# Consumer Credit Information Systems: A Critical Review of the Literature. Too little attention paid by Lawyers?

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#### Abstract

This paper reviews the existing literature on consumer credit reporting, the most extensively used instrument to overcome information asymmetry and adverse selection problems in credit markets. Despite the copious literature in economics and some research in regulatory policy, the legal community has paid almost no attention to the legal framework of consumer credit information systems, specially within the context of the European Union. Studies on the topic, however, seem particularly relevant in view of the establishment of a single market for consumer credit. This article ultimately calls for further legal research to address consumer protection concerns and inform future legislation.

Keywords: consumer credit reporting, review of the literature, legal framework

JEL Classification: K2, G14, G21, 017

#### Introduction

This work explores consumer credit information systems as a tool used by lenders to manage credit risk.

Such devices have become the most extensively used instrument to underwrite decisions on borrowings or the supply of goods and/or services to customers. Lenders, in fact, access credit reference databases managed by third party providers (the so-called 'Credit Reference Agencies') in order to evaluate a consumer's credit application and his or her creditworthiness.

Nowadays, there is hardly a country that does not have a credit information sharing system in place, whilst international organisations such as the World Bank are working to implement at least one in those few emerging economies that still do not have one.<sup>1</sup>

Such systems have integrated themselves thoroughly in the credit granting practices of Western economies, at times differing from country to country only for some minor aspect.<sup>2</sup>

In general terms, though, it may be synthesised that Credit Reference Agencies (hereinafter 'CRAs') collect a variety of both positive and negative financial information on individuals, producing a so-called 'credit report' that contains details of the payment and credit history of an individual, his or her financial accounts and the way these have been managed, as well as other information of interest to the credit industry.

Such source and type of data normally include detailed information about mortgages, bank accounts, store cards, charge cards, credit cards, loan accounts, and in many jurisdictions even mail order accounts as well as telecom and other utilities accounts.

Such information, then, is usually integrated with data from other sources, such as, for example, electoral rolls, Court judgements, bankruptcies and voluntary arrangements, and other private information provided by other organisations, which compile additional information referring to an individual, thus forming a single file.<sup>3</sup>

Significantly, consumer credit reporting is not mandated by law and the underlying sharing devices rely on the voluntary provision to CRAs of customers' data from an indefinite number of lenders, which in turn are the same CRAs' own clients.

In this way, CRAs ultimately maintain a full data sharing mechanism based on the collection of information from the various lenders about their customers and, at the same time, supply for a fee those same lenders with consumer credit reports.

As CRAs rely on the voluntary provision of data by their client members, they also rely on the reporting lending institutions to voluntary review and correct erroneous data.

In economic theory, CRAs have evolved as organisations providing information sharing devices in the financial system in order to meet the problem of asymmetrical information between borrowers and lenders. By making available rapid access to standardised information on potential borrowers, they represented the response to the demands of the market for such type of data, i.e. the needs of banks and other financial intermediaries.

The rapid development and sophistication of information systems and highly technological statistical models, coupled with the increasing competition between lenders and issues of borrowers' indebtedness, have made data sharing mechanisms in the credit market a topic of recent interest among academics in a number of disciplines.

Thus, the purpose of this paper is to identify and critically review the existing literature on this specific subject matter in order to understand the pillars upon which it is based, with the definite objective to explore the extent to which lawyers have provided a legal analysis of such sophisticated systems vis-à-vis the positive law.

In such attempt, this work ultimately investigates whether the legal community has considered consumer protection concerns, for example by addressing either the privacy or the discriminatory consequences of credit reporting, with a special interest and reference to the context of the European Union.

Such examination seems particularly relevant today in view of a future single market for consumer credit.

#### 1. Credit Reference Agencies in the Economic Literature

Economic theory has long stressed the importance of information in credit markets. The exchange of financial data and customers' information sharing devices have been the subject of a large body of academic literature in economics.

Theorists have long aimed at showing that access to credit is essential for economic development and growth. To this purpose, the subject relating to the effects of asymmetric information and credit rationing in credit markets has been thoroughly analysed.

The economic model pioneered by Akelof in 1970, who takes the used car market as an example, is often cited as the first economic study to recognise the issue of quality uncertainty, the importance of trust and the role of asymmetric information in financial relationships.<sup>4</sup>

Jaffee and Russell followed in 1976 by prospecting in economic terms that there is a link between the issue of asymmetric information and the problem of credit rationing.<sup>5</sup>

However, the first generation of theoretical treatment of asymmetric information in credit markets - which is today uncontrovertibly considered as one of the most influential papers on adverse selection in credit markets and the economic basis for the existence and explanation of credit reporting - was developed in 1981 by Stiglitz and Weiss who used the small business credit market as the economic model to understand why is credit rationed.<sup>6</sup>

The findings of the study are best summarised by the authors' own words:

"banks making loans are concerned about the interest rate they receive on the loan, and the riskiness of the loan. However, the interest rate a bank charges may itself affect the riskiness of the pool of loans by either: 1) sorting potential borrowers (the adverse selection effect); or 2) affecting the actions of borrowers (the incentive effect). Both effects derive directly from the residual imperfect information which is present in loan markets after banks have evaluated loan applications. (...)

The adverse selection aspects of interest rates is a consequence of different borrowers having different probabilities of repaying their loan. The expected return to the bank obviously depends on the probability of repayment, so the bank would like to be able to identify borrowers who are more likely to repay. It is difficult to identify 'good borrowers' and to do so requires the bank to use a variety of *screening devices*. The interest rate which an individual is willing to pay may act as one such screening device: those who are willing to pay high interest rates may, on average, be worse risk; they are willing to borrow at high interest rates because they perceive their probability of repaying the loan to be low. As the interest rate rises, the average 'riskiness' of those who borrow increases, possibly lowering the bank's profits.

Similarly, as the interest rate and other term of the contract change, the behavior of the borrower is likely to change. For instance, raising the interest rate decreases the return on projects which succeed. (...) [H]igher interest rates induce firms to undertake projects with lower probability of success but higher payoffs when successful.

In a world with perfect and costless information, the bank would stipulate precisely all the actions which the borrower could undertake (which might affect the return of the loan). However, the bank is not able to directly control all the actions of the borrower; therefore, it will formulate the terms of the loan contract in a manner designed to induce the borrower to take actions which are in the interest of the bank, as well as to attract low-risk borrowers".<sup>7</sup>

Ultimately, the scholars suggest that the structure of the credit market determines the extent to which either lenders or borrowers benefit from greater transparency of information. While greater access to information should increase the quantity of lending, it may not necessarily reduce the price of loans unless the credit market is competitive and information can be transferred between lending institutions.<sup>8</sup>

A second generation of economic literature incorporated these insights.

For instance, while Diamond, Campbell and Kracaw - as well as Stigliz and Weiss - put forward that information may be used for supporting profitable lending, at the same time they all advance the idea that financial intermediaries such as banks are institutions specialising in the acquisition and dissemination of information - including data monitoring the repayment of loans and other transactions of their customers - thus performing the function of resource allocation in the economy.<sup>9</sup>

Again, Diamond, Petersen and Rajan - as Berger and Udell, and Peek and Rosengren - all have written about the way that lenders may improve their knowledge of borrowers through their direct observation of clients over time, as well as the importance of information so developed over the course of the banking relationship.<sup>10</sup>

Other economists have focused their work respectively on the implications of proprietary information for banking competition and on the importance of screening customers by banks in order to increase the probability that borrowers do not default strategically.<sup>11</sup>

Using a pure adverse selection model, in 1993 Jappelli and Pagano have analysed the factors that lead to endogenous communication between lenders in a credit market and firstly introduced the use of information sharing among creditors via credit registries into economic models. The researchers claim that information sharing is more likely to occur when the mobility of households is high, borrowers are heterogeneous, the underlying credit market is large, and the cost of exchanging information is low. The authors also point out that when safe borrowers are priced out of the market because of adverse selection, information sharing leads to an increase in the volume of lending.<sup>12</sup> The study concludes that "lenders can overcome informational asymmetries by exchanging private information about potential borrowers. (...) The incentive to create credit bureaus is greatest, it is

argued, where each lender is confronted by large numbers of customers on which it has no previous information, e.g. where borrowers are very mobile. The size of the credit market also increases the incentives to share information".<sup>13</sup>

Papers by Klein, Vercammen, and Padilla and Pagano offer other pertinent theoretical arguments to understanding the factors that may encourage the implementation of information sharing systems in the credit market.

In particular, Klein developed an economic model derived from game theory to argue that credit reporting may act as a borrower discipline device.<sup>14</sup>

Vercammen, however, cautions that information sharing mechanisms are not sustainable over time as the more lenders learn about their borrowers the more is likely that the value of negative information is reduced, suggesting that a certain level of adverse selection is required in a credit market in order to give rise to borrower reputation incentives. The reason would be that, as credit histories lengthen, lenders become increasingly informed about the types of borrowers with whom they are dealing. The author explains that reputation effects would result strongest when lenders are the most uncertain about a borrower's type since it is at this point that the former are willing to adjust their beliefs the most when new information is received. Ultimately, thus, Vercammen puts forward that policies that restrict the flow of information from borrowers to lenders may be desirable from a social efficiency perspective because such policies would sustain reputation effects.<sup>15</sup>

Padilla and Pagano, for their part, insist that information sharing affects the lenders' profits because credit reporting increases borrower discipline reducing defaults.<sup>16</sup>

In a later paper, the same authors focus on the type of information that would need to be shared, namely the relevance of the use of both positive and negative information versus negative information alone. They conclude that borrowers have greater incentive to avoid defaults if only negative information is exchanged.<sup>17</sup>

Looking at the topic from a different angle, McIntosh and Wydick recently have put forward that the overall effect of data sharing and credit reporting systems can be decomposed into a screening effect on the one side, and an incentive effect on the other side. Assuming a competitive credit market, the authors argue that credit reporting may improve credit access for the poorest borrowers as information sharing would lower lenders costs through lower default rates, thus adding them to the institutions' micro-lending portfolios.<sup>18</sup>

Still, due to the shortage of adequate data sets - which started to become available only by the end of the 1990s - empirical investigations proving the theoretical implications on the value of information sharing in credit markets are limited.

Only in 2002 Jappelli and Pagano began to offer the first empirical work relating to the existence of credit reporting activities in approximately forty countries around the world and their impacts at the economy-wide level, including volume of credit, price of credit, quality of credit portfolios, and access to credit.

The scholars argue that the presence of private CRAs or public credit registries is normally associated with higher levels of lending and lower credit risk. They find no differential effect between private and public institutions on credit market performance, and suggest that public institutions are more likely to be established where creditor rights are poorly protected and there is no pre-existing private credit reporting firms, also indicating that the two may serve some of the same functions.<sup>19</sup>

Kallberg and Udell, using data from a private American business reporting company, have tested empirically the added value provided by mercantile reports to conclude that trade credit histories have substantially greater predictive power than data taken from financial statements alone.<sup>20</sup> Instead, Galindo and Miller analyse the extent to which credit reporting alleviates credit rationing to companies, indicating that they are less credit constrained when credit reports are available.<sup>21</sup>

Similarly, using cross-country firm level data, Love and Mylenko study the effect of credit reporting institutions on financing constraints as they are perceived by a firm's manager and on firm's reliance on bank financing. They suggest that the existence of private credit reporting systems is associated with lower financing constraints and higher share and availability of bank financing for small and medium firms, while public credit registries do not seem to have significant effect on availability of financing.<sup>22</sup>

From a different perspective from the above, there is a limited number of empirical studies, or else case studies, which concentrate on the diverse subject of credit information systems operating in sectors other than the business or commercial one.

Even though some studies put forward the case for either private or public CRAs collecting and disseminating information between lenders operating in developing economies, the literature does not include empirical analysis on the ability of information sharing systems to increase access to credit among the poor and/or issues of social justice.<sup>23</sup>

Luoto, McIntosh and Wydick, using an empirical test of the effects of a newly implemented credit information system in Guatemala, argue that credit information systems help to build an efficient financial system by promoting transparency in lending and remark that there has been burgeoning growth in the implementation of such systems worldwide in the last decade. They conclude by arguing that the beneficial effects of credit information systems are to be found when CRAs are utilised in the microfinance sector (the authors, however, do not specify if such organisations are, or should be, of private or public nature).<sup>24</sup>

Until now, however, empirical evidence relating to the consumer credit market still seems to be missing.

## 2. Institutional Aspects and the Literature in Regulatory Policy

As overviewed above, the literature in economics is abundant. However, it largely - if not exclusively - focus on the U.S. or developing countries market, to a certain extent disregarding Europe.

Moreover, when it comes to an analysis of the institutional aspects and the regulatory policy of credit reporting, studies become scarce.

Margaret Miller's (Ed.) "Credit Reporting Systems and the International Economy" (2003) offers the first and so far only comprehensive study focusing specifically on CRAs, as well as the only source for the institutional aspects of credit reporting systems. The book - which has been written as part of a research project carried out by the World Bank acting in an advisory and financing capacity with developing countries - complements and extends existing economic research, offering further theoretical and empirical evidence on the importance of credit reporting for determining creditworthiness. While several chapters of the work extend case studies in developing countries (mainly South-Americans) providing empirical analysis of credit reporting, the volume originally attempts to provide answers to fundamental questions such as how credit reporting institutions can enable markets to overcome problems of asymmetric information.<sup>25</sup>

In her own chapter, Miller, using results from a World Bank survey, offers an insight on the institutional dimension of credit reporting providing empirical data on the state of the art of private and public CRAs around the world. The economist shows that CRAs can provide borrowers with the so-called 'reputation collateral' as a valuable instrument for timely repayments, arguing that the type of data collected and disseminated by CRAs often provide the best predictors of such repayments.<sup>26</sup>

Jappelli and Pagano's contribution, instead, offer an account of public credit information registries in Europe, suggesting that countries currently setting up a credit information system should make its design compatible for future integration with those of their main commercial and financial partnering countries.<sup>27</sup>

When it comes to a review of the literature in regulatory policy, it is surprising to note that little has been written on the topic and that the main contributions mainly relate to the development of regulatory indexes by economists, or analysis on the impact of legislation on the economy or, at a different though related level, on the design of scoring models.

Riestra, whose starting point centres on the necessity of credit information sharing and the role of CRAs as key actors in the assessment of an individual's ability to repay incurred debts as well as a valuable disciplinary instrument vis-à-vis borrowers, warns nevertheless that CRAs cannot provide perfect or quasi-perfect creditworthiness assessments. The research, analysing evidence from the U.S., finds that the collection of comprehensive information by CRAs does not ensure the ability to anticipate the occurrence of situations of defaults and/or over-indebtedness.<sup>28</sup>

In addition, the author argues that "the collection and maintenance of adequate positive data will significantly increase technical, personnel and financial requirements of credit bureaus, raising the cost for credit institutions, which will ultimately be reflected in the cost of loans for consumers", concluding that "consumer information, responsible lending practices and the legal environment should be balanced in any public policy strategy".<sup>29</sup>

Similarly, Avrey, Calem, and Canner - researching on the related issue of credit scoring - advise that although credit history offers benefits to lenders and the economy, failure to consider situational circumstances raises important statistical issues that affect the ability of scoring systems to accurately quantify an individual credit risk.<sup>30</sup>

Looking at the issue from a different perspective, Jentzsch - who underlines once more the economic benefits of information sharing mechanisms - presents a new panel mapping the regulatory environment for commercial reporting. The economist develops an econometric analysis and index to show the impact of regulation on data sharing as well as its effect on credit market breadth. She puts forward that the regulatory environment is crucial for and has a significant impact on information sharing: in fact, more information sources mandated via regulation, better access to them, a high centralisation degree (i.e. information not scattered but collected in a centralised manner), and property rights would strengthen and increase information flows thus boosting a thriving credit market.<sup>31</sup>

Interestingly, the study explicitly - although incidentally - warns that it "would not propose any data collection and centralisation measure for undemocratic regimes".<sup>32</sup>

On a similar line of argument, the same author provides in a different paper a quantitative analysis of the effects of differing regulatory environments on both CRAs and the efficiency of the consumer credit market. The author, quantifying data protection regimes with an economic index, contrasts the U.S. with four European countries to conclude that information exchange is not really inhibited by privacy regulations in the individual countries but, in any event, the international comparison showed that more stringent data protection regulations inhibit the distribution of credit reports (in terms of credit report sales) in consumer credit markets which, in turn, could result in reduced access to credit, less integrated credit markets, and more consumer credit risk.<sup>33</sup>

This latter conclusion may seem quite unclear as to the impact of regulation on borrowings and in some way some results could be interpreted as contradictory, specially if compared with the conclusions of the former paper. The author, nevertheless, ultimately warns that increased access to credit is also correlated with increased consumer indebtedness rising consumer credit risk. In addition, she finally recommends that the EU should proceed to standardise its credit reporting systems to exchange data cross-border as a precondition of an integrated consumer credit market.<sup>34</sup> Putting their own research together, Jentsch and Riestra find that integration indicators of the consumer credit market within the European Union provide a negative picture and it remains an objective far from achievement. The study points out that the U.S. experience teaches that a lightly regulated industry may provide high volumes of credit reports sold which in turn would contribute to the quick integration of consumer credit markets at least for certain market segment. However - the authors conclude - "differences in languages, credit culture and strong preferences for privacy contribute to a credit market that will remain distinct 'European' and that will remain segmented for probably a much longer time".<sup>35</sup>

#### 3. Literature in Law

Surprisingly, a legal examination of credit reporting systems vis-à-vis the positive law seems almost non-existent. The legal community, lawyers and academics alike, have not backed the increasing research led by economists and neglected to analyse the many issues that credit reporting may have on consumers. This is particularly the case when the context of the European Union is taken into consideration, or else the jurisdictions of its member states.<sup>36</sup>

Only in recent times a handful of scholars have touched the issue, limiting their contribution to legal policy reflections.

Appreciably, Andreeva, Ansell, and Crook give consideration to the impact that credit scoring may have on anti-discriminatory laws: they seem to point out that legislation would potentially limit the development of scoring models and techniques but, at the same time, suggest that there is the need for a balance and a degree of protection of consumers within the credit market.<sup>37</sup>

Not surprisingly, however, the authors are not lawyers and, as such, do not provide a legal analysis of the subject.

In any event, it is useful to remind that credit scoring is something distinct from credit reporting: although it is certainly a related issue in that it includes credit reports as one of its core elements, it remains a separate risk-management instrument and would deserve a discussion of its own.

The one author who provides a pertinent legal examination of the subject is Hunt presenting in his recent studies detailed insights on the consumer credit reporting industry in the United States. Such examination, however, is limited to the requirements of the U.S. legislation to reveal an attempt to attain in that specific jurisdiction an appropriate balancing of information sharing arrangements against the costs of processing inaccurate personal data resulting in mistakes.<sup>38</sup>

Surveys that explore the regulation of credit reporting are rare and usually reported incidentally in a context analysing and/or putting forward arguments of economic interest, exception being the paper by Del Villar, De Leon, and Hubert<sup>39</sup>.

The scholars - far from providing a legal assessment of consumer credit reporting, its compliance with existing legislation, its impact on human rights/civil liberties and/or investigations of the like - explore in very broad terms the regulatory frameworks of the US, the EU (the data protection directive), and some Latin American countries.

#### 4. Information Asymmetry and Consumers

As this work has tried to stress, the economic studies which justify the existence and operation of information sharing systems run by CRAs do so in an attempt to find a solution to the problems of asymmetric information and adverse selection in credit markets.

It is not the scope of this work to evaluate, nor analyse or challenge, the economic theories and rationale for the use of credit reporting (and scoring systems).

It is interesting - and for some aspects rather perplexing - to note, however, how the problem of asymmetric information in the lender-borrower relationship has been dealt as if it was a one-sided unilateral concern for lenders only.

As reviewed earlier, in fact, research in economics and regulatory policy insist on sharing information about borrowers only.

Arguably, though, before entering into any borrowing contract, also consumers would have a keen interest in the lenders reputation and reliability. They would require information not only about the lenders' products but also about the lenders themselves in order to make informed choices and assess their trustworthiness. The reputation and reliability of lenders, either - though not exclusively - in terms of customer relationship management, customers' satisfaction and complaints, or

behaviour in past transactions would play a crucial part in the choice of consumers about the right lender, forcing the latter to behave fairly and reduce abusive practices to the minimum. From an economic (free market approach) perspective, in fact, consumers play the role of rational maximisers of their own utility if they have the information upon which to make an informed decision, meaning that individuals are considered the best judges of what is in their best interest in terms of both choice of suppliers and products.<sup>40</sup>

This reflection seems important as it allows to draw a clear-cut separation between two types of third-party intermediaries that have established themselves to meet the problem of asymmetric information in credit markets.

On the one hand, there are brokers that use their own information to allocate persons (either natural or legal) to the various types of contracts matching the requirements of borrowers and lenders for specific transaction. They are independent intermediaries that use information that are spontaneously and freely given to them by the parties to take an informed decision in view of a business transaction.

On the other hand, by contrast, there are CRAs that differ consistently from brokers because they lack independency from both the contracting parties. CRAs, in fact, operate at the service of lenders notwithstanding the agreement, or else disagreement, of borrowers. They provide information to lenders that they have not received directly from borrowers but from other lender clients.

In this respect, CRAs are closer to private investigators in that they gather and disseminate information about borrowers through technologies that inform their own clients. In the end, thus, CRAs would solve the problem of information asymmetry on the part of lenders only.

However, as it has already been extensively pointed out by others, not only financial markets suffer from information asymmetry and the risk of externalities exclusively on the part of lenders, but from the side of consumers too. <sup>41</sup>

Arguably, this latter aspect is widely accepted, together with social rationales, to constitute the key economic justification for financial regulation.<sup>42</sup>

In this respect, it should not be forgotten that the financial services industry is one of the most important sectors of a country's economy and is perceived as somehow delicate and special - as different and more sensitive from other industries. Indeed, this is the reason why the financial services industry is also one of the most closely regulated sectors.<sup>43</sup>

Yet, the literature on CRAs seems to have failed to take both sides of the same coin into perspective when offering the solution to the problem of information asymmetry and adverse selection in credit markets, underestimating the scope for increasing financial regulation also in the credit reporting sector. On the contrary, it strikes someone attention that the studies on CRAs take the different approach of neglecting market regulation for consumer financial information, at times showing the opposite attitude that considers regulation as a limit that may potentially restrict the development – or else, efficacy - of credit reporting systems.

#### 5. Remarks on the Review of the Literature

This work aimed at reviewing the literature on credit reporting systems intended as a device to overcome the problem of asymmetric information and adverse selection in the consumer credit market.

In summary, it found out that the existing works predominantly focus their attention on the economic side of credit reporting and insist on the prospective positive effects or results for lenders. It seems, however, that there is still neither consensus nor sufficient conclusive evidence to prove either their efficacy in the assessment of the creditworthiness of consumers at least, or the validity of such envisaged solution.

Besides, some have begun to suggest some forms of caution precisely in the interest of consumers. Interestingly, the handful of scholars who have dealt with information sharing mechanisms with specific reference to the consumer credit market again tend to analyse the issue of asymmetric information and the need for information sharing systems from the view point of the advantages for lenders, often neglecting the concerns of consumers.

If it's true that some literature points out some sort of benefits, in pure economic terms, that a thriving consumer credit market may indirectly and ultimately have on (some) consumers, up to date research focusing specifically on concerns about possible violations or abuse of human rights and civil liberties seems almost non-existent.<sup>44</sup>

Certainly, one may reasonably think that CRAs induce an increase in the volume of lending, thus indirectly providing important benefits to those with good credit risks and making the interest of debtors too. Whether CRAs really make the interest of a number of debtors or not, however, this seems hardly the point if one looks at and balances the civil rights involved (for example, the right to privacy) and the foundations upon which credit reporting relies on.

To begin with, it could be argued that there are no fixed rules as to what constitutes a good credit risk. Assuming that a good credit risk is someone with an immaculate repayment behaviour, the system seems to penalise those with a weaker credit history notwithstanding factual situations. From this point of view, the profiling and standardisation of the behaviours of individuals not only appear hazardous for the civil right to privacy involved, but also artificial. Very often, contrary to the very foundations of credit reporting, human behaviours are heterogeneous and unpredictable. As recent research has stressed, in fact, the major factors behind the creditworthiness or over-indebtedness of individuals were found to be unforeseen life events, such as sudden illness, loss of job, death of someone close, etc. rather than a mismanagement of resources.<sup>45</sup>

From a different angle, it could be also argued that someone who has had problems in the past does not necessarily have problems at present or in the future. Or else, an individual may well also have a low profile credit record from failing to make payments which are either undue or in conflict with the service provider.<sup>46</sup>

Last but not least, the mechanisms in place bear important consequences in terms of social justice, either by way of absence of equal treatment in the access (or, else, exclusion) to credit, or in any event selection - hence discrimination.

Arguably, this bears consequences not only in terms of poverty, when people with low and/or unstable incomes are categorised and face inequality. When people (particularly though not exclusively those at social disadvantage) are refused credit they should not become more vulnerable to either getting credit at more expensive rates and unfavourable contract terms (sometimes to the point of extortionate credit deals) or, even worse, to being the victims of usury in the black market. Also, at a different level, such system seems to have a peculiar impact in the context of at least one pillar of the European Union, namely the perspective of the free movement of people and an effective mobility of Europeans from a Member State to another. EU nationals should not face barriers caused by the lack of information provided by CRAs (or the result of different national practices and cultures) and selection criteria different from the nationals of the hosting Member State, alias discrimination based on nationality.<sup>47</sup>

What decisively strikes someone attention is that information about defaults are passed on to CRAs (and then, in turn, disseminated) simply by the lenders so affirming, regardless of any judicial hearing having taken place, thus rising questions as to whether is there any respect for the certainty and rule of law.

It is useful to remind once more that all the above concerns are exacerbated by the consideration that there is no conclusive or at least empirical evidence - nor a certain relation of cause and effect as to the connection between credit reporting and the predictability of human behaviour. What's more, when considering all such issues, one should not forget that the use of CRAs databases is not mandatory by law.

Whether all such considerations are relevant or could be contested, what in any event emerges from the review of the literature is that despite the copious research in economics - and some literature in regulatory policy - on the importance of sharing credit information by a wide source of lenders, there has been almost no attention paid by lawyers as to an analysis and/or assessment of the legal framework of consumer information systems, as well as their compliance with the positive law, specially in the jurisdictions of the European countries or within the context of the European Union. First of all, the reviewed literature largely omits to distinguish between business and consumer borrowers and centres its attention for the most part on the U.S. market or the economies of developing countries, marginalising Europe.

It is surprising to note that the borders between consumer and commercial credit reporting and their use haven't been marked sufficiently and that they are too often ignored or blurred. The two, however, differ greatly in several aspects, the most important being the most obvious one, i.e. that consumers are human beings who, in modern European society at least, benefit from the recognition of civil liberties and the respect of fundamental human rights transposed into several pieces of legislation, or debated in increasing calls and demands for further protection, as well as sustainable social justice.

Moreover, it should be also taken into consideration that arguments that may be relevant for the U.S. market could not be applicable to the European one. In fact, the two markets and the business culture, as well as the legislative attitude and existing legal systems (just to mention few factors), arguably differ greatly one versus the other.<sup>49</sup>

For the purpose of this discussion, the best example of diverging legislative approaches is arguably represented by the inherent tension between the historical focus of the U.S. on freedom of expression and the strong emphasis placed on privacy and data protection in the EU, together with the latter's attitude towards a tighter consumer protection regime.

Hence, the aforesaid legal analysis and research on the subject-matter seems particularly relevant specially at a time when the use of credit information sharing systems, together with the number of other activities carried out by CRAs, represent already the current practice in consumer credit and banking relationships in every European country.

In many ways, in fact, the development of the credit industry has reflected the intuitions developed in the economic theoretical literature on information sharing arrangements, with the addition of the industry's substantial investments in technologies that were not in place when data sharing was initially considered, as well as the industry's growing pressures for more information to be made available through increased data sharing.<sup>50</sup>

At the same time, legislation has not responded with the same speed to the new concerns brought by such mechanisms, leaving them under the regulatory umbrella of general principles of existing laws. Legislators across Europe, in fact, mainly rely on at least one law that has a significant impact on consumer credit reporting activities, namely the EU Data Protection Directive as transposed in national law.<sup>51</sup>

However, whether data protection legislation is adequate and relevant to the sophisticated and highly technological mechanisms of credit reporting, where data from different sources are easily and quickly aggregated, new data are automatically created (for example, the searches), and are disclosed to a potentially unlimited number of third parties for a growing number of expanding purposes is open to discussion and would require a more detailed country by country legal analysis. It is worthy to anticipate already at this stage, for instance, that it seems the case that consumers do not have much choice if they do not want to be refused credit. The consumer's consent with regard to the searches to be carried out in the CRAs' databases, in fact, seems to be viewed both mandatory and assumed (i.e. implied consent). Lenders say that the lack of such consent would impede them from taking the credit application any further. No consent, no credit (i.e. enforced consent).

Moreover, lenders make it a condition of the credit contract that at a later stage they have the right to pass the information concerning such specific credit line to CRAs, which in turn have the right to disseminate the same to their client members, such clause seeming to be not negotiable although alien to the decision of the granting of credit (that has already been taken positively). Again, it seems that no agreement to such clause means that there will be no contract.

On top, previous research has already cautioned that further consideration should be given to what constitutes the 'essential information' which allow the credit assessment process by lenders.<sup>52</sup> In this respect, it would certainly be crucial to assess the necessity and scope of all the types of information provided by CRAs for the purpose of predicting the future behaviour of a borrower, matching them with the causal nexus about the likelihood of repayments with the contracted interests.

For instance, in an analysis of what constitutes 'essential information' one of the main questions refers to the distinction between 'negative' and 'positive' data. Whereas most people may accept the value of sharing negative data as a disciplinary instrument, at least where customers are informed and where they provide consent, the issue of sharing positive information proves more difficult.<sup>53</sup>

In any event, whatever the answer may be in relation to the above, the heart of the debate and the fundamental question referring to credit reporting is how far a consumer should be forced to sacrifice his/her own privacy in the interest of the credit industry (the general interest?), bearing in mind that the 'utilitarian' concerns of the credit industry cannot necessarily prevail over civil liberty and fundamental human rights concerns. To these end, it should be taken into account that in Europe at least all privacy rights now benefit from, and should be interpreted in light of, Art. 8 of the European Convention for the Protection of Human Rights and Fundamental Freedoms.<sup>54</sup>

## 6. Conclusions

Looking ahead, legal research on the topic of consumer credit reporting in the context of the European Union seems particularly important. In particular, the legal community and policy makers should debate openly whether the sophisticated mechanisms of credit reporting comply with the positive law (mainly, though not exclusively, data protection) and whether the latter is adequate to

cover the many difficult questions and complex legal issues and concerns that may rise, above all over the privacy rights and civil liberties of individuals.

This seems particularly the case and right time as the EU single market and the political desire for further integration and harmonisation within the European Union are likely to have a dramatic impact on the financial service industry (including, in particular, consumer credit lending).

Harmonisation in this sector, however, is likely to bring with it a number of important decisions for both credit grantors and legislators, which could represent a source of conflict and controversies with consumers. The policy and legislative decisions at stake, in fact, could reflect interests that push in opposite directions and that require a difficult balance between the protective consumer attitude versus the market-oriented and profit-seeking credit industry perspective.

If the smooth operation and further development of an efficient financial market is important for the economy, at the same time there is a duty to preserve the established right of the individual to the privacy of his or her transactions as well as a fair and legitimate use of his or her (essential and strictly necessary) personal data.

Such balance seems particularly difficult to find at the EU single market level, as in Europe credit markets are still reported to vary widely the one from the other and to have deep differences in credit culture, practice, use, and regulatory regimes which arguably hamper the development of a truly integrated single European market and political union.<sup>55</sup>

May be the time has come for lawyers to conduct tailored research on the issue.

Obviously, this will carry interest of its own, but it may also become useful to anticipate the debate that will need to happen – if not happening already – at EU institutional level, thus blazing what appears a tortuous trail.

## \*Acknowledgments

I am grateful to Andrew Campbell, Joan Loughrey, and Prof. Andrew Keay for valuable discussions and encouragement. I would also like to thank Simon Davies and Gus Hossein of *Privacy International* for their professional example. Helpful comments and suggestions of two anonymous referees are acknowledged. My special appreciation to Stella for her uninterrupted love and support.

#### Notes

- <sup>3</sup> In the UK, for example, data provided by other organisations include the Council of Mortgage Lenders.
- <sup>4</sup> Akelof G. (1970).
- <sup>5</sup> Jaffee D. and Russell T. (1976).
- <sup>6</sup> Stiglitz J. E. and Weiss A. (1981).
- <sup>7</sup> Ibid., p. 393-394.
- <sup>8</sup> Ibid.

<sup>&</sup>lt;sup>1</sup> See http://www.doingbusiness.org/ExploreTopics/GettingCredit/

<sup>&</sup>lt;sup>2</sup> As of 2003, CRAs operated in all OECD countries but France.

<sup>&</sup>lt;sup>9</sup> Diamond D.W. (1984); Campbell T. and Kracaw A.W. (1991); Stiglitz J.E. and Weiss A. (1988); Stiglitz J.E. and Weiss A. (1992).

<sup>&</sup>lt;sup>10</sup> Diamond D.W. (1991); Petersen M.A. and Rajan R.G. (1994); Berger A.N. and Udell G.F. (1995); Peek J. and Rosengren E.S. (1995).

<sup>&</sup>lt;sup>11</sup> Dell'Ariccia G. (2001); Marquez R. (2002); Khalil F. and Parigi B.M. (2001).

<sup>&</sup>lt;sup>12</sup> Pagano M. and Jappelli T. (1993).

<sup>&</sup>lt;sup>13</sup> Ibid. p. 1713-1714.

<sup>&</sup>lt;sup>14</sup> Klein D.B. (1992). See also Klein D.B., "Promise Keeping in the Great Society: A Model of Credit Information

Sharing", in Klein D.B. (Ed.) (1997).

<sup>&</sup>lt;sup>15</sup> Vercammen J.A. (1995).

<sup>&</sup>lt;sup>16</sup> Padilla J.A. and Pagano M. (1997).

<sup>&</sup>lt;sup>17</sup> Padilla J.A. and Pagano M. (2000).

<sup>&</sup>lt;sup>18</sup> McIntosh C. and Wydick B. (2004).

<sup>19</sup> Jappelli T. and Pagano M. (2002).

- <sup>20</sup> Kallberg J.G. and Udell G.F. (2003).
- <sup>21</sup> Galindo A. and Miller M.J. (2001).
- <sup>22</sup> Love I. and Mylenko N. (2003).
- <sup>23</sup> Campion A. (2001); Lenaghan, T. (2001).
- <sup>24</sup> Luoto J., McIntosh C., and Wydick B. (2004).
- <sup>25</sup> Miller M.J. (Ed.), (2003).
- <sup>26</sup> Miller M.J., "Credit Reporting Systems around the Globe: the State of the Art in Public Credit Registries and Private
- Credit Reporting Firms" in Miller M.J. (Ed.), p. 25-79.
- <sup>27</sup> Jappelli T. and Pagano M., "Public Credit Information: A European Perspective" in Miller M.J. (Ed.), p. 81-114.
- <sup>28</sup> Riestra A.S.J. (2002).
- <sup>29</sup> Ibid., p. 28.
- <sup>30</sup> Avrey R.B., Calem P.S., and Canner G.B. (2004).
- <sup>31</sup> Jentzsch N. (2003a).
- <sup>32</sup> Ibid. p. 32.
- <sup>33</sup> Jentzsch N. (2003b).
- <sup>34</sup> Ibid., p. 46-47.
- <sup>35</sup> Jentzsch N. and Riestra A.S.J. (2003).

<sup>36</sup> Howells G.G. (1995), Johnson H. (1991), and Johnson H. (1992) all provide a comprehensive legal analysis of CRAs against consumer concerns in the United Kingdom. The papers, however, cannot be considered relevant today as they refer to a time preceding the enactment of relevant EU and UK legislation such as, for example, the EU Data Protection Directive (95/46/EC) and the 1998 UK Data Protection Act, as well as the European Convention for the Protection of Human Rights and Fundamental Freedoms and the 1998 UK Human Rights Act.

- <sup>37</sup> Andreeva G., Ansell J., and Crook J. (2004).
- <sup>38</sup> Hunt R.M. (2002); Hunt R.M. (2005).

- <sup>40</sup> See Jolls C., Sunstein C., and Thalrer R. (1998), p. 1471; Posner R. (1998), p. 1551.
- <sup>41</sup> Cartwright P. (2004); Goodhart C., (1995), p. 454; Davies H. (1998); Ford C. and Kay J., "Why Regulate
- Financial Services" in Oditah F. (Ed.), (1996); Benston G. (1998); Llewellyn D. (1999).
- <sup>42</sup> Ibid.

<sup>&</sup>lt;sup>39</sup> Jentzsch N. (2003a); Jentzsch (2003b); Jappelli T. and Pagano M. (2000).

<sup>43</sup> Cartwright P. (2004), p. 13.

<sup>44</sup> For all, see Miller (Ed.) (2003).

<sup>45</sup> Riestra A.S.J. (2002).

<sup>46</sup> Examples of such incidents are reported in M. Brignall M., 'Total History of Your Dealings', *The Guardian, Jobs & Money*, Saturday 30 October 2004, London.

<sup>47</sup> See Free movement of workers – Articles 39 (ex Article 48) to 42 (ex Article 51) Treaty Establishing the European Community. Right of Establishment – Articles 43 (ex Article 52) to 48 (ex Article 58) Treaty Establishing the European Community.

<sup>49</sup> Diez Guardia N. (2002).

<sup>50</sup> Bradford M. (2004). See also *The Guardian*, "Bad debts force Lloyds TSB to raise cover", July 30 2005, p. 26.

<sup>51</sup> Directive 95/46/EC, OJ 1995 L 281 p 0031-0050.

<sup>52</sup> Howells (1995), p. 343-359; Riestra A.S.J. (2002), p. 17.

<sup>53</sup> Ibid. Negative data refer to information about defaults on payments, delays, delinquencies, bankruptcies, etc. That is, information with a negative connotation on the payment history and financial behaviour of the data subject. Positive consumer data, by contrast refer to information about the financial standing, payments and other details which do not indicate a default or late payment.

<sup>54</sup> Article 8 of the European Convention for the Protection of Human Rights and Fundamental Freedoms provides that:

- 1. Everyone has the right to respect for his private and family life, his home and his correspondence.
- 2. there shall be no interference by a public authority with the exercise of this right except such as in accordance with the law and is necessary in a democratic society in the interests of national security, public safety or the economic well-being of the country, for the prevention of disorder or crime, for the protection of health or morals, or for the protection of the rights and freedoms of others.

<sup>55</sup> Jentzch N. and Riestra A.S.J. (2003); Diez Guardia N. (2002); Lanoo K. and De la Mata Munoz A. (2004); Weill L. (2004).

#### References

- Akelof G. (1970), "The Market for 'Lemons': Quality Uncertainty and the Market Mechanism", *Quarterly Journal of Economics*, 28(3), p. 523-547.
- Andreeva G., Ansell J., and Crook J. (2004), "Impact of anti-discrimination laws on credit scoring", *Journal of Financial Services Marketing*, 9(1), p. 22-33.
- Avrey R.B., Calem P.S., and Canner G.B. (2004), "Consumer Credit Scoring: Do Situational Circumstances Matter?", *Journal of Banking and Finance*, 28(4), p. 835.
- Benston G. (1998), Regulating Financial Markets, Institute of Economic Affairs, London.
- Berger A.N. and Udell G.F. (1995), "Relationship Lending and Lines of Credit in Small Firm Finance", Journal of Business, 68, p. 351-381.
- Bradford M. (2004), "Full data-sharing could stem over-indebtedness concerns", *Credit Risk International*, November, p. 10-11.
- Campbell T. and Kracaw A.W. (1991), "Financial Intermediation and the Market for Interest Rate Swaps", *Journal of Financial Intermediation*, p. 362-384.
- Campion A. (2001), "Client Information Sharing in Bolivia", Journal of Microfinance, 3(1), p. 45-63.
- Cartwright P. (2004), Banks, Consumers and Regulation, Hart Publishing, Oxford, UK and Portland, Oregon US.
- Davies H. (1998), "Why Regulate", Henry Thorton Lecture, City University Business School, 4 Nov 1998.
- Dell'Ariccia G. (2001), "Asymmetric Information and the Structure of the Banking Industry", *European Economic Review*, 40, p. 1957-1980.
- Diamond D.W. (1984), "Financial Intermediation and Delegated Monitoring", *Review of Economic Studies*, 51, p. 393-414.
- Diamond D.W. (1991), "Monitoring and Reputation: The Choice between Bank Loans and Directly Placed Debt", *Journal of Political Economy*, 99(4), p. 689-721.
- Diez Guardia N. (2002), "Consumer Credit in the European Union", ECRI Research Report No. 1.
- Galindo A. and Miller M.J. (2001), "Can Credit Registries Reduce credit Constraints? Empirical Evidence on the Role of Credit Registries in Firm Investment Decisions", Paper prepared for the Annual Meetings of the Inter-American Development Bank, March, Santiago, Chile, at

http://www.aaep.org.ar/espa/anales/pdf\_01/inv\_galindo\_miller.pdf on 01/08/05.

Goodhart C., (1995), The Central Bank and the Financial System, Mc Millan Press, Basingstoke.

Howells G.G. (1995), "Data Protection, Confidentiality, Unfair Contract Terms, Consumer Protection and Credit Reference Agencies", *Journal of Business Law*, 7, p. 343-359.

- Hunt R.M. (2002), "The Development and Regulation of Consumer Credit Reporting in America", *Working Paper N.* 02-21, Federal Reserve Bank of Philadelphia.
- Hunt R.M. (2005), "A Century of Consumer Credit Reporting in America", *Working Paper N. 05-13*, Federal Reserve Bank of Philadelphia.
- Jaffee D. and Russell T. (1976), Imperfect Information and Credit Rationing, John Wiley & Sons, New York.
- Jappelli T. and Pagano M. (2000), "Information Sharing in Credit Markets: The European Experience", Working Paper No. 35, Centres for Studies in Economics and Finance, University of Salerno, Italy.
- Jappelli T. and Pagano M. (2002), "Information Sharing, Lending and Defaults: Cross-Country Evidence", *Journal of Banking and Finance*, 26(10), p. 2017-2045.
- Jentzsch N. (2003a), "The Regulatory Environment for Business Information Sharing", Working Paper 10.07.03 at http://rru.worldbank.org/Documents/doingbusiness/ExploreTopics/GettingCredit/BusinessInfoSharingRegulatio n.pdf on 02/08/05.
- Jentzsch N. (2003b), "The Regulation of Financial Privacy: The United States Vs Europe", *ECRI Research Report No.* 5.
- Jentzsch N. and Riestra A.S.J. (2003), "Information Sharing and Its Implications for Consumer Credit Markets: United States vs. Europe", Working Paper, European University Institute Workshop 'The Economics of Consumer Credit: European Experience and Lessons from the U.S.', Florence.

Johnson H. (1991), "Credit Blacklist Problems", International Banking Law, 9(12), p. 458-459.

- Johnson H. (1992), "A Winning Score: OFT Review Credit Scoring", *International Banking and Financial Law*, 11(3), p. 35-36.
- Jolls C., Sunstein C., and Thalrer R. (1998), "A Behavioural Approach to Law and Economics", *Stanford Law Review*, 50, p. 1471.
- Kallberg J.G. and Udell G.F. (2003), "The Value of Private Sector Business Credit Information Sharing: the U.S. Case", *Journal of Banking and Finance*, 27(3), p. 449-469.

Khalil F. and Parigi B.M. (2001), "Screening, Monitoring and Consumer Credit", EUI Working Paper, Florence, Italy.

- Klein D.B. (1992), "Promise Keeping in Great Society: a Model of Credit Information Sharing", *Economics and Politics*, 4(2), p. 117-136.
- Klein D.B. (Ed.) *Reputation: Studies in the Voluntary Elicitation of Good Conduct*, Ann Arbor, University of Michigan Press, Michigan, US.

- Lanoo K. and De la Mata Munoz A. (2004), "Integration of the EU Consumer Credit Market Proposal for a More Efficient Regulatory Model", CEPS Working Document No. 213/Nov 2004, Centre for European Policy Studies, Brussels.
- Lenaghan, T. (2001), "Microfinance and the Market for Credit Information in El Salvador", Division 41, Financial Systems Development and Banking Services, Oct. at *http://www2.gtz.de/dokumente/bib/03-0070.pdf* on 29/07/05.
- Llewellyn D. (1999), "The Economic Rationale for Financial Regulation", *FSA Occasional Paper*, 1 April 1999, London.
- Love I. and Mylenko N. (2003), "Credit Reporting and Financing Constraints", *World Bank Policy Research Working Paper 3142*, October 2003.
- Luoto J., McIntosh C., and Wydick B. (2004), "Credit Information Systems in Less-Developed Countries: Recent History and a Test", at *http://are.berkeley.edu/courses/DEVELWORK/papers/Luoto.pdf on 29/07/05*.
- Marquez R. (2002), "Competition, Averse Selection, and Information Dispersion in the Banking Industry", *Review of Financial Studies*, 15(3), p. 901-926.
- McIntosh C. and Wydick B. (2004), "A Decomposition of Incentive and Screening Effects in Credit Market Information Systems", *Working Paper* - University of California at San Diego / University of San Francisco.

Miller M.J. (Ed.), (2003), Reporting Systems and the International Economy, Cambridge, Massachusetts, MIT Press.

Oditah F. (Ed.), (1996), The Future of the Global Securities Market, Clarendon Press, Oxford.

- Padilla J.A. and Pagano M. (1997), "Endogenous Communication among Lenders and Entrepreneurial Incentives", *Review of Financial Studies*, 10(1), p. 205-236.
- Padilla J.A. and Pagano M. (2000), "Sharing Default Information as a Borrower Discipline Device", *European Economic Review*, 44(10), p. 1951-1980.

Pagano M. and Jappelli T. (1993), "Information Sharing in Credit Markets", Journal of Finance, 48(5), p. 1693-1718.

- Peek J. and Rosengren E.S. (1995), "Banks and the Availability of Small Business Loans", Working Paper n. 95-1, Federal Reserve Bank of Boston.
- Petersen M.A. and Rajan R.G. (1994), "The Benefits of Lending Relationships: Evidence from Small Business Data", *Journal of Finance*, 49(1), p. 3-37.

Posner R. (1998), "Rational Choice, Behavioural Economics and the Law, Stanford Law Review, 50, p. 1551.

Riestra A.S.J., (2002), "Credit Bureaus in Today's Credit Markets", ECRI Research Report No. 4.

- Stiglitz J. E. and Weiss A. (1981), "Credit Rationing in Markets with Imperfect Information", *American Economic Review*, 71(3), p. 393-410.
- Stiglitz J. E. and Weiss A. (1988), "Banks as Social Accountants and Screening Devices for the Allocation of Credit", *National Bureau of Economic Research*, No. 2710.
- Stiglitz J. E. and Weiss A. (1992), "Asymmetric Information in Credit Markets and Its Implications for Macroeconomics", *Oxford Economic Papers*, 44(4), p. 694-724.
- Vercammen J.A. (1995), "Credit Bureau Policy and Sustainable Reputation Effects in Credit Markets", *Economica*, 62 (Nov), p. 461-478.
- Weill L. (2004) "Efficiency of Consumer Credit Companies in the European Union A Cross-Country Frontier Analysis", ECRI Research Report No. 7.