percent.[95] Therefore, opt-in regulations would reduce the available funding for online companies and reduce their potential to produce market innovation. In the same vein, Campbell showed that if privacy regulations only rely on enforcing opt-in consent, an unintended outcome

[90] Edward J. Janger & Paul M. Schwartz, *The Gramm-Leach-Bliley Act, Information Privacy, and the Limits of Default Rules*, 86 MINN. L. REV. 1219, 1247 (2002).

[91] Paul M. Schwartz & Karl-Nikolaus Peifer, *Transatlantic Data Privacy Law*, 106 GEO. L. REV. 115, 145 (2017).

[92] *See, e.g.*, Jay P. Kesan et al., *A Comprehensive Empirical Study of Data Privacy, Trust, and Consumer Autonomy*, 91(2) IND. L. J. 267, 290–346 (2016).

[93] *Id*. at 290. However, one should read such studies with cautions because these surveys rarely confront consumers with the price results of their choice to extend the protection provided by private protection laws. This point is illustrated in Lior Strahilevitz & Matttew B. Kugler, *Is Privacy Policy Language Irrelevant to Consumers?*, 45 J. LEGAL STUD. 69 (2016). The authors found that, despite most participants were uncomfortable with an email provider using automated content analysis, 65 percent of them were unwilling to pay any sum for an alternative. *Id*. at 578. For a recent attempt to provide a contextual explanation for this paradox, see, e.g., Martin & Nissenbaum, *supra* note 50, at 191.

[94] Avi Goldfarb & Catherine E. Tucker, *Privacy Regulation and Online Advertising*, 57 MGMT. SCI. 57, 58 (2011) ("Overall, our results suggest that, although there may be many rea- sons to enact privacy regulation, such regulation may reduce ad effectiveness, particularly for plain banner ads and for general interest websites. Speculatively, this may change the number and types of businesses sustained by the advertising-supported Internet.").

[95] *Id*. at 57–58 ("We find that in Europe, where privacy laws have been implemented, banner ads have experienced, on average, a reduction in effectiveness of 65% in terms of changing stated purchase intent.").

may be the entrenching of monopolies.[96] Campbell further showed that consumers are more likely to give their opt-in consent to large networks with a broad scope rather than to less established firms.[97] Thus, if regulation focuses only on enforcing an opt-in approach, users may be less likely to seek out services from less stable firms, potentially creating hurdles to entry by leading to a "natural monopoly" in which scale economics combine privacy protection.[98]

Several commentators have questioned, however, the validity of consumers' consent for data processing purposes when the data is requested in exchange for economic consideration. In this regard, without granting consent, individuals would have to purchase services at a much higher price or to obtain them at a lower quality. Therefore, for consent to be meaningful, the costs of not granting consent should not be high. There are other options available which may provide the individual with the commodity or the service he or she wishes to obtain at a reasonable price.[99]

A central postulate of the standard neo-classical economic approach to consumer-protection regulation provides that "all human behavior can be viewed as involving participants who maximize their utility from a stable set of preferences and accumulate an optimal amount of information and other inputs in a variety of markets."[100] The book Behavioral Law and Economics challenges this assumption by exploring the behavior of "real people," as opposed to the theoretical "homo-economicus," and raises doubts about rationality in people's decision-making.[101] Prospect theory asserts that the benchmark with reference to which people perceive outcomes as gains or losses depends on how they frame the scenario or the choice facing them.[102] Frequently, people use the status quo as the reference point and view changes from this point as either gains or losses. Numerous experiments have

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[96] James Campbell et al., *Privacy Regulation and Market Structure*, 24(1) J. OF ECON. & MGMT. STRATEGY 47, 48 (2015) ("Overall, our model suggests that privacy regulation can alter the competitive market structure of data-intensive industries").

[97] *Id*. at 68.

We show that a potential risk in privacy regulation is the entrenchment of the existing incumbent firms and a consequent reduction in the incentives to invest in quality. These incentives are stronger when firms have little consumer-facing price flexibility, as is the case in online media. We show this result in a setting where large firms have no inherent advantage over small firms in generating trust. If consumers are more likely to trust large firms with data, as suggested by McDonald and Cranor (2008), then consumers might become even less likely to provide consent to small firms, though that depends on the degree to which consumers are aware of tracking absent regulation. *Id*.

[98] For a very interesting survey, see generally Alessandro Acquisti, Curtis Taylor & Liad Wagman, *The Economics of Privacy*, 54 J. ECON. LITERATURE 442 (2016). More than a decade ago, Staten and Cate examined the impact of opt-in rules on MBNA (a financial institution which offers a variety of loans and insurance products and operated without branch network). They found that mandatory opt-in requirements on MBNA's operations would raise account acquisition costs and lower profits, reduce the supply of credit and increase credit card prices, generate more offers to uninterested or unqualified consumers and raise the number of missed opportunities for qualified consumers, and impair efforts to prevent fraud and identity theft. *See generally* Michael E. Staten & Fred H. Cate, *The Impact of Opt-In Privacy Rules on Retail Credit Markets: A Case Study of MBNA*, 52 DUKE L.J. 745 (2003).

[99] Borghi, Ferretti & Karapapa, *supra* note 45, at 126–27.

[100] GARY S. BECKER, THE ECONOMIC APPROACH TO HUMAN BEHAVIOR 14 (1976).

[101] EYAL ZAMIR & DORON TEICHMAN, BEHAVIORAL LAW AND ECONOMICS 141–56 (2018); Osovsky, *supra* note 38, at 900.

[102] ZAMIR & TEICHMAN, *supra* note 101, at 46–48; Avital Moshinsky & Maya Bar-Hillel, *Loss Aversion and Status Quo Label Bias*, 28 SOC. COGNITION 191, 192–93 (2010); Amos Tversky & Daniel Kahneman, *The Framing of Decisions and the Psychology of Choice*, 211 SCI. 453, 453–54 (1981).

confirmed that people will choose differently from among essentially identical options, depending on how their choices are framed.[103]

The drafters of the GDPR appear to have understood perfectly that merely informing people is not enough to empower them, particularly in cases where information is provided in an unclear format. For instance, the GDPR defines consent as "any freely given, specific, informed and unambiguous indication of the data subject's wishes by which he or she, by a statement or by a clear affirmative action, signifies agreement to the processing of personal data relating to him or her."[104] The GDPR does not accept a consent request that is not clear in its terms and conditions: "If the data subject's consent is given in the context of a written declaration which also concerns other matters, the request for consent shall be presented in a manner which is clearly distinguishable from the other matters, in an intelligible and easily accessible form, using clear and plain language."[105] However, these regulations do not address specifically the issue of framing—i.e., how the processor frames and presents to the consumer the choice to refuse or grant authorization for collecting and processing personal data.[106]

For example, a recent study from the Norwegian Consumer Council, an organization funded by the Norwegian government, examined the recent, GDPR-inspired updates to user settings by Google, Facebook, and Microsoft.[107] The researchers found that default settings and "dark patterns"—techniques and features of interface design meant to manipulate users—are being deployed by Facebook, Google, and Microsoft to nudge users towards privacy-intrusive options.[108] The findings include "privacy-intrusive default settings, misleading wording, giving users an illusion of control, hiding away privacy-friendly choices, take-it-or-leave-it choices, and choice architectures where choosing the privacy-friendly option requires more effort for the users."[109] The researchers found that, in particular, Facebook and Google have privacy-intrusive defaults ". . . where users who want the privacy friendly option have to go through a significantly longer

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[103] EYAL ZAMIR, LAW, PSYCHOLOGY, AND MORALITY: THE ROLE OF LOSS AVERSION 7 (2014).

[104] GDPR at art. 4(11).

[105] *Id*. at art. 7(2).

[106] *See* WOODROW HERTZOG, PRIVACY BLUEPRINT: THE BATTLE TO CONTROL THE DESIGN OF NEW TECHNOLOGIES 21–55 (2018). Recently, Hertzog addressed this issue, arguing that the law should require software and hardware makers to respect privacy rights of users in the design of their products. Hertzog developed a theoretical framework of a new kind of privacy law that is responsive to the way people actually perceive and use digital technologies.

[107] DECEIVED BY DESIGN: HOW TECH COMPANIES USE DARK PATTERNS TO DISCOURAGE US FROM EXERCISING OUR RIGHTS TO PRIVACY (June 27, 2018), https://fil.forbrukerradet.no/wp-content/uploads/2018/06/2018-06-27-deceived-by-design-final.pdf (recently featured in John Naughton, *More Choice on Privacy Just Means to Do What's Best for Big Tech*, THE GUARDIAN (July 8, 2018), https://www.theguardian.com/commentisfree/2018/jul/08/more-choice-privacy-gdpr-facebook-google-microsoft.).

[108] Cass Sunstein recently suggested that an effort to influence people's choices counts as manipulative to the extent that it does not sufficiently engage or appeal to their capacity for reflection and deliberation. Sunstein argued that manipulation is rarely policed by the legal system because manipulation has so many shades, and in a social order that values free markets and is committed to freedom of expression, it is exceptionally difficult to regulate manipulation as such. *See generally* Cass R. Sunstein, *Fifty Shades of Manipulation*, 1 J. MARKET. BEHAV. 213 (2016).

[109] DECEIVED BY DESIGN: HOW TECH COMPANIES USE DARK PATTERNS TO DISCOURAGE US FROM EXERCISING OUR RIGHTS TO PRIVACY, *supra* note 107, at 3.

process. They even obscure some of these settings so that the user cannot know that the more privacy-intrusive option was preselected."[110]

Moreover, the study indicates that Facebook, Google, and Microsoft designed choices ". . . to compel users to make certain choices, while key information is omitted or downplayed. None of them lets the user freely postpone decisions. Also, Facebook and Google threaten users with loss of functionality or deletion of the user account if the user does not choose the privacy-intrusive option."[111] This study indicates that service providers employ numerous tactics in order to nudge or push consumers toward sharing as much data as possible.[112] Therefore, in our context, financial institutions and credit bureaus can nudge an individual to disclose varying amounts of personal data simply by manipulating the format in which the policy itself is presented to the individual. Unfortunately, the GDPR does not confront this issue directly.

No doubts, the GDPR applies considerable thought to the question of how to inform consumers in such a way that can make informed choices regarding their personal information. For instance, the GDPR stipulates a list of items that individuals should be informed about, including the processing purpose, the contact details of the controller, and all other information that is necessary to ensure the fairness of the personal data processing.[113] The GDPR also makes stipulations regarding the form in which the data should be given: concise, easily accessible, and easy to understand, using clear and understandable language.[114] These requirements aim to empower consumers by providing them with additional information prior to their granting of consent, which may substantially improve market transparency.[115] The drafters of the GDPR designed the consent process by emphasizing the procedural mechanisms that should be implemented to achieve an informed consent. The underlying assumption embodied in this approach is that by restricting regulation of the process by which consent is granted, it will result in fairness of the substantive characters of the consent itself.[116]

C. THE ANGLO-AMERICAN APPROACH

In the nineteenth century, the United States was one of the first countries in the world to develop a consumer credit information sharing system.[117] The top three monopolistic credit bureaus—Experian, Equifax, and

[110] *Id.*
[111] *Id.*
[112] *Id.*
[113] GDPR at arts. 5, 14, 21(1).
[114] *See id.*
[115] Hoofnagle et al., *supra* note 68, at 86.
[116] *See* Arthur A. Leff, *Unconscionability and the Code – The Emperor's New Clause,* 115 U. PA. L. REV. 485, 487–89 (1967). To use Leff's terminology, the GDPR's drafters have embraced the notion of "fairness of the bargaining process" rather than the fairness of the bargaining itself. *Id.*
[117] For a historical account, see JOSH LAUER, CREDITWORTHY: A HISTORY OF CONSUMER SURVEILLANCE AND FINANCIAL IDENTITY IN AMERICA (2017); Hartmut Berghoff, *Civilizing Capitalism? The Beginnings of Credit Rating in the United States and Germany*, 45(3) BULLETIN OF THE GERMAN HISTORICAL INSTITUTE 9 (2009); Bruce G. Carruthers, *From Uncertainty Toward Risk: The Case of Credit Ratings,* 11 SOCIO-ECONOMIC REVIEW 525 (2013).

Transunion—control credit data trade in Anglo-American markets.[118] Under the United Kingdom consumer credit regulations, credit providers must assess the "creditworthiness" of borrowers.[119] It requires assessing both the credit risk to the lender and the affordability of the credit for the consumer.[120] Assessing affordability seeks to alleviate possible financial difficulties to consumers due to over-indebtedness.[121] Moreover, it limits the ability of lenders to exploit the behavioral and cognitive bias of less financially literate consumers by selling them unaffordable credit products.[122] In the U.K., there have been legislative attempts to establish public mechanisms for collection credit records ("CCR").[123] These mechanisms help policymakers better learn a country's credit market management and enable an intelligent decision-making process regarding monetary policies and a financial system's stability.[124] The collection process in the Anglo-American markets is automatic and many people are not familiar with it until their credit or purchase request is declined.

In the United States,[125] the Fair Credit Reporting Act ("FCRA") was enacted in 1970 to serve the twofold purpose of ensuring fairness in consumer credit reporting and safeguarding consumers' privacy through restrictions on how consumer credit information can be disclosed or used.[126] The FCRA seeks to ensure that consumers can access information about their scores, correct errors, and understand how third-parties are using their personal and credit data. FCRA governs "consumer reports," which are defined as reports containing "any information . . . bearing on a consumer's credit worthiness, credit standing, credit capacity, character, general reputation, personal characteristics, or mode of living."[127] Under the FCRA, information that nominally suits as a "consumer report" will not trigger the Act's requirements unless it is provided by an entity meeting the definition of a "consumer reporting agency" ("CRA").[128] Based on this final condition,

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118 Latoya Irby, *What are the 3 Major Credit Reporting Agencies: Credit Bureaus Collect Information About Your Creditworthiness*, BALANCE, https://www.thebalance.com/who-are-the-three-major-credit-bureaus-960416 (last updated Feb. 25, 2020).

119 *See* FCA, CONSUMER CREDIT SOURCEBOOK, Ch. 5 (2018), https://www.handbook.fca.org.uk/handbook/CONC/5.pdf.

120 OECD, FACILITATING ACCESS TO FINANCE - DISCUSSION PAPER ON CREDIT INFORMATION SHARING 3-4 (2010), https://www1.oecd.org/globalrelations/45370071.pdf.

121 *Id.*

122 For a criticism of this argument, see FERRETTI, *supra* note 14, at 15.

123 For an overview of these legislative developments, see BANK OF ENGLAND, SHOULD THE AVAILABILITY OF UK CREDIT DATA BE IMPROVED? 8 (2014), https://www.bankofengland.co.uk/-/media/boe/files/paper/2014/should-the-availability-of-uk-credit-data-be-improved.

124 *Id.* at 10.

> [A]ccess to credit information facilitates the study of credit conditions and so supports the decisions of monetary and other macroeconomic policymakers. Credit data can be used to assess credit risk at both the aggregate and institutional level to support assessments of financial stability, stress testing and the supervisory monitoring of financial institutions and underwriting standards. Credit assessments can also inform the use of macroprudential tools, such as the appropriate setting for banks' countercyclical capital buffers. More broadly, credit data can be used to produce statistics that inform both policymaking across government and the broader public debate on credit issues. *Id.*

125 For a detailed discussion and analysis of the current law in the United States concerning the regulation of credit data sharing system, see generally Osovsky, *supra* note 38. In the following, we are only discussing the main risks which are associated with the Anglo-American approach that enables a vast practices of credit data sharing, scoring and use.

126 For an overview of the relevant provisions of the Fair Credit Reporting Act, see Schwartz & Peifer, *supra* note 91, at 152–55.

127 Fair Credit Reporting Act ("FRCA"), 15 U.S.C. § 1681a(d)(1) (2012).

128 *Id.* § 1681a(f).

many gathering and reporting of personal information practices may fall outside of FCRA's boundaries. For example, the U.S. consumer data broker industry gathers and stores a wealth of information about consumers that reaches far beyond the data held by regulated credit bureaus, including psychographic and geodemographic information which includes past and future purchase behavior, internet usage, brand preferences, leisure activities, and social networking activity.[129] As opposed to credit bureaus, those companies are not restricted by Federal Trade Commission ("FTC") regulations, including the FCRA.[130]

When a lender takes an adverse action on a consumer's application based on data contained in a consumer report, the FCRA obligates the lender to notify the consumer of the adverse action, identify the CRA that provided the report, and deliver instructions on how the consumer can obtain the information in the report.[131] The consumer has a further right to request and obtain information in the report,[132] and to challenge the accuracy of the information.[133] However, the FCRA does not limit the types of information that can be used to score credit, aside from certain forms of outdated criminal records and financial records. As a consequence, "consumers may have few guideposts allowing them to understand what stands behind a credit decision and what steps they can take to improve their scores."[134]

The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 ("Dodd-Frank Act") created the Consumer Financial Protection Bureau ("CFPB") to protect consumers of financial products or services and to encourage fair and competitive operation of consumer financial markets.[135] Collecting, investigating, and responding to consumer complaints are integral parts of the CFPB's work, as outlined by the Dodd-Frank Act.[136] For instance, in 2016, the CFPB received more than forty-three thousand complaints on credit reporting companies. These companies received the highest percentage of complaints that year, about 23 percent of the total 186,000 complaints.[137] The FTC has been collecting complaints from individuals whose identities have been stolen and seeks to assist individuals in restoring their own identities. In 2014, over 330,000 individuals filed

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[129] Leanne Roderick, *Discipline and Power in the Digital Age: The Case of the US Consumer Data Broker Industry*, 40 CRITICAL SOC. 729, 732 (2014).

[130] *Id*. at 732.

> This industry, borne of the personal information economy, has resisted consumer control options (i.e. by complicating opt-in and opt-out procedures) that could potentially slow the flow of information and hinder profits. . . . As opposed to credit-rating agencies (CRAs), such as TransUnion, Equifax, and Experian, third-party companies like Acxiom are not restricted by Federal Trade Commission (FTC) regulations, including the Fair Credit Reporting Act (FCRA). *Id*.

[131] 15 U.S.C. § 1681m(a) (2012).

[132] *Id*. § 1681g.

[133] *Id*. § 1681i(a). For an excellent overview of the provisions of the FRCA, see Mikella Hurley & Julius Adebayo, *Credit Scoring in the Era of Big Data*, 18 YALE J.L. & TECH. 148, 189 (2016) (arguing that existing laws are insufficient to respond to the challenges posed by credit scoring in the era of Big Data, and under these circumstances, the law should shift the burden of accuracy of the credit reports to the shoulders of the credit scorers themselves).

[134] Hurley & Adebayo, *supra* note 133, at 189.

[135] *See* Dodd-Frank Act, Pub. L. No. 111-203, 124 Stat. 1376, § 1021(a) [hereinafter Dodd-Frank Act].

[136] *Id*.

[137] Andrew Rombach, *CFPB Credit Reporting Complaints*, LENDEDU (Jan. 5, 2017), https://lendedu.com/blog/credit-reporting-complaints.

identity theft complaints with the FTC, and according to the Department of Justice, ". . . an estimated 17.6 million persons, or about seven percent of U.S. residents age sixteen or older, were victims of at least one incident of identity theft in 2014. The majority of identity theft victims (eighty-six percent) experienced the fraudulent use of existing account information, such as credit card or bank account information."[138]

The FCRA established essential accuracy requirements for the data used in credit assessment tools. However, consumers carry the full burden of identifying and disputing inaccuracies.[139] A credit reporting business does not hold the incentive to achieve high levels of accuracy concerning its input data because the costs of doing so outweigh the marginal financial benefits of that increased accuracy.[140] In light of these disturbing findings, it is quite surprising that the U.S. laws regarding the protection of private data rely heavily on a disclosure approach, which mainly suggests that the law should provide the public with better information to assist them in making the right decisions as consumers,[141] rather than require explicit consent for the use of their personal information.[142] Though the American laws use the idea of consent for processing data, they have not done so under the broad restrictions existing in comparable EU laws.

Also, the Equal Credit Opportunity Act prohibits lenders from considering sensitive factors, such as race, religion, national origin, sex, or marital status, when making lending decisions.[143] The law currently does not prevent credit scoring models from taking into consideration many pieces of information that are not directly related to consumers' financial conditions and serve as proxies for permanent or sensitive characteristics of individuals. Thus, "borrowers are likely to find, however, that it is much more difficult to make the case for either disparate treatment or disparate impact when a lender justifies its decisions on a credit-scoring process that uses sophisticated algorithms and thousands of data points."[144]

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Contrasting the EU approach with U.S. approach reveals that while the European community adopted the constitutional rights discourse for ex-ante protection of credit consumers' privacy, the U.S. relied on forced disclosure for data processors and forced receipt of the information by privacy

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[138] Press Release, U.S. Dep't of Justice, Victims of Identity Theft (Nov. 13, 2017), https://www.bjs.gov/content/pub/pdf/vit14.pdf.

[139] 15 U.S.C. § 1681i(a) (2012).

[140] Richard M. Hynes, *Maximum Possible Accuracy in Credit Reports*, 80 L. & CONTEMP. PROBS. 87, 91–97 (2017).

[141] OMRI BEN-SHAHAR & CARL E. SCHNEIDER, MORE THAN YOU WANTED TO KNOW: THE FAILURE OF MANDATED DISCLOSURE 33–37 (2014).

[142] Schwartz & Peifer, *supra* note 91, at 148. Recently, however, several U.S. states have introduced and enacted legislation to expand data breach notification rules and to mirror some of the protections provided by the European GDPR. For example, the California Consumer Privacy Act of 2018 provides California consumers with more control over how businesses collect and use their data. Vermont, in May 2018, enacted a law regarding data brokers and consumer protection which will go into effect on January 1, 2019. Under the new law, data brokers will be required to: (1) register with the Attorney General of Vermont and pay a $100 registration fee; (2) make annual disclosures to the Attorney General concerning data privacy practices and data breaches; and (3) develop, implement, and maintain a comprehensive written information security program that contains administrative, technical, and physical safeguards.

[143] 15 U.S.C. § 1691(a)(1) (2012).

[144] Hurley & Adebayo, *supra* note 133, at 190–91.

consumers. Therefore, our discussion indicates that a broader protection to personal information is given ex-ante in the European community based on the profound importance provided by the constitutional right to privacy.[145] As was explained by Paul M. Schwartz and Karl-Nikolaus Peifer,

> [e]xisting constitutional protections [in the US], such as the Fourth Amendment and Fourteenth Amendment, prove a poor fit with the Information Age's development of governmental databases and widespread sharing of data by individuals with "third parties." If anything, the U.S. Constitution serves as a force for strengthening the rights of data processors.[146]

IV. A FRESH REGULATORY APPROACH FOR PROMOTING FAIRNESS AND PRIVACY OF CREDIT CONSUMERS

We divide our approach for regulatory design, aimed to increase privacy, justice, and fairness in the consumer credit data regime into three separate categories: individuals, markets, and the state. We show how jurists and policymakers should redesign the current regimes governing the permissible credit data collection, scoring, and use by examining how individuals, markets, and the state contribute to the design of such practices. The proposed analysis can also shed light on the main challenges and risks associated with the existing regimes of credit data sharing system.

A. THE INDIVIDUAL

So far, we have compared the EU with the U.S. approach regarding the means available for protecting personal information in the credit sharing data system and demonstrated that the EU provides superior protection for individual rights by adopting an opt-in regime accompanied by a meaningful consensual mechanism. We argue that a more nuanced and contextual methodology should be adopted regarding the regulatory design of collecting, scoring, and using credit information. In our view, the EU institutions should introduce a particular enactment along with the newly introduced GDPR, which establishes specific regulatory regimes concerning the permissible gathering, scoring, and use of consumer information in Europe. This piece of legislation should be constructed with the assistance of experts along with the data protection authorities, consumer organizations, civil society, financial industry representatives, and credit bureaus.[147] This group of experts has to identify how processing each kind of personal information is required in order to achieve different policy goals of the credit

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[145] *See* Acquisti, Taylor & Wagman, *supra* note 98, at 479.

The United States and the European Union have taken different positions in this debate. The EU has focused on regulatory solutions, establishing principles that govern use of data across multiple sectors, including the need for individuals' consent for certain data processing activities. By contrast, the US has taken a more limited, sectorial, and ad-hoc regulatory approach, often opting for providing guidelines rather than enforcing principles. *Id*.

[146] Schwartz & Peifer, *supra* note 91, at 155.

[147] *See generally* IRA S. RUBINSTEIN, THE FUTURE OF SELF-REGULATION IS CO-REGULATION (Evan Selinger et al. eds., Cambridge University 2018) (exploring how co-regulation, which conceived as a collaborative, flexible, and performance-based approach, can be implemented in the design of consumer privacy regulation).

data sharing system, that is, promoting competition between banking institutions on the one hand and protecting individual rights on the other hand.[148] Moreover, this contextual approach regarding the permissible use of each kind of piece of information and its effect on achieving desirable policy objectives may "nudge" individuals towards the personal information practices they have claimed to prefer.[149]

Our contextual methodology confronts the conflict between efficiency considerations—which stipulates that practices of data sharing significantly foster competition between lenders and lower credit interest rates—and social considerations—which emphasize the danger for privacy rights and unjustified distributive outcomes. In order to tackle this divergence, we suggest that the arrangements regarding the permissible practices in the credit data sharing markets should be designed in light of three interrelated considerations: the identity of the credit consumer and his or her personal and socioeconomic backgrounds, the purpose for which the consumer asks for credit provided by the lender, and the complexity of a given credit transaction. Generally, the credit data sharing regulation refers to structure, institutions, and rules involved in gathering, scoring, and use of financial data on individual consumers. In our view, the law should strike an appropriate balance between two conflicted considerations. Since such practices may undermine privacy rights of and fairness to populations that are the most vulnerable to the harmful effects of this industry, the law should construct an association between the identity of the consumer—such as sex, race, marital status, and socioeconomic class—with the extent of the personal information the law allows credit bureaus to collect, score and use. In other words, the law should distinguish between different data subjects according to their personal backgrounds when determining the scope of the permissible practices in the data sharing industry.

Empirical studies conducted recently in the U.S. demonstrated an unequal distribution of the risks and resources connected with online life. Particularly, Americans with lower income and education levels are severely aware of a range of digital privacy-related harms that could influence their financial, professional, or social well-being. These concerns are usually characterized by low levels of trust in the institutions and companies that they rely on to be responsible stewards of their data. However, many of those who feel most vulnerable to data-related harms also feel that it would be difficult to find the strategies necessary to better protect their personal information online against privacy abuses.

A recent survey administrated by the Data & Society Research Institute provides new insights into the privacy and security experiences of low socioeconomic status ("SES") populations and contributes to a richer understanding of their technology-related behaviors.[150] This survey includes

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[148] FERRETTI, *supra* note 14, at 8.

[149] *See* Acquisti, Taylor & Wagman, *supra* note 98, at 480; Cass R. Sustein, *Nudging: A Very Short Guide,* 37 CONSUMER POL'Y 583, 584 (2014) ("It is true that some nudges are properly described as a form of "soft paternalism" because they steer people in a certain direction. But even when this is so, nudges are specifically designed to preserve full freedom of choice."). For a detailed account of the limitations of constructing default rule which provide opt-out or opt-in mechanism, see Lauren E. Willis, *Why Not Privacy by Default?*, 29 BERKELEY TECH. L.J. 61 (2014).

[150] Mary Madden, *Privacy, Security, and Digital Inequality: How Technology Experiences and*

a range of questions about various digital privacy and security concerns.[151] For each of these questions, those living in households with annual incomes of less than twenty thousand dollars per year are considerably more likely to say that they are "very concerned" about the possibility of these harms when compared with those in households earning one hundred thousand dollars or more per year. For example, the survey indicated that 60 percent of those in the lowest-income households say the loss or theft of financial information is something they are "very concerned" about, while just 38 percent of those in the highest-earning households say the same.[152] Fifty-two percent of those in the lowest-earning households say that not knowing what personal information is being collected about them or how it is being used makes them "very concerned," compared with 37 percent of those in the highest-income households.[153]

Furthermore, the study reveals that those with the fewest economic and educational resources also face difficulty accessing the tools and strategies that would help them protect their personal information.[154] For example, among users living in households earning less than twenty thousand dollars per year, 31 percent say it would be very or somewhat difficult to find the tools and strategies they would need to learn more about protecting their personal information, compared with just 17 percent of those in higher-earning households.[155] "The findings suggest that high-SES Americans are largely confident in their technology skills but reveals a substantial demand for educational resources among low-SES groups."[156]

In the following, we demonstrate how the identity of the credit consumer is a valuable factor that jurists and policymakers should consider thoroughly when designing the appropriate arrangements regarding the permissible use of personal information.

1. The Right to an Explanation

Chapter 3 of the GDPR defines the Regulation terms as the "right not to be subject to a decision based solely on automated processing."[157] The protection establishes some safeguards designed to ensure the "fair and transparent processing" of personal data, including an obligation that firms provide "meaningful information about the logic involved" in particular types of highly automated decision-making systems.[158] The protection

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Resources Vary by Socioeconomic Status, Race, and Ethnicity, DATA & SOCIETY 1, 1 (Sept. 27, 2017), https://datasociety.net/pubs/prv/DataAndSociety_PrivacySecurityandDigitalInequality.pdf. For similar results, see generally Mary Madden et al., *Privacy, Poverty, and Big Data: A Matrix of Vulnerabilities for Poor Americans*, 95 WASH. U. L. REV. 53 (2017).

151 Madden, *supra* note 150, at 2.

152 *Id.*

153 *Id.*

154 *Id.* at 11.

155 *Id.*

156 *Id.*

157 GDPR at art. 22(1).

158 *Id.* at art. 15(1)(h). GDPR Article 15(1)(h) entitles data subjects to have the right to access the information about solely automated decision making, including profiling, as required under articles 13(2)(f) and 14(2) (g) namely: (1) the intent and existence of automated decision making, including profiling; (2) meaningful information about the logic involved; and (3) the significance and envisaged consequences of such processing for the data subject; and (4) Essentially, the controller or processor must inform the data subject what the controller or processor has envisioned to do with the data and request consent from the data subject to profile or use automated decision making on the data.

obligates the disclosure of "meaningful information," which has been described as a "right to an explanation."[159] Article 22 provides that each individual has the right not to be subjected to these processes under several exceptions which nevertheless allow for such automated processing to be carried out—such as the data subject's explicit consent.[160] Also, member states can authorize such a process, and it will also be permitted if considered necessary to enter or perform a contract.[161] Many view the GDPR's "right to an explanation" as a promising new device for promoting fairness, accountability, and transparency in the types of machine learning systems being used by firms globally. However, the precise scope and effectiveness of the "right to an explanation" has been subjected to persistently transnational debate among academics and practitioners alike.[162]

Under the contextual strategy presented in this Article, the scope of the right to an explanation should be partly dependent on the socioeconomic background of the credit consumer. To empower consumers with meaningful rights concerning the collection and use of their personal data, a more sensitive method is required. Therefore, the law should consider the exact type of each piece of information and how its wrongful processing and use will affect the living conditions of consumers in low-SES groups. In case there is clear evidence that collecting and using certain data will gravely affect the livelihood of low-SES groups, further burdens and responsibilities should be imposed on data processors wishing to receive the consent of these consumers for data sharing practices.

Specifically, in our view, the law should obligate firms to provide low-SES group consumers with an explanation not only about the specific data they wish to collect and use, but also on the negative consequences that may affect their standard of living in case of privacy violation. Accordingly, the consent mechanism will require not only consumers' approval for processing personal data but also their acknowledgment of the socioeconomic risks involved in rendering their authorization. Consequently, such broad interpretation of the right to an explanation in certain cases could better support credit consumers in challenging discriminatory and unfair credit decisions ex-post.

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[159] *See*, Margo E. Kaminski, *The Right to Explanation, Explained*, 34 BERKELEY TECH. L.J. 189 (2019) (suggesting that GDPR Article 22 provides a right to explanation which have the potential to be broader, stronger, and deeper than the preceding requirements of the Data Protection Directive).

[160] GDPR at art. 22.

[161] *See*, *e.g*., U.K. INFO. COMM'R OFFICE, FEEDBACK REQUEST – PROFILING AND AUTOMATED DECISION-MAKING 20 (2017), https://ico.org.uk/media/2013894/ico-feedback-request-profiling-and-automated-decision-making.pdf. It asks "Do you consider that "solely" in Article 22(1) excludes any human involvement whatsoever, or only actions by a human that influence or affect the outcome? What mechanisms do you have for human involvement and at what stage of the process?" *Id*. Several commentators argued that Article 22 applies only when the processing has been performed *solely* by automated means. This requirement could nevertheless be bypassed relatively easily by inserting human intervention into the process. *See, e.g*., Lilian Edwards & Michael Veale, *Slave to the Algorithm? Why a 'Right to an Explanation' is Probably Not the Remedy You Are Looking For,* 16 DUKE L. & TECH. REV. 18, 44–46 (2018); Tal Z. Zarsky, *Incompatible: The GDPR in the Age of Big Data,* 47 SETON HALL L. REV. 995, 1015–18 (2018).

[162] For a comprehensive discussion of the public debate surrounding the "right to explanation," see Bryan Casey, Ashkon Farhangi & Roland Vogl, *Rethinking Explainable Machines: The GDPR's 'Right to Explanation' Debate and the Rise of Algorithmic Audits in Enterprise*, 34 BERKELEY TECH. L.J. 143 (2019).

2. The Right to Erasure

Currently, in the U.S., the FCRA determines how long negative information can remain on a given credit report. Generally, the credit reporting time limit is seven years for most negative information, however certain types of negative information will stay on a credit report for longer.[163] For instance, while delinquency information like late credit card payments and collections can be reported for seven years from the date of the delinquency, bankruptcy can be reported up to ten years from the date of the file and unpaid tax liens, and cannot ever be removed.[164] U.S. law has not yet considered the possibility of constructing a differential framework which will condition the credit reporting time limit to its severe consequences on exigent maintenance circumstances of credit consumers. Similarly, a related and much debated issue among commentators and practitioners is Article 17 of the GDPR, which is entitled "Right to Erasure ('Right to be Forgotten')." This provision is an explicit gesture toward the ruling of *Google Spain*. In *Google Spain*, the Court of Justice of the EU asserted that a search engine allows searchers to establish "a more or less detailed profile" of a data subject, thereby 'significantly' affecting privacy and data protection rights.[165] According to the court, search results of a person's name produce "a structured overview of the information relating to that individual that can be found on the internet—information which potentially concerns a vast number of aspects of his private life and which, without the search engine, could not have been interconnected or could have been only with great difficulty."[166] The EU Court of Justice maintained that search engine operators process personal data if they index, store, and refer to personal data available on the web.[167] Therefore, the court perceived search engine operators as "data controllers" in respect to this processing.[168] The court believed that the public has, under certain conditions, the right to have search results of their names erased. This right to have search results deleted also applies to lawfully published information.[169] The court based its judgment on the Data Protection Directive and the privacy and data protection rights of the Charter of Fundamental Rights of the EU.[170] In *Google Spain*, the court explained that inaccurate data is not the only thing that can lead to such inconsistency with the provisions of the Data Protection Directive and the Charter; information that is "inadequate, irrelevant or no longer relevant, or excessive" regarding the processing purposes because the data have been saved longer than necessary can also produce such inconsistencies.[171]

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[163] 15 U.S.C. § 1681c(a) (2012).

[164] *See, e.g.*, Michael Carlin & Ellen Frick, *Criminal Records, Collateral Consequences, and Employment: The FCRA and Title VII in Discrimination Against Persons with Criminal Records*, 12 SEATTLE J. SOC. JUST. 109, 122 (2013).

[165] Google Spain, *supra* note 82, at ¶ 37, ¶ 80.

[166] *Id*. at ¶ 80.

[167] *Id*. at ¶ 27.

[168] *Id*. at ¶ 28.

[169] *Id*. at ¶ 88.

[170] *Id*. at ¶ 89.

[171] *Id*. at ¶ 93. For an extensive discussion on the right to be forgotten in the literature, see, e.g., Stefan Kulk & Frederik Zuiderveen Borgesius, *Privacy, Freedom of Expression, and the Right to be Forgotten in Europe*, *in* CAMBRIDGE HANDBOOK ON CONSUMER PRIVACY 301 (Evan Selinger, Jules Polonetsky & Omer Tene eds., 2018); Michael J. Kelly & David Satola, *The Right to Be Forgotten*, 2017 U. ILL. L. REV. 1 (exploring the historical and theoretical foundations of the right to be forgotten and assesses practical legal issues including whether North American "free speech" rights are an effective buffer to

Article 17 of the GDPR provides that the controller has the obligation to erase personal data without undue delay in certain circumstances.[172] This concern arises when the personal data is no longer necessary for the purposes for which it was collected or when the data subject withdraws consent on which the processing is based and there is no other legal ground for the processing. We, however, believe that the drafters of the GDPR had to consider another option for demanding the erasure of personal information in a case in which the collection, scoring, and use of such data caused harsh consequences on the necessary living conditions of credit consumers even when prior meaningful consent was received. Our approach is consistent with the developing EU regulation regarding the protection of social rights of member states' citizens and the recent European Pillar of Social Rights.[173] The Pillar of Social Rights aims to deliver new and more effective social rights to European citizens. It builds upon twenty key principles that are structured around three categories: (1) equal opportunities and access to the labor market; (2) fair working conditions; and (3) social protection and inclusion.[174] Moreover, our view would allow a special case study in which the identity and background of the credit consumer would be interpreted in accordance with the Charter of Fundamental Rights and the Pillar of Social Rights to increase privacy rights.

3. The Implications of Different Credit Card Use

Modern consumer credit can be classified in numerous ways. The most common classification is the expected use of funds. Typical applications include automobile credit, boat loans, mobile home loans, home improvement loans, furniture credit, student loans, and debt enhancing.[175] John Linarelli recently argued that only society should structure its institutions to allow access to credit and allocate debt so as to be sensitive to basic concerns about equality.[176] According to Linarelli, regulation of credit access must integrate moral demands associated with egalitarian luck into the standard cost-benefit analysis.[177] Specifically, he argues that the state should not require people to carry out significant debt to promote a public policy aim; unless the debtor can make an unbiased choice about the debt and the debt does not substantially impair the life projects of the debtor.[178]

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this controversial issue); and Robert C. Post, *Data Privacy and Dignitary Privacy: Google Spain, the Right to Be Forgotten, and the Construction of the Public Sphere*, 67 DUKE L.J. 981 (2018) (criticizing the European Court of Justice's ruling and arguing that its judgment is deeply confused about the kind of privacy it wishes to protect, such asdata privacy or dignitary privacy).

172 GDPR at art. 17(1), recitals 65–66.

173 *The European Pillar of Social Rights in 20 Principles*, EUROPEAN COMM'N, https://ec.europa.eu/commission/priorities/deeper-and-fairer-economic-and-monetary-union/european-pillar-social-rights/european-pillar-social-rights-20-principles_en (last visited Sept. 6, 2019).

174 *See* Sacha Garben, *The European Pillar of Social Rights: An Assessment of its Meaning and Significance*, 21 CAMBRIDGE YEARBOOK EUR. L. STUDIES 101, 103–16 (2019).

175 DURKIN ET AL., *supra* note 4, at 9 (noting that buying autos, household repairs and furnishings, major hobby items, is only part of the fundamental economic behavior that gives rise to these classifications of debt. Rather, basic economic demand motivation for consumer credit is the desire by consumers to change both the size and the timing of their resource inflows and outflows).

176 John Linarelli, *Debt in Just Societies: A General Framework for Regulating Credit*, REG. & GOVERNANCE 1, 2–3 (2018).

177 *Id*. at 6–12.

178 *Id*. at 13.

Frequently, some goods are essential and valuable both for individuals and for society to flourish. These goods have both private and public benefits.

Student loans are an example of such debt. Higher education is widely accepted as having features of both public and private goods.[179] Moreover, education degrees and inequality significantly correlate. The wealthier a student's family is, the higher the chances the student will enroll in higher education.[180] Accordingly, the government generally should not impose debt on people to pay for assets that others benefit from unless it can justify the debt as a tax on those able to pay. Currently, the law regulating the practices of collecting, scoring, and using credit information entirely avoids any consideration relating to the particular use of the fund received following the credit transaction. Specifically, current regulation of the credit data sharing industry is indifferent to the various uses of the credit funds even if such uses are beneficial to society collectively.

The most well-known score in the U.S. is the Fair Isaac Co. ("FICO"), which is considered the pioneer of the behavior scoring model and accounts for a majority of all consumer credit scorecards used worldwide.[181] This model calculates scores using many pieces of credit that are grouped into five categories: (1) payment history (35 percent); (2) amounts owed (30 percent); (3) length of credit history (15 percent); (4) new credit (10 percent); and (5) credit mix (10 percent).[182] This credit mix contains information on student loans, retail accounts, installment loans, mortgage loans, and finance company.[183] In our view, several information components included in this credit mix, such as student loan or other expenses incurred for acquiring education, are essential to the development of individuals and the society. Since costs associated with education pursuits have private and public benefits they should receive special treatment under the scoring process. Specifically, in our view, the law should obligate consumer credit reporting agencies ("CRAs") to give a special and positive weight to such information in the scoring analysis regardless of the credit payment history of those expenditures. Therefore, jurists, and policymakers should examine the different uses of credit funds to determine whether they are essential to society-wide advancement. Any information related to a credit use that advances economic goals is valuable to the public and thus should receive a positive indication regardless of any arrears of its payment. We believe that integrating these considerations in regulations of credit data sharing practices pays particular attention to the overall contribution that credit consumption has on realizing important social goals without denying the economic benefits of such methods to enhancing market competition.

[179] Simon Marginson, *Higher Education and Public Good*, *in* THINKING ABOUT HIGHER EDUCATION 53 (Paul Gibbs & Ronald Barnett eds., 2014).

[180] Linarelli, *supra* note 176, at 14.

[181] Martha Poon, *Scorecards as Devices for Consumer Credit: The Case of Fair, Isaac & Company Incorporated*, 55 SOC. REV. 284, 285 (2007).

[182] *What's in My Fico® Score?*, MYFICO, https://www.myfico.com/credit-education/whats-in-your-credit-score (last visited Mar. 10, 2020)

[183] *See generally id.*

4. The Implications of a Complex Credit Transactions

In recent years, credit card contracts have become increasingly impenetrable and complex, reducing the consumers' ability to clearly understand the actual costs involved thereby challenging consumers' card choice and card use. Moreover, due to behavioral biases, credit consumers are not fully aware of all elements of credit transactions.[184] Consumers are generally not considering the "long-term" elements of the contract, such as interest rates.[185]

In a report submitted to the U.S. Senate more than a decade ago, the United States Government Accountability Office investigated the increasing complexity of credit card rates and fees, highlighting the need for more effective disclosure by the issuers.[186] The Office found that the credit card documents were usually written in a complex manner far above the level likely to be understood by most consumers.[187] For example, the information about annual percentage rates, grace periods, balance computation, and payment allocation methods was written at a level equivalent to a fifteenth-grade education, which is comparable to three years of college education.[188] Moreover, the Office discovered that issuers frequently placed relevant information toward the end of sentences and that consumers must read through massive amounts of text before arriving at the critical information.[189]

In our view, there should be a strong association between the complexity of a given credit transaction and the scope of obligations that should be imposed on financial institutions wishing to collect, process, and use the credit consumer's personal information. As the credit transaction is more complex and complicated, there is a profound concern that consumers are totally unaware of the long-term consequences associated with it. Therefore, the financial information gathered for a future transaction may reflect on its merit's adverse effects even if the consumer pays his obligation on time. Accordingly, financial institutions and credit bureaus wishing to share personal information resulting from a complex credit transaction should be subject to more comprehensive duties and liabilities.

Recently, several commentators have argued that the Big Data revolution, which radically expanded the range of data that can be personally

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[184] OREN BAR-GILL, SEDUCTION BY CONTRACT: LAW, ECONOMICS, AND PSYCHOLOGY IN CONSUMER MARKETS 91–92 (2012); Oren Bar-Gill, *Seduction by Plastic*, 98 NW. L. REV. 1373, 1375, 1402–03 (2004).

[185] Bar-Gill writes that "[d]ue to the underestimation bias, consumers are insensitive to interest rates. They are, however, quite sensitive to the annual fee. Thus, competition concentrates on the annual fee dimension. Issuers attract consumers by offering low (or zero) annual fees and then extract significant interest payments from those consumers." Bar-Gill, *supra* note 184, at 1403. Recently, Durkin, Elliehausen, and Zywicki suggested that empirical findings do not support Bar-Gill's thesis, including the argument that consumers are not responsive to long-term rates on their credit cards. *See* Thomas A. Durkin, Gregory Elliehausen & Todd J. Zywicki, *An Assessment of Behavioral Law and Economics Contentions and What We Know Empirically about Credit Card Use by Consumers*, 22 SUP. CT. ECON. REV. 1, 21–25 (2015).

[186] U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-06-929, CREDIT CARDS: INCREASED COMPLEXITY IN RATES AND FEES HEIGHTENS NEED FOR MORE EFFECTIVE DISCLOSURES TO CONSUMERS 46 (2006).

[187] *Id.* at 46–51.

[188] *Id.* at 37–38.

[189] *Id.* at 39. *See* Oren Bar-Gill & Ryan Bubb, *Credit Card Pricing: The Card Act and Beyond*, 97 CORNELL L. REV. 967, 1002–05 (2012).

identifying, justifies implementing procedural data due process.[190] Today, procedural due process generally represents the constitutional requirement that any government infringement of a liberty or property right must be prefaced by notice and the opportunity for a hearing on the matter before an unbiased adjudicator.[191] Accordingly, we believe that those who use personal information collected from a complicated credit transaction should be required to post forms of notice and disclose the type of predictions they attempt to produce to third parties based on such data.[192] Once notice is available, there should be an ex-post opportunity to be heard and, if necessary, an opportunity to correct the record. Moreover, such arrangements should examine the evidence used, including both the data input and the algorithmic logic applied.

This role could be assigned to a trusted third party who would act as a neutral data arbiter to routinely examine financial institutions and credit bureaus whose adjudications increase imminent privacy harms.[193] Furthermore, regulators should be authorized to access credit-scoring systems that unfairly harm consumers.[194] The extent and scope of the access may depend on the degree of unfairness that may result from the complexity of a given credit transaction. To do so, regulatory agencies should construct quantitative criteria that link the extent of the predicted unfairness stemming from the complexity of the credit transaction and the scope of procedural safeguard that will be provided to credit consumers in order to mitigate the adverse consequences of sharing data collected during such a transaction.

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Our contextual approach for designing the regulation of collecting, scoring, and using credit information is a unique manifestation of a personalized law which aims to increase efficiency by improving the enforcement of law, providing better risk avoidance mechanisms and reducing institutionalized discrimination.[195] By recognizing the advanced

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[190] *See* Ian Kerr, *Prediction, Pre-emption, Presumption: The Path of Law After the Computational Turn*, *in* Privacy, DUE PROCESS AND THE COMPUTATIONAL TURN: THE PHILOSOPHY OF LAW MEETS THE PHILOSOPHY OF TECHNOLOGY 91 (Mireille Hildebrandt & Katja de Vries eds., 2013); Danielle K. Citron, *Technological Due Process*, 85 WASH. U. L. REV. 1249, 1301–13 (2008); Kate Crawford & Jason Schultz, *Big Data and Due Process: Toward a Framework to Redress Predictive Privacy Harms*, 55 B.C. L. REV. 93, 109–28 (2014).

[191] Crawford & Schultz, *supra* note 190, at 111. *See generally* Henry J. Friendly, *Some Kind of Hearing*, 123 U. PA. L. REV. 1267 (1975) (discussing eleven potential elements of a hearing that may help secure a fair process, such as an impartial tribunal; notice of the proposed action and the grounds asserted for it; an opportunity to present causes why the proposed action should not be exercised; the right to call witnesses; the right to know the evidence against oneself; the right to have the decision based only on the evidence introduced; the right to counsel; the making of a record; a statement of reasons; public attendance; and judicial review).

[192] Crawford & Schultz, *supra* note 190, at 125–26.

[193] *Id*. at 126–28. *See also* Danielle Keats Citron & Frank Pasquale, *The Scored Society: Due Process for Automated Predictions*, 89 WASH. U. L. REV. 1, 1 (2014) (arguing that the American due process tradition should inform basic safeguards in the credit data sharing industry, and that regulators should be able to test scoring systems to ensure their fairness and accuracy and Individuals should be granted meaningful opportunities to challenge adverse decisions based on scores miscategorizing them).

[194] Citron & Pasquale, *supra* note 193, at 24.

[195] Ariel Porat & Lior J. Strahilevitz, *Personalizing Default Rules and Disclosure with Big Data*, 112 MICH. L. REV. 1417 (2014); *see* Omri Ben-Shachar & Ariel Porat, *Personalizing Negligence Law*, 91 N.Y.U. L. REV. 627 (2016). *But see* Niva Elkin-Koren & Michal S. Gal, *The Chilling Effect of Governance-by-Data on Innovation*, 86 U. CHI. L. REV. 403, 403 (2018) (arguing that once governance by data is introduced, the incentives of firms to continue collecting personal information might be undermined effecting the efficiency of data driven markets and data driven innovation).

technology of the Big Data era the law can—and should—set legal rules and standards that are more specifically tailored for each particular individual. Jurists and policymakers can reconstruct personalized law by analyzing the information derived from the datasets to which the personal information of credit consumers is gathered. Moreover, the law should explore the possibility of using demographic data (and its correlation to behavior) derived from advances in computing power to articulate the appropriate regimes of collecting, scoring, and use of personal information in light of the considerations discussed above.[196] Our approach is also compatible with the theory of contextual integrity articulated by Helen Nissenbaum.[197] Furthermore, our methodology brings the theory of "information fiduciaries" into practice since our framework instructs policymakers on how to develop the regulation of a credit data sharing system that is in line with credit consumers' expectations.[198] Thus, applying our contextual approach could bring the principles for processing personal data articulated in the GDPR into practice.[199] For example, the limitation and data minimization principles which state that personal data should only be collected for a purpose specified in advance and may require policymakers to design proportionate arrangements for any permissible use of personal information.[200]

Thus, to formulate the permissible use of personal information, jurists should rely on the interpretation of the proportionality principle in the EU laws.[201] To determine whether a specific provision is compatible with the principle of proportionality, it is necessary to examine whether the means it employs to achieve a certain goal corresponds to the aim and whether they are necessary for its accomplishment.[202] In recent years, several cases were heard by the ECTHR involving the issue of proportionality in the area of privacy law.

For example, *Volker und Markus Schecke GbR v. Land Hessen* held that regulations requiring the publication of the names of any individuals who received agricultural subsidies were in violation of Article 7 and 8 of the EU Charter for Fundamental Rights.[203] Although the court's rhetoric is couched in procedural terms, the court was motivated by proportionality reasoning. In another interesting case, the court annulled Directive 2006/24/EC,[204]

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[196] *See* Yuval Feldman & Yotam Kaplan, *Big Data & Bounded* Ethicality, B. ILAN U. FAC. L. RES. PAPER NO. 19-05 (2019), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3171987 (discussing the limits of using demographic data analysis in designing personalized law).

[197] NISSENBAUM, *supra* note 49, at Part III.

[198] Dobkin, *supra* note 58, at 7.

[199] GDPR at art. 5.

[200] *Id*.

[201] Article 5(4) reads:

Under the principle of proportionality, the content and form of Union action shall not exceed what is necessary to achieve the objectives of the Treaties. Institutions of the Union shall apply the principle of proportionality as laid down in the Protocol on the application of the principles of subsidiarity and proportionality. *Id*.

[202] *See, e.g.*, AHARON BARAK, PROPORTIONALITY: CONSTITUTIONAL RIGHTS AND THEIR LIMITATIONS (Doron Kalir trans., 2012); Takis Tridimas, *The Principle of Proportionality*, *in* OXFORD PRINCIPLES OF EUROPEAN UNION LAW: THE EUROPEAN UNION LEGAL ORDER, VOL. I 243 (Robert Schütze & Takis Tridimas eds., 2018).

[203] Joined Cases C-92/09 & C-93/09, Volker und Markus Schecke GbR v. Land Hessen, 2010 E.C.R. I-11117, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:62009CJ0092&from=EN.

[204] Joined Cases C-293/12 & C-594/12, Dig. Rights Ir. Ltd., v. Minister for Commc'ns, Marine and Nat. Res., 2014 ECLI:EU:C:2014:238, 1, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:62012CJ0293& from=EN.

which required providers of electronic communication services to maintain certain consumer's information in the interests of public security.[205] The court found that the provisions of the Directive did not follow the proportionality and necessity principles. Specifically, it ruled that the coverage of the Directive was too wide since it applied to all people using electronic communication even if there is no clear evidence that their conduct may be connected with serious crime. Moreover, the provisions of the Directive did not elaborate on any procedural or substantive conditions under which access to the personal information could be granted.[206]

In our view, implementing the EU's well-developed reasoning of proportionality laws will ensure adequate protection for privacy rights of credit consumers while also accomplishing economic policy goals involved in the credit data sharing system. Below, we examine how regulating the conduct and internal affairs of credit bureaus themselves can incentivize them to provide further protections to privacy rights of credit consumers.

B. THE MARKET

Credit bureaus are the primary data channels in almost all EU Member States.[207] The different roles credit information providers play reveals a critical difference between public and private organizations. Public organizations are usually a part of a national central bank or supervisory authority that aim to ensure the financial stability of the local market; privately-held or public company that provide risk-management and market knowledge devices to improve economic efficiency and the profitability of financial institutions. Similarly, CRAs play an important role in the U.S.'s financial information market. These agencies collect, process, and analyze financial information received from various furnishers to create consumer reports and credit scores. Such consumer reports assist lenders, retailers, employers, and landlords in evaluating consumers' creditworthiness.[208]

Below, we address legal arrangements that regulate the relations between these companies and their retail investors through corporate and tax laws. We believe the law should redesign these relations in a manner that incentivizes companies to take into consideration the importance of providing adequate privacy protection for credit consumers' information.

1. Corporate Law and Governance as a Mechanism for Promoting Privacy Protection

We begin our analysis by discussing the fundamental principles of corporate law and governance. Generally, the analysis of corporate law and governance is focused primely on reducing the agency cost between management and shareholders, or alternatively, between controlling

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[205] Directive 2006/24/EC, of the European Parliament and of the Council of 15 March 2006 on the retention of data generated on connection with or with the provision of publicly available electronic communications services or of public communication networks and amending directive 2002/58/EC, 2006 O.J. (L 105) 54, 57.

[206] For an interesting discussion on *Digital Rights Ireland* case, see Tridimas, *supra* note 202, at 257–59.

[207] FERRETTI, *supra* note 14, at 27.

[208] Osovsky, *supra* note 38, at 883.

shareholders and minority shareholders.[209] Therefore, the law establishes the purposes that the directors and management have to achieve in order to reduce the agency cost and mitigate such conflicts of interest. The conventional assumption in Anglo-American law is that the purpose of the company is to enhance shareholders' value and that the company's board of directors are obligated to pursue profits for shareholders only,[210] while holding neither the right nor any obligation to pursue the interests of other stakeholders, such as employees, consumers, or the public.[211] In Delaware, home to more than 50 percent of all U.S. publicly traded corporations, shareholders' best interest must always be the goal of the company's conduct, within legal limits. The interests of other constituents are only to be considered as instruments to advance shareholders profits.[212] Thus, the Anglo-American law is not attentive to the interests of non- shareholder stakeholders.

In contrast, the stakeholder theory rejects the idea that shareholders are the ultimate beneficiaries of corporate law and instead sees them as mere owners of a residual interest in its profits.[213] Therefore, a stakeholder approach to corporate governance defines the corporate purpose as creating the most value for all stakeholders, such as, "any group or individual who can affect or is affected by the achievement of the organization's objectives."[214] For example, Blair and Stout view a corporation as a team of participants who enter into a complex agreement to operate together for mutual gain.[215] The corporation is a combination of members seeking a premium on its opportunity costs through collaboration with the team.[216] According to this view, the board of directors act as trustees of different stakeholders and aim to sustain a productive and efficient collaboration of different stakeholders, despite diverging interests between the diverse groups.[217]

In the same vein, Yosifon argued that corporate law must vindicate the consumer interests also by requiring directors to sincerely consider the

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[209] REINIER KRAAKMAN ET AL., THE ANATOMY OF CORPORATE LAW: A COMPARATIVE AND FUNCTIONAL APPROACH 29 (3rd ed. 2017); Zohar Goshen & Richard Squire, *Principal Costs: A New Theory for Corporate Law and Governance*, 117 COLUM. L. REV. 767, 767 (2017).

[210] Revlon, Inc. v. Macandrews & Forbes Holdings, Inc., 506 A.2d 173, 176 (Del. 1986) ("[W]hile concern for various corporate constituencies is proper when addressing a takeover threat, that principle is limited by the requirement that there be some rationally related benefit accruing to the stockholders."); Dodge v. Ford Co., 170 N.W. 668 (Mich. 1919); STEPHEN BAINBRIDGE, THE NEW CORPORATE GOVERNANCE IN THEORY AND PRACTICE 53 (2008) ("[T]he shareholder wealth maximization norm . . . indisputably is the law in the United States."); Andrew Keay, *Shareholder Primacy in Corporate Law: Can it Survive? Should it Survive?*, 3 EUR. COMPANY & FIN. L. REV. 369 (2010). *See generally* Henry Hansmann & Reinier Kraakman, *The End of History for Corporate Law*, 89 GEO. L.J. 439 (2001).

[211] *Cf.* LYNN STOUT, THE SHAREHOLDER VALUE MYTH: HOW PUTTING SHAREHOLDERS FIRST HARMS INVESTORS, CORPORATIONS, AND THE PUBLIC 29 (2012) ("The notion that corporate law requires directors . . . to maximize shareholder wealth simply isn't true.").

[212] Ira M. Millstein et al., *Fiduciary Duties of Corporate Directors in Uncertain Times*, 30 J. APPLIED CORP. FIN. 17, 18 (2018).

[213] Margaret M. Blair & Lynn A. Stout, *A Team Production Theory of Corporate Law*, 85 VA. L. REV. 247, 260 (1999).

[214] Shlomit Azgad-Tromer, *The Case for Consumer-Oriented Corporate Governance, Accountability and Disclosure*, 17 U. PA. J. BUS. L. 227, 276 (2015).

[215] Blair & Stout, *supra* note 213, at 290–92.

[216] *Id.*

[217] *Id.*

impact of corporate decision-making on multiple stakeholders.[218] According to Yosifon:

> [A]s an initial guiding principle, the law should instruct corporate directors to seek profits for shareholders. But the principle should be circumscribed by an obligation to actively, honestly and sincerely undertake that pursuit in a way that it is mindful of the interests of non-shareholding stakeholders in corporate decisions.[219]

Fiduciary duties of board members encompass the duty of loyalty, the duty of care, and the obligation of good faith, and therefore the stakeholder approach should be extended towards additional stakeholders, including consumers.[220]

Section 172 of the UK Companies Act 2006 provides that a director is required to act in the way he or she considers, in good faith, will be most likely to promote the success of the company for the benefit of its members (the shareholders) as a whole.[221] Further, it requires that in carrying out this duty, directors must take the following factors, among others into consideration: the likely consequences of any decision in the long term; the interests of the company's employees; the need to foster the company's business relationships with suppliers, customers, and others; the impact of the company's operations on the community and the environment; the desirability of the company maintaining a reputation for high standards of business conduct; and the need of fairness between members of the company.[222] In addition to the specific requirements in Section 172, other general duties on directors in the UK Companies Act may also be relevant to the way the board addresses the interests of the members and other stakeholders. For example, these include the duties to comply with the company's constitution (Section 171), to exercise independent judgement (Section 173), and to exercise reasonable care, skill and diligence (Section 174).

In late-August 2017, the English government published its response to the Corporate Governance Green Paper.[223] The government considered the function of Section 172 CA 2006 within the context of a broader corporate governance reform. Additional proposals were made which would, in the government's estimation, reinforce the utility of the said section with a view to strengthening the employee, customer and wider stakeholder voices in the

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[218] DAVID G. YOSIFON, CORPORATE FRICTION: HOW CORPORATE LAW IMPEDES AMERICAN PROGRESS AND WHAT TO DO ABOUT IT 17–40 (2018).

[219] David G. Yosifon, *The Social Relations of Consumption: Corporate Law and the Meaning of Consumer Culture*, 2015 BYU L. REV. 1309, 1341 (2016).

[220] Azgad-Tromer, *supra* note 214, at 288. *See* BCE Inc. v. 1976 Debentureholders, [2008] 3 S.C.R. 560, 618 (Can.) (holding that board members owe a fiduciary duty to the corporation rather than its shareholders in order to consider the interests of different constituencies).

[221] Companies Act 2006, c. 46 § 172(1) (Eng.), http://www.legislation.gov.uk/ukpga/2006/46/contents.

[222] For a recent discussion, see Georgina Tsagas, *Section 172 of the Companies Act 2006: Desperate Times Call for Soft Law Measures, in* SHAPING THE CORP. LANDSCAPE (Nina Boerger & Charlotte Villiers eds., 2018) (suggesting the use of alternative means available in the soft law sphere that could support a more pluralistic and democratic formation of corporate decision-making).

[223] *See generally* DEP'T FOR BUS., ENERGY & INDUSTRIAL STRATEGY, CORPORATE GOVERNANCE REFORM: THE GOVERNMENT RESPONSE TO THE GREEN PAPER CONSULTATION (2017), http://www.wlrk.com/docs/corporate-governance-reform-government-response.pdf.

company's decision-making process. Specifically, the government proposed to introduce secondary legislation to require all companies of significant size (private as well as public) to explain how their directors comply with the requirements of Section 172 to have regard to employees and other interests, such as consumers, suppliers, and society.[224]

Moreover, to incentivize the management and directors to consistently examine any threats for privacy of credit consumers, these companies should be legally required to tie executive compensation to the long-term sustainability of the credit bureaus including the interests of multiple stakeholders involved in the long-term success of the company, notably credit consumers.[225] Our suggestion may be suitable to social activists who urge the legislator to compel public companies and their shareholders to advance a social responsibility agenda and contribute their efforts (including their funds) to the fulfillment of global social and environmental goals.[226] Furthermore, our thesis is mainly supported by the fact that the primary assets for the functioning of credit bureaus companies, apart from their scoring algorithm, is the private information provided by consumers themselves. Under these circumstances, the law must provide additional protection for the interests of credit consumers by taking into consideration their interests in the daily decision-making and conduct of the Credit Bureaus in the financial markets.

2. Tax Law and Policy as a Mechanism for Promoting Privacy Protection

Another branch of commercial laws which may indirectly assist in reinforcing the protection of the privacy and avoidance of material errors in the credit reports of consumers is tax law. Credit reports are being used in the Anglo-American markets not only for providing credit to consumers but also for other purposes. For example, insurers use credit reports to set premiums, landlords use credit reports to decide whether to rent apartments, and both private and public employers use credit reports to determine whom to hire.[227] In these circumstances, there is a great importance in assuring that collecting and scoring personal data will be done with maximum accuracy.[228] So, how can tax law contribute for achieving such a goal? Jurists and

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[224] *Id*. at 24–35.

[225] *See, e.g.*, RESEARCH HANDBOOK ON EXECUTIVE PAY (Jennifer Hill & Randall Thomas, eds., 2011) (providing a comprehensive analysis of the current law on executive compensation in the Anglo-American and Civil laws); Alberto Salazar & Mohamed Muthana, *The Duty of Corporate Directors to Tie Executive Compensation to the Long-Term Sustainability of the Firm*, 60 CANADIAN BUS. L.J. 234 (2018).

[226] *See, e.g.*, Scott Hirst, *Social Responsibility Resolutions*, 43 J. CORP. L. 217, 220–25 (2018) (arguing that institutional votes on social responsibility resolutions vary significantly from the preferences of their own investors). This problem could be addressed by institutions changing their voting policies on social responsibility resolutions to better approximate the preferences of their investors. Eliminating this distortion could significantly influence the behavior of corporations on social and environmental matters in a way that investors, and society, would prefer. Recently, the 2016 Nobel Laureate Oliver Hart and Luigi Zingales supported a corporation's pursuit of social goals even if we accept the theory of shareholders primacy. Given that shareholders may have social preferences besides maximization of profits, their welfare would be maximized only if those preferences were also considered by managers and the board. As a result, maximization of shareholder welfare requires the promotion of social objective at the account of profits. *See* Oliver Hart & Luigi Zingales, *Companies Should Maximize Shareholder Welfare Not Market Value*, 2 J. L. FIN. & ACCT. 247 (2017).

[227] Hynes, *supra* note 140, at 87–88.

[228] *Id*.

policymakers have extensively discussed the possibility of incentivizing corporations to exercise social responsibility strategies and contribute funds to the community by granting them different tax benefits.

Tax incentives are effective because corporate management has the responsibility to shareholders to minimize tax liability. There are ways to incentivize behavior through the taxation system by providing: (1) a tax deduction that reduces taxable income; or (2) a tax credit that reduces tax liability dollar-for-dollar. Tax credits are used to encourage companies to hire specific groups of people to increase their employment rates.[229] Specifically, in the U.S., the Work Opportunity Tax Credit provides a tax credit for hiring people from specific target groups that have consistently faced significant barriers to employment, such as Temporary Assistance for Needy Families recipients and food stamp recipients. Therefore, advancing social policy goals has been considered worth the foregone tax revenue.[230]

There are also some examples of tax incentives related to social and environmental activities. In countries such as Sweden, Italy, Bulgaria, Poland, and the U.K., payroll-giving schemes encourage employees to donate to charities by authorizing a deduction from their gross pay before tax.[231] Applying this framework in our context indicates that governments could construct different tax benefits to incentivize credit bureaus and financial institutions to protect the privacy of credit consumers and to ensure that mistakes found in credit reports will be minimal. Specifically, credit bureaus should be entitled to tax benefits in case the amount of consumer complaints of mistakes in their credit reports is under a certain threshold which is regarded as reasonable and appropriate in the eyes of financial authorities. In our view, these mechanisms derived from corporate and tax law discussed above can provide further and significant protection for privacy rights of credit consumers. Next, we discuss how the state can affect the extent of protection afforded to the privacy rights of credit consumers.

C. THE STATE

In this part, we compare different ex-post enforcement devices for the protection of consumer privacy rights in the credit data sharing market. We distinguish between ex-post private and public enforcement of consumer rights. Ex-post private enforcement mechanisms are initiated by consumers thorough private litigation in the courts of state and ex-post public enforcement actions initiated by public authorities using the threat of inspections and sanctions to compel market actors to protect privacy rights of customers.[232]

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[229] *See* UK EQUAL OPPORTUNITIES COMM'N, INCOME TAX AND SEX DISCRIMINATION 3 (1978) ("Taxation is not only a method of raising revenues; it is also an instrument of social policy. Governments customarily use changes in taxation as a way of encouraging or discouraging a very wide range of social behavior"); *see also* ALLISON CHRISTIANS, INTRODUCTION TO TAX POLICY THEORY 8 (2018), https://ssrn.com/abstract=3186791.

[230] Margaret Ryznar & Karen E. Woody, *A Framework on Mandating Versus Incentivizing Corporate Social Responsibility*, 98 MARQ. L. REV. 1667, 1683–88 (2015).

[231] Jette Steen Knudsen, Jeremy Moon & Rieneke Slager, *Government Policies for Corporate Social Responsibility in Europe: A Comparative Analysis of Institutionalisation*, 43 POL'Y & POL. 81, 88 (2015).

[232] *See, e.g.*, FRANZISKA BOEHM, A COMPARISON BETWEEN US AND EU DATA PROTECTION LEGISLATION FOR LAW ENFORCEMENT PURPOSES (Committee on Civil Liberties, Justice and Home Affairs 2015),

Generally, Chapter 6 of the GDPR provides for the appointment by each member state of Supervisory Authorities ("SAs") with broad "investigatory," "advisory," and "corrective" powers of far greater scope then those that were available under the previous EU legislation.[233] According to Chapter 6, these powers are designed to ensure the "consistent application" of the GDPR throughout the EU and include, the ability: (1) "to obtain . . . access to all personal data [belonging to a firm] and to all information necessary for the performance of [investigatory] tasks," (2) "to carry out investigations in the form of data protection audits," (3) "to issue reprimands to a [firm]," (4) "to impose a temporary or definitive limitation [against firms] including a ban on processing," and (5) "to order the suspension of data flows to a recipient in a third country or to an international organization."[234] In addition, Chapter 8 provides the supervisory agencies with power for imposing administrative fines that are "effective, proportionate, and dissuasive."[235] Accordingly, for violations of provisions which are fundamental to the GDPR's data protection, the SAs can punish with fines of up to twenty million euros, or up to 4 percent of a company's total annual revenue for the proceeding financial year (whichever is higher).[236]

Enforcing credit consumers' privacy rights through ex-post public enforcement mechanisms in the U.S. is quite remarkable. Following the 2008 financial crisis, consumer advocates and academics argued that the structure and operation of federal consumer financial regulation had several structural flaws; this enabled lenders to take advantage of certain gaps related to consumer protection regulation to design mortgages and other financially sophisticated products, which impaired consumers and investors alike.[237] The divided accountability of multiple different agencies for rulemaking, supervision, and enforcement of consumers privacy regulation made timely reform and compatible interpretation difficult.[238] The Dodd-Frank Act created a new federal consumer protection agency, the CFPB, vested with authority over all providers of consumer financial services of all kinds, and entrusted with protecting consumers from "unfair, deceptive or abusive" acts or practices in consumer financial services.[239]

The CFPB operates as the U.S. government's primary regulator and civil law enforcement agency regulating consumer lending, payment systems, debt collection, and other consumer financial services. In its first four years of enforcing federal consumer protection laws, the CFPB declared over a

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http://www.europarl.europa.eu/RegData/etudes/STUD/2015/536459/IPOL_STU(2015)536459_EN.pdf.

[233] GDPR at art. 58.

[234] *Id.*

[235] *Id.* at art. 83.

[236] *Id. See* Casey, Farhangi & Vogl, *supra* note 162, at 166–67.

[237] Kathryn C. Lavelle, *Constructing the Governance of American Finance: Timing and the Creation of the SEC, OTS, and CFPB*, 3 POL'Y HIST. 29 (2017).

[238] Christopher L. Peterson, *Consumer Financial Protection Bureau Law Enforcement: An Empirical Review*, 90 TUL. L. REV. 1057, 1066 (2016); *see* Leonard J. Kennedy, Patricia A. McCoy & Ethan Bernstein, *The Consumer Financial Protection Bureau: Financial Regulation for the Twenty-First Century,* 97 CORNELL L. REV. 1141, 1145 (2012) (analysis of four principles that in the authors' view define the Bureau's twenty-first century approach to promoting a well-functioning market for consumer financial services and effective consumer protection).

[239] Adam J. Levitin, T*he Consumer Financial Protection Bureau: An Introduction*, 32 REV. BANKING & FIN. L. 321, 341 (2013); Dee Pridgen, *Sea Changes* in *Consumer Financial Protection*: *Stronger Agency* and *Stronger Laws*, 13 WYO. L. REV. 405, 409 (2013).

hundred different law enforcement cases, which required financial institutions and companies to surrender over eleven billion dollars in customer returns, forgiven debts, and financial penalties.[240]

A recent empirical study conducted by Christopher Lewis regarding all publicly announced CFPB enforcement actions since the CFPB's establishment through the end of 2015 revealed remarkable results. Among other results, the study found that: (1) in 122 matters that generated over eleven billion dollars in consumer redress and forgiven debts, the CFPB did not lose a case from its inception through 2015; (2) over 90 percent of all consumer relief was awarded in CFPB cases in which the defendants illegally misled consumers; (3) over 90 percent of all consumer relief was awarded in cases in which the CFPB cooperated with other state, tribal, or federal law enforcement agencies; (4) no bank has publicly challenged a public CFPB enforcement action; (5) the CFPB has succeeded to demonstrate its willingness to retain senior managers at nonbank financial companies individually liable for unlawful conduct.[241] This study indicates that the CFPB has created competent, powerful, and professional enforcement authorities which provide significant ex-post public protection for consumers' rights.

In contrast, the enforcement of privacy rights of credit consumers through private litigation is scarce. Though the FCRA established a framework within which consumers can bring litigation to vindicate their rights,[242] its effectiveness is quite limited. Generally, consumers remain unlikely to bring an enforcement action when confronted with CRA violations of the FCRA provisions for two reasons. First, consumers may not bring suit because they are unaware that a violation has occurred or, more troublingly, because they do not seem aware of whether their credit report contains a costly mistake. Second, consumers may not bring enforcement actions under the FCRA because the prospective costs of bringing a lawsuit may outweigh the advantages.[243] A similar result exists in Europe, which places a relatively low emphasis on litigation as a mean for protecting privacy rights and a relatively high emphasis on ex-ante strategies. Traditionally, Europe has relied almost exclusively on public enforcement of laws through robust regulatory apparatuses. The U.S., in contrast, has historically used a mix of public and private enforcement.

Several years ago, Francessa Bignami demonstrated empirically that European regulatory styles in the data privacy field are converging—not on adversarial litigation but on a model of "cooperative legalism."[244] According to this notion, rather than relying on private litigation mechanisms, contemporary regulators in Europe are using the threat of inspections and sanctions to induce markets actors to take privacy standards seriously. France and Italy, for example, which were traditionally hostile to industry

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[240] Peterson, *supra* note 238, at 1057.

[241] *Id*. at 1093–98.

[242] For a detailed account of the dispute-resolution infrastructure established by the FCRA, which serves as a first level of recourse for consumers in the U.S., see Austin H. Krist, *Large-Scale Enforcement of the Fair Credit Reporting Act and the Role of State Attorneys General,* 115 COLUM. L. REV. 2311, 2316–19 (2015).

[243] *Id*. at 2321.

[244] *See generally* Francesca Bignami, *Cooperative Legalism and the Non-Americanization of European Regulatory Styles: The Case of Data Privacy*, 59 AM. J. COMP. L. 411 (2011).

involvement in policymaking, are now calling upon market actors to design and enforce more tailored privacy safeguards, and Germany and Britain—where self-regulation has always been common—are continuing to promote new self-regulatory techniques for the enforcement of privacy rights.[245]

In order to allow other areas of law such as corporate and tax to provide protection for consumers' privacy rights, the law should provide a direct cause of action against directors of the private and commercial credit bureaus for not providing adequate protection for borrowers' privacy rights which may be regarded as a breach of the duties of loyalty and care toward the company and its stakeholders. However, our proposal may be dependent on the ability of consumers to initiate private enforcement means designed to impose liability on corporate officers for not respecting privacy rights. Whereas private enforcement of regulatory agendas plays a central role in the United States, it is of marginal importance in Europe.[246]

> In the United States, it is predominant in antitrust law, corporate law, and even more so in products liability; it is very significant in securities law and employment discrimination; and it is still quite substantial in environmental and civil rights protection. In European countries, it plays some role with regard to securities fraud, remains low in antitrust, company, and consumer protection law, and is almost unknown in the environmental and civil rights context.[247]

One reason for this result is based on the different regimes of fee-shifting, such as the main legal rules for allocating the private costs of civil litigation (mainly attorney's fees) between a plaintiff and a defendant. In U.S. lawsuits, a party always pays its own fees unless otherwise specified by contract or statute (the American Rule), while in Europe the losing party is typically required to pay the winner's legal expenses (the English Rule).[248] The fee-shifting regimes have even reached Europe's highest courts, where litigants have prevailed on claims that high court costs or the denial of legal aid violated fundamental rights under European law.[249] Since private enforcement can achieve significant public ends,[250] other branches of law, mainly the civil procedure laws should be redesigned to encourage the submission of legal claims in Europe.[251]

Likewise, the scope of public enforcement of corporate law in continental states is far under developed compared to England and the United States.[252] Two resource-based examples provide imperfect evidence of the

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245 *Id.* at 460.

246 Mathias Reimann, *Private Enforcement in the United States and in Europe*, *in* ENFORCEMENT OF CORPORATE AND SECURITIES LAW: CHINA AND THE WORLD 14 (Robin Hui Huang & Nicholas Calcina Howson eds., 2017).

247 *Id.* at 15–16.

248 Mathias Reimann, *Cost and Fee Allocation in Civil Procedure: A Synthesis*, *in* COSTS AND FEE ALLOCATION IN CIVIL PROCEDURE 3 (Mathias Reimann ed., 2012).

249 Theodore Eisenberg, Talia Fisher & Issi Rosen-Zvi, *When Courts Determine Fees in a System with a Loser Pays Norm: Fee Award Denials to Winning Plaintiffs and Defendants*, 60 UCLA L. REV. 1452, 1454 (2013).

250 Jason Rathod & Sandeep Veheesan, *The Arc and Architecture of Private Enforcement Regimes in the United States and Europe: A View Across the Atlantic*, 14 U.N.H. L. REV. 303, 308 (2016).

251 Reimann, *supra* note 246, at 17–20.

252 KRAAKMAN ET AL., *supra* note 209, at 259–60.

intensity of enforcement by market regulatory authorities in the Anglo-American system compared to the continental one: (1) the U.S. and U.K. devote at least three times the staff to public companies and securities enforcement (adjusted for population) in comparison to other civil law states, (2) enforcement budgets adjusted for GDP yield much the same result, with the budgets of the U.K. and the U.S. exceeding those of France and Germany by ratios of three or four.[253]

V. DESIGNING AN OPTIMAL PROTECTION FOR CREDIT CONSUMERS RIGHTS IN THE REGULATORY STATE

In this part, we demonstrate how to integrate our analysis in the conventional thinking of the regulatory state and its contribution to the development of its functions in the information era. Specifically, we show how implementing our approach can assist to alleviate the potential regulatory clash.

A. A THEORETICAL ANALYSIS OF THE REGULATORY STATE

Both the expansion in the number of regulatory agencies and the enlarged scope of regulation have been exposed since the 1990s in the prevalence notion of the regulatory state.[254] Levi-Faur and Gilad argued that four elements are especially useful in describing the regulatory state and its relation to regulatory governance literature.[255]

First, bureaucratic functions of regulation are being separated from service delivery with the departure of the state from direct provision of services.[256] Second, the regulatory roles of government are being separated from policymaking functions and, thus, the regulators are being placed at arm's length from the political leaders; the autonomy of regulators and regulatory agencies creates a domain of "apolitical" policymaking.[257] Third, and as a result of the previous two elements, regulation and rulemaking emerge as a distinct stage in the policy-making process.[258] Fourth, a degree of formal rule-based relations becomes the norm and replaces the intimate and informal relations that define older styles of decision making.[259] The relationships among regulators, and between regulators and other players, are based on formal rules and contracts rather than discretion.[260]

Moreover, Braithwaite's conception of the "new regulatory state" emphasizes the deployment of responsive techniques which place greater emphasis on the steering of private and self-regulatory capacity over the

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[253] *Id.* at 241–42, 259.

[254] *See generally* Giandomenico Majone, *The Rise of the Regulatory State in Europe*, 17 W. EUR. POL. 77 (1994).

[255] Jacint Jordana & David Levi-Faur, *The Politics of Regulation in the Age of Governance*, *in* THE POLITICS OF REGULATION 1 (Jacint Jordana & David Levi-Faur, eds., 2004); David Levi-Faur & Sharon Gilad, *The Rise of the British Regulatory State: Transcending the Privatization Debate*, 37 COMP. POL. 105, 112–13 (2004).

[256] David Levi-Faur, *The Odyssey of the Regulatory State: From a 'Thin' Monomorphic Concept to a 'Thick' and Polymorphic Concept*, 35 LAW & POL'Y 29, 37 (2013).

[257] *Id.*

[258] *Id.*

[259] *Id.*

[260] *Id.*

purpose of direct command and control.[261] According to this approach, when considering the role of the state in regulation, there is a focus on the variety of styles of engagement with the private sector, and how it may accomplish public interest goals. Therefore, the government should acknowledge the scope for delegating regulatory responsibilities to corporations with the state overseeing corporations regulating themselves.[262]

More recently, Levi-Faur suggested a polymorphic construction of the term "regulatory state" by its instruments of governance. According to him, the regulatory state is a one that applies and extends rulemaking, rule monitoring, and rule enforcement either directly or indirectly.[263] One implication of such definition is that it embraces both "old" and "new" regulatory states. What makes the difference between what we now call "old" and "new" is the extent of diffusion of the regulatory power, such as the formal separation of the political and the legislative from the regulatory authority, and at the same time the degree of diffusion of the regulatory power between different specialized agencies. Therefore, according to this view, while the old regulatory state is centered and hierarchical, the new one is decentered and is expressed via growth in delegation and the increased specialization and diversification of regulatory institutions. Thus, regulatory agencies are not the regulatory state itself but rather they are a critical manifestation of its existence.[264]

Furthermore, according to this view, civil courts perform a substantial role in regulating the market of credit consumer information.[265] Although, civil courts are not generally perceived as regulatory organizations *per se*, they produce significant rules and standards for protecting the rights of credit consumers. Moreover, regulatory agencies frequently design and enforce their ruling and standards in light of the case lawand indicate the obligation of the regulated bodies to obey civil courts' rulings. Therefore, civil courts influence the practical operations and conduct of credit bureaus, and should also be considered as major actors in the regulatory sphere of credit information sharing markets even if they are not seen as regulatory administrations as such.

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[261] John Braithwaite, *The New Regulatory State and the Transformation of Criminology*, 40 BRIT. J. CRIMINOL. 222, 224–25 (2000).

[262] IAN AYRES & JOHN BRAITHWAITE, RESPONSIVE REGULATION: TRANSCENDING THE DEREGULATION DEBATE, CHAPTER 4 (1992); Colin Scott, *The Regulatory State and Beyond*, *in* REGULATORY THEORY: FOUNDATIONS AND APPLICATIONS 265, 281 (Peter Drahos ed., 2017) ("Such an approach takes us beyond state actors and draws in both market and community actors, and the range of mechanisms through which they may act, to achieve public interest objectives and more generalized wellbeing.").

[263] Levi-Faur, *supra* note 256, at 39.

[264] *Id*. at 40.

[265] As stated by Levi-Faur:

The ex-ante bureaucratic legislation of prescriptive rules and the monitoring and enforcement of these rules by social, business and political actors on other social business and political actors. These rules will be considered as regulation as long as they are not formulated directly by the legislature . . . or the courts. . . . *This does not mean that for other scholarly purposes they shouldn't be included, nor does it mean that legislatures or courts are not important engines for regulatory purposes and of course it does not mean that legislators or courts cannot be critical actors in the regulatory space*. David Levi-Faur, *Regulation and Regulatory Governance*, *in* HANDBOOK ON THE POLITICS OF REGULATION 3 (David Levi-Faur ed., 2011) (emphasis added).

Another related important issue to our purpose is how we should perceive the term regulatory state in the information age.[266] In a recent influential article, Julie Cohen has argued that the current regulatory institutions were designed in an era which industrialism was the principal mode of development and such institutions are not capable to deal with the challenges involved in the information age.[267] For example, she argued that the American disclosure approach to consumer privacy protection is not compatible with the condition of information overload age.[268] Therefore, she suggested a novel analytical framework to confront this inconsistency by developing a sound conception of platform power, effective strategies for counteracting infoglut and responding to systematic threats.[269] Moreover, administrative policymaking initiatives in the digital era are also subject to the concern of jurisdictional regulatory overlap which is a result of many information-economy practices that are regulated simultaneously by more than one regulatory agency.[270]

Public Administration research that examined regulatory decision-making processes has shown that even when regulatory agencies hold a considerable amount of independence, they must interact with other agencies when reaching regulatory decisions. Accordingly, there is a need for coordination and cooperation among the multiple actors involved in regulatory decision-making.[271] Moreover, Stokman and Van den Bos suggested that in a collective decision-making process, the final decision on a given issue is the result of two interrelated considerations.[272] The actual resolution is reflected by the voting power that each regulatory agency holds, and by the specific interactions within the regulatory network in which each agency tries to influence the outcome of the decision based on its ability to influence. Each agency's level of access and the power of the resources it owns to persuade the final decision-makers to consider its interests determines its influence.

In order to understand the mutual influence of regulatory agencies within the network, Stokman and Van den Bos suggested to consider three important factors: voting power, timely access, and power resources.[273] The voting power of each regulatory agency is usually outlined in legal texts and reflects the capability of each agency to influence the actual decision-making moment. Timely access is defined as the scope of contacts and interactions within the regulatory networks. An actor has more access when that actor

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[266] *See generally* Lyria Bennett-Moses, *Regulating in the Face of Sociotechnical Change*, *in* THE OXFORD HANDBOOK OF LAW, REGULATION AND TECHNOLOGY 573 (Roger Brownsword, Eloise Scotford & Karen Yeung eds., 2017); Patrice Dutil & Julie Williams, *Regulatory Governance in the Digital Era: A New Research Agenda*, 60 CANADIAN PUB. ADMIN. 562 (2017).

[267] Julie E. Cohen, *The Regulatory State in the Information Age*, 17 THEORETICAL INQUIRIES L. 369, 370 (2016).

[268] *Id.* at 383. Arguably, our contextual methodology is not vulnerable to this difficulty since it determines and declares ex-ante what are the specific permissible practice of processing, scoring and use of personal credit data.

[269] *Id.* at 374.

[270] *Id.* at 397–98. *See* Jody Freeman & Jim Rossi, *Agency Coordination in Shared Regulatory Space*, 125 HARV. L. REV. 1131, 1138–51 (2012).

[271] Karin Ingold, Frédéric Varone & Frans Stokman, *A Social Network-Based Approach to Assess De Facto Independence of Regulatory Agencies*, 20 J. EUR. PUB. POL'Y 1464, 1478 (2013).

[272] Frans N. Stokman & Jan M Van den Bos, *A Two-Stage Model of Policymaking with an Empirical Test in the US Energy-Policy Domain,* 4 RES. POL. & SOC'Y 219, 228 (1992).

[273] *Id.* at 230–33.

can carry out more significant communication with other actors in the systems. The power resources are related to the extent of the agency's knowledge of the industry and its functional capacities. These three factors determine the potential influence each agency has on the decision-making process within the network.[274]

In our context, entrusting several regulatory authorities with powers to promote privacy rights through different areas of law, such as data protection, corporate, and tax, may result in a lack of coherence in the operation of their authorities in practice. In order to tackle this challenge, in the last part we suggest a different concept for advancing cooperation between regulatory agencies in this field which we term as *optimal equilibrium synergy of regulatory networks*.

Applying this notion in the design of credit information sharing regulation implies that jurists and policymakers should differentiate between ex-ante rulemaking authorities of different regulatory agencies and ex-post enforcement authorities of those agencies for determination of an optimal balance in the operation of such authorities. Specifically, a world in which regulatory authorities diffuse an optimal balance of synergy will be structured and achieved only after a realistic examination of the effectiveness and efficiency of the ex-ante and ex-post powers of different agencies. Therefore, relying on our reconceptualization of the individual's, the market's, and the state's roles discussed above, we distinguish between the effectiveness of ex-ante and ex-post strategies in Europe and the U.S. as a methodological method for determining the optimal balance of powers for regulating a credit data sharing system around the world.

B. Constructing Optimal Equilibrium Synergy of Regulatory Networks in the Information Era

Until this point, we distinguished between ex-ante and ex-post strategies for protecting privacy rights of consumers based on the grounds of individual, markets and the state. Relying on the previous parts of this Article, we are equipped to discuss the effectiveness of such strategies in order to establish an optimal equilibrium synergy of regulatory authorities concerning the regulation of the credit data sharing industry in the EU and the U.S.

Generally, different regulatory agencies' overlap of jurisdictional authorities occurs when different agencies are responsible for designing and enforcing regulation in the same area to achieve similar policy goals. Significant downsides of overlapping regulatory authorities include risks of inconsistency (both in terms of interpretations of regulations and enforcement), uncertainty, and overregulation.[275] These risks may increase

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[274] See Camilo Ignacio González & Koen Verhoest, *De Facto Regulatory Decision-Making Processes in Telecommunications Regulation: Explaining Influence Relationships with Exponential Random Graph Models*, 2018 J. PUB. POL'Y 1, 6–7 (2018) for an explanation of how regulatory actors interact at the de facto level in a multi-actor regulatory arrangement when making regulatory decisions in the telecommunications sector of Colombia.They suggested that actors' level of influence is affected by the access they have to other organizations, the divergence of positions they have with these other organizations and the power resources of an organization.

[275] Catherine M. Sharkey, *Agency Coordination in Consumer Protection*, 2013 U. CHI. LEGAL

when different regulatory agencies have other policy goals they wish to fulfill that are inconsistent with the one shared by all the relevant agencies. The OECD has acknowledged this challenge by developing several methods to mitigate the risks of inconsistency in the operation of regulatory powers of different agencies in the regulatory state.[276] The OECD recommended the regulatory state to form special mechanisms for establishing proper coordination and for resolving administrative disputes between different agencies.[277]

In Europe, national authorities in individual countries are responsible for the enforcement of EU consumer protection laws. In order to protect consumers when shopping across national borders, a cooperation framework was set up by Consumer Protection Cooperation Regulation (EC) 2006/2004 (CPC Regulation).[278] The CPC regulation allows national authorities in the EU and the European Economic Area ("EEA") countries to cooperate to address breaches of consumer law in the internal market when it involves traders and consumers in different countries.[279] In this regard, a competent authority in a country where consumers' rights are being violated can ask its counterpart in the country where the trader is based to act in order to stop the breach of law. Authorities can also coordinate their approaches to applying consumer protection law in order to tackle widespread infringements.[280]

Another possibility to confront the risk of inconsistency is to provide preference to the position of one regulatory agency in the rulemaking and enforcement of certain issues settled in advance between them.[281] In this context, political science literature believes that modern democratic governance is constructed and presented via some hybrid arrangement involving a range of different actors, including representatives of private or non-governmental institutions. According to this view, modern governance reflects a transformation "towards a sharing of tasks and responsibilities; towards doing things together instead of doing them alone."[282]

The term "network" is frequently used to describe clusters of different kinds of actors who are linked together in political, social, or economic life. Links between organizations, rather than the organizations themselves, have become the central analytical focus for many social scientists. The term policy network suggests, therefore, "a cluster of actors, each of which has an interest, or 'stake' in a given . . . policy sector and the capacity to help

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FORUM 329, 333 (2013). The author also surveys several advantages involved in regulatory overlap, such as: (1) addressing the complexity of regulated bodies; (2) overcoming regulatory inertia; (3) encouraging innovation in regulatory design; (4) facilitating integration across jurisdictional lines. *Id*. at 333–35.

[276] OECD, THE OECD REPORT ON REGULATORY REFORM SYNTHESIS (1997), https://www.oecd.org/gov/regulatory-policy/2391768.pdf.

[277] *See id*.; Adi Ayal, Oren Perez & Tzipi Isser-Itzik, *Decentralized Regulation: Between Clash and Synergy in the Regulatory Reality of Israel, in* THE GOVERNANCE OF REGULATION: LAW AND POLICY 213, 244 (Yishai Blank, Roy Kreitner & David Levi-Faur eds., 2016).

[278] Regulation 2006/2004, of the European Parliament and of the Council of 27 October 2004 on Cooperation Between National Authorities Responsible for the Enforcement of Consumer Protection Laws, 2004 O.J. (L 564) 1; Regulation 2017/2394 of the European Parliament and of the Council of 12 December 2017 on Cooperation Between National Authorities Responsible for the Enforcement of Consumer Protection Laws and Repealing Regulation (EC) No 2006/2004, 2017 O.J. (L 345) 1.

[279] *See generally id*.

[280] *See* Fabrizio Cafaggi, *Towards Collaborative Governance of European Remedial and Procedural Law?*, 19 THEORETICAL INQUIRIES L. 235, 244–45 (2018).

[281] Ayal, Perez & Isser-Itzik, *supra* note 277, at 249–52.

[282] MODERN GOVERNANCE: NEW GOVERNMENT-SOCIETY INTERACTIONS 1 (Jan Kooiman ed., 1993).

determine policy success or failure."[283] According to this view, modern governance frequently attempts to explain policy outcomes by studying how networks in specific sectors facilitated bargaining among stakeholders over policy design. Thus, a regulatory agency that holds broad network connections characterized by multiple and varied stakeholders will gain relative primacy concerning policy rulemaking, supervision and enforcement over a regulatory agency which carries only relatively narrow network linkages.[284] We advocate a different regulatory approach that aims to design an appropriate balance of powers between distinctive regulatory agencies based on the relative effectiveness of ex-ante rulemaking and ex-post private and public enforcement with respect to the protection of credit consumer rights in the credit data sharing market. In our view, there is an important link between the ex-ante and ex-post strategies for protecting rights of credit consumers. We argue that jurists and policymakers should design arrangements regarding the permissible processing, scoring, and use of personal financial information only after a closer examination of the effectiveness of ex-ante and ex-post approaches for promoting privacy rights of consumers under different branches of laws.

To ensure a fair balance between protecting consumers' privacy rights and enabling efficient practices of personal credit data sharing in the global markets to enhance competition between banking institutions and significantly lower insolvency rates, we suggest that ex-ante rulemaking and ex-post enforcement mechanisms will be designed according to their relative effectiveness. Therefore, in cases where ex-ante strategies fail to provide adequate protection for privacy rights in the credit data sharing industry more comprehensive and forcible ex-post strategies should be carried out in order to achieve proper protection for individual rights. And in cases where ex-post strategies provide optimal deterrence against privacy violations by Private Credit Bureau or CRAs, a more lenient method should be implemented regarding the design of the rules that regulate the industry of credit data sharing. Accordingly, regulatory agencies should engage in consistent empirical scrutiny of the effectiveness of different regulatory methods devoted to protecting the privacy rights of credit consumers. In our view, this approach may contribute to meaningful synergy of regulatory network powers, since the operation of a particular regulatory authority is dependent on the specific relative effectiveness of the ex-ante and ex-post strategies discussed above. In other words, our approach urges policymakers to evaluate the benefits and costs of alternative modes of protecting credit consumers in order to set the limits of each regulatory authority.[285] The

[283] JOHN PETERSON & ELIZABETH BOMBERG, DECISION-MAKING IN THE EUROPEAN UNION 8 (1999). In this respect, the Rhodes model of policy networks has gained much recognition in the study of regulation. The model assumes that three key variables determine what type of policy network exists in a specific sector: (1) the relative stability of a network's membership; (2) the network's relative capability of excluding outsiders; (3) the strength of dependency on each other for valued resources. Ryan Whalen, *Legal Networks: The Promises and Challenges of Legal Network Analysis*, 2016 MICH. ST. L. REV. 539, 547–54 (2016). See Whalen, *supra* for a recent review of the existing literature on legal network analysis. *See, e.g.*, Roderick Arthur William Rhodes, *Policy Network Analysis*, *in* THE OXFORD HANDBOOK OF PUBLIC POLICY 425 (Michael Moran et al. eds., 2008).

[284] Ayal, Perez & Isser-Itzik, *supra* note 277, at 221.

[285] *See generally* Howell E. Jackson & Paul Rothstein, *The Analysis of Benefit in Consumer Protection Regulation*, 9 HARV. BUS. L. REV. 197 (2019) (offering a detailed study of how regulatory agencies are currently undertaking benefit analysis in promulgating new regulations involving matters of

following table displays the effectiveness of the current ex-ante and ex-post strategies for promoting privacy rights of credit consumers in the U.S. and EU, as discussed in the previous parts based on our distinction between *individual, markets, and the state* roles in establishing fair and efficient credit information sharing markets.

Table 1: The relative effectiveness of current ex-ante and ex-post strategies for protecting credit consumer privacy rights in the U.S. and the EU.

Basis of Protection for Privacy and Fairness	**Ex-Ante Strategies**		**Ex-Post Strategies**			
			State Enforcement		**Private Enforcement**	
	US	**EU**	**US**	**EU**	**US**	**EU**
Individual	Non-Effective	Effective	Effective	Effective	Non-Effective	Non-Effective
Markets	Non-Effective	Effective	Effective	Non-Effective	Effective	Non-Effective

Several policy considerations justify adopting our suggestion for arranging the optimal divisions of agency powers under the structure of the regulatory state. First, we believe that our approach may increase trust and cooperation between different regulatory agencies, since each of them is responsible for the rulemaking, supervision and enforcement of specific fields in certain condition under the concurrence of all members of the network. Several years ago, Bratspies argued that regulatory trust could be achieved under three correlated conditions: expertise, stewardship, and transparency.[286] According to Bratspies, expertise means not only evident technical skill but also a perceptive recognition of the limits of knowledge and an ability to work with different groups.[287] Stewardship includes not only density and fair decision-making processes, but also thorough responsiveness to the variety of public concerns.[288] Transparency involves more than merely establishing accurate and useful information; it also includes an obligation to an active approach to many opinions.[289]

Financial regulators' lack of expertise, stewardship, and transparency was also evident in the recent financial crisis. Therefore, one of the central lessons of the financial crisis was the profound importance of cooperation between financial authorities as an instrument for ensuring financial stability. For example, in the U.S., the Financial Stability Oversight Council ("FSOC") is a federal government organization, established by Title I of the

consumer finance and other analogous areas of consumer protection).

[286] *See generally* Rebecca M. Bratspies, *Regulatory Trust*, 51 ARIZ. L. REV. 578 (2009).

[287] *Id*. at 608–18.

[288] *Id*. at 618–22.

[289] *Id*. at 622–28.

Dodd–Frank Wall Street Reform and Consumer Protection Act, charged with: identifying risks to the financial stability of the U.S. from both financial and non-financial organizations; promoting market discipline by eliminating expectations that the government will shield them from losses in the event of failure; and responding to emerging threats to the stability of the US financial system.[290] The Council has ten voting members including the Director of the CFPB.[291] Therefore, our thesis can be regarded as one example of integral working procedures which may govern the divisions of authorities between the regulatory agencies that are members of the U.S. FSOC.

Second, our thesis is consistent with the recommendations of the organizational management research which investigates appropriate techniques to promote trust within organizational networks.[292] Generally, the study of trust in the organizational management field is spread across many different academic areas such as law, political science, public administration, and sociology. In this regard, several theories in organizational management studies have suggested implementing internal methods of actions to establish inter-organizational trust.[293] The organizational management research advances four different approaches through which institutions can foster the development of faith: (1) the law can be an effective risk-reducing instrument because it aligns actors' expectations and behaviors long before any serious disagreement arises; (2) corporate reputation is an example of a mechanism that carries informal behavioral norms;[294] (3) formal certifications or guidelines and norms of ethical business practices are also a mechanism through which institutions may promote trust; and (4) norms, structures, and procedures that are created internally in an organizations community make individual and collective behaviors more predictable and reduce the inherent risk of losing trust within the regulatory network. The public, therefore, is considerably more inclined to invest faith in organizations than if such norms, structures, and procedures did not exist.[295] Applying these studies to our context suggests that engaging in a consistent examination of the effectiveness of the legal strategies for protecting consumer rights could be conceived as a particular procedure or internal cultural and ethical norm to promote trust and cooperation between regulatory agencies themselves and between agencies and consumers generally.

Third, our thesis advances approaches in the study of regulations that seek to strike the right balance between over-regulation and insufficient

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[290] Fin. Stability Oversight Council, *About FSOC: Frequently Asked Questions*, U.S. DEP'T TREASURY, https://www.treasury.gov/initiatives/fsoc/about/Pages/default.aspx.

[291] *See* Hilary J. Allen, *Putting the 'Financial Stability' in Financial Stability Oversight Council*, 76 OHIO ST. L.J. 1087. 1113–19 (2015).

[292] *See, e.g.*, THE OXFORD HANDBOOK OF INTER-ORGANIZATIONAL RELATIONS (Steve Cropper et al. eds., 2008).

[293] Reinhard Bachmann & Andrew C. Inkpen, *Understanding Institutional-Based Trust Building Processes in Inter-Organizational Relationships*, 32 ORG. STUD. 281, 288 (2011).

[294] An organization's reputation channels behaviors of and towards the organization in directions, which results in future interest and traction for the organization and its partners. A firm's reputation will influence the whether one whichs to contract with such an organization. "Firms that value their reputation as social capital will be unlikely to engage in practices that have the potential to damage that reputation and will thus be more predictable and trustworthy." *Id.* at 290.

[295] *Id.* at 292.

regulation.[296] In this regard, the *Better Regulation* approach seeks to enhance the rationality of government regulation through cost-benefit analysis to ensure optimal regulation.[297] This approach has gained ground in the U.S. and Europe with a view to reevaluate the costs and benefits of existing regulation.[298] Therefore, our contribution to the *Better Regulation* approach is that the cost-benefit analysis is not confined only to the examination of the relative effectiveness of the different methods for protecting the privacy rights of credit consumers but also serves as a valuable mechanism for redrawing the various agencies' boundaries in the regulatory state.

VI. CONCLUSION

Our Article undeniably accepts the significance of credit information sharing practices as a crucial condition for engaging in valuable exchanges required to enhance the aggregate welfare. However, taking into consideration the substantial risks for privacy rights and regressive distributional effects involved in the current vast practices, we argued for extending protection for consumer rights by adopting a more nuanced approach. Our approach is built on a fresh interpretation of the different areas of law, such as commercial and privacy, in Europe and the United States. We proposed a novel regulatory design that is grounded on our reconceptualization of the individual's, market's, and state's role in structuring an appropriate balance between fairness and efficiency considerations. In this framework, we suggested to adopt a contextual strategy which urges jurists and policymakers to consider the following aspects while designing appropriate regimes for regulating a credit data sharing market: the identity of the consumer, the implications of different credit uses and the complexity of a given credit transaction. Finally, we have shown how our approach can contribute to creating an *optimal equilibrium synergy of regulatory networks* which will be achieved only after a closer study is conducting, determining the effectiveness of the ex-ante and ex-post powers of different agencies in regulating the credit data sharing industry. Embracing the suggested personalized methodology for regulating the credit data sharing market will provide the safeguards required to meaningfully ensure credit consumers' well-being. While we focused on establishing a novel regulatory theory for credit consumer law, future empirical research may still be required to examine whether the suggested personalized methodology will really accomplish sound protection for privacy rights

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[296] CASS R. SUNSTEIN, THE COST-BENEFIT STATE: THE FUTURE OF REGULATORY PROTECTION 19–20 (2002).

[297] Robert Baldwin, *Better Regulation: The Search and the Struggle*, *in* THE OXFORD HANDBOOK OF REGULATION 259 (Robert Baldwin et al. eds., 2010).

[298] In the United States, this policy was enshrined in Presidential Order No. 12,291, which defined principles for determining and reexamining the rules of governmental regulation. Exec. Order No. 12291, 46 Fed. Reg. 13193 (Feb. 17, 1981). At the center of the optimal regulatory method is the Regulatory Impact Assessment (RIA)—a methodological tool for conducting systematic examination of the effect of the regulations. In the UK, the term "Regulatory Impact Survey" was defined as: "A tool which informs policy decisions. It is an assessment of the impact of policy options in terms of the costs, benefits and risks of a proposal." CABINET OFFICE, BETTER POLICY MAKING: A GUIDE TO REGULATORY IMPACT ASSESSMENT 5 (2003), http://www.dei.gov.ba/bih_i_eu/RIA_u_BiH/default.aspx?id=6595&langTag=bs-BA. The EU urges its member countries to adopt this method of assessing regulation. *See* CAUDIO M. RADAELI & FABRIZIO DE FRANCESSO, REGULATORY QUALITY IN EUROPE: CONCEPTS, MEASURES & POLICY PROCESSES 2 (2007).

without denying the efficiency of credit information sharing practices in different legal systems.