

מערכת נתוני האשראי: הכלה, הדרה וניהול
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תקציר

מידע הוא כוח, מידע הוא כלי לצמיחה כלכלית, מידע מאפשר יתרון לאחד על פני האחר, מידע מאומץ ומופץ באמצעות מוסדות ומידע הוא סימן התקופה. אנחנו חיים בעידן של מידע ומה שנכון למידע בכלל נכון למידע פיננסי בפרט. השימוש במידע פיננסי באמצעות מיסוד מערכות איסוף, עיבוד ומסחור נתוני אשראי של לווים הפך נפוץ בשני העשורים האחרונים. מערכות אלו מאפשרות מעקב אחר פעילותו הכלכלית של האזרח ותרגומה לערך מספרי באמצעות דירוג אשראי אישי. הן הפכו למרכזיות בשוקי האשראי, בהיותן משמשות להערכת יכולת הפירעון של הלקוח ורמת הסיכון הפיננסי שלו, ובהחלטה לגבי המחיר והתנאים שבהם יוקצה האשראי. השימוש במערכות אלו הופך לנפוץ במגוון רחב של שווקים צרכניים גם מחוץ לשוק האשראי, בין היתר בשוק הקמעונאי, בטלקומוניקציה, דיור, וביטוח וגם להערכה של אזרחים בהחלטות שאינן קשורות בצריכה של שירותים ומוצרים, כמו למשל בהחלטות לגבי תעסוקה. המסחור של נתוני אשראי התרחב בשנים האחרונות, וצפוי להמשיך להתרחב לצד הגידול המתמשך בשוקי האשראי הצרכני והיכולות הטכנולוגיות המתקדמות. עבור לווים, נתוני אשראי מהווים נכס אסטרטגי ורווחי חשוב בהערכת סיכוני אשראי וביכולת לאתר לווים פוטנציאליים. כמו כן, מערכות נתוני אשראי מקודמות על ידי שחקנים מדינתיים לצורך קידום יעדים כלכליים ולעיצוב מדיניות כלכלית. התפתחותן המואצת של מערכות נתוני אשראי בשוקי האשראי בעולם נעשית בגיבוי ובעידוד מחקרים בתחום הכלכלי המצביעים על התועלות הכלכליות שלהן בייצוב ומקסום התועלת של שוקי האשראי הצרכניים.

לצד זאת, להתפתחותן של מערכות נתוני אשראי ישנן השלכות חברתיות וצרכניות חמורות. ספרות מחקרית ענפה מצביעה על סיכוני פרטיות כתוצאה מאיסוף מידע רגיש ואישי שעלול לשמש גורמים ומטרות לא ראויות, פגיעה וניצול של הצרכן ואפליה בתהליך מתן אשראי שנעשה בהסתמך על דירוג אשראי בלתי שקוף. כמו כן, השלכות על אי שוויון ושעתוק המעמדות בחברה כתוצאה מהאופן בו דירוגי אשראי מענישים את הלווים המוחלשים, והשימוש במערכות אלו לעיצוב "אזרחות טובה" תוך הגבלת הזירות של הצרכן, לצד הגדלת התלות שלו באשראי והגדלת הכוח של שחקני שוק לכוון את התנהגותו בשוק. כך, מערכות נתוני אשראי משמשות לעיצוב התנהגות חברתית וכלכלית ולהבניה של צרכנים כנכס פיננסי בחברה.

השימוש במערכות נתוני אשראי להרחבה הכלכלה הניאו-ליברלית וההשלכות החברתיות

והכלכליות החמורות שלהן מדגישות את הצורך והחשיבות לבחון כיצד יש לעצב את הסביבה הרגולטורית כך שתבטיח את הרווחה של האזרח ולהבין את המשמעויות הפוליטיות, הכלכליות והחברתיות של ההבדלים בין משטרי נתוני האשראי במדינות שונות. פרויקט מחקר זה מציב שלוש מטרות מרכזיות: האחת, למדוד ולהשוות את ההגנות הצרכניות במדינות נתוני אשראי במדינות שונות תוך התייחסות לממדים שונים של שונות במשטר. שנית, לבחון מה הם הכוחות המעצבים והשחקנים הדומינטיים בעיצוב המשטר. שלישית, להבין כיצד ומדוע משטרי הגנה צרכנית מתפתחים בעידן הקפיטליזם הרגולטורי. שלושת המטרות הללו תורמות יחדיו למטרה הרחבה יותר של בחינת האופי הרב ממדי של המדינה הרגולטורית בעידן הקפיטליזם הרגולטורי.

הדיסרטציה מורכבת משלושה מאמרים אשר בוחנים כיצד למדוד ולהבחין בין משטרי הגנה צרכנית בנתוני אשראי, מה מסביר שונות בין מדינות, ומה מסביר את האינטראקציה בין אסטרטגיות רגולטוריות במשטרי ממשליות מורכבים (Big Governance). המאמר הראשון, שכותרתו היא: ***Varieties of consumer credit data regimes: A regulatory governance approach***, אינדקס למדידת הגנה צרכנית במשטרי הרגולציה על נתוני אשראי תוך שימוש במתודולוגיה של פיתוח מדד. בניגוד לרוב המחקרים האקדמיים ומחקרי המדיניות בתחום אשר מציגים גישה רגולטורית צרה המודדת רווחה צרכנית במונחים של יעילות השוק, מחקר זה עוסק בהיבטים הרגולטוריים המשקפים את הוגנות השוק ומתייחס להשפעות הרחבות של מערכות נתוני אשראי על רווחת הצרכן. האינדקס מאפשר לתפוס שונות באופן מורכב ורב ממדי על ידי כך שהוא מבחין בין שלושה תתי-משטרים (משטר האיסוף, העיבוד והשימוש) ושתי אסטרטגיות רגולטוריות: הגבלה על עסקים והעצמה צרכנית. המאמר מציג הדגמה של האינדקס באמצעות מדידה של משטר נתוני אשראי בארבע מדינות: ארה"ב, שבדיה, צרפת וישראל נכון לשנת 2019. הממצאים האמפיריים העולים מהמאמר מצביעים על שונות בין המדינות ברמות שונות ומדגישים את החשיבות בבחינת משטרי רגולציה ברמה המדינתית, אך גם ברמות נוספות וזאת כדי לאפיין ולבחון משטרים רגולטוריים באופן השוואתי. למאמר שתי תרומות מרכזיות: אמפירית, המאמר מציג לראשונה מדד אנליטי להשוואה בין הסדרי ההגנה הצרכנית הנהוגים בתחום מדיניות נתוני אשראי במדינות שונות. תיאורית, המאמר מפתח גישה השוואתית לחקר הקפיטליזם הרגולטורי המבוססת על מדידה רב ממדית של משטרי רגולציה.

המאמר השני, שכותרתו היא: ***National Varieties Still Matter: A Comparative Analysis of Consumer Credit Data Regulatory Regimes in the US, Sweden, Israel, and France*** מחבר בין הספרות של רגולציה לבין ספרות הקפיטליזם ההשוואתי בתחום הכלכלה

הפוליטית וספציפית עוסק בשאלת הרלוונטיות של המודלים המדינתיים בעידן הגלובליזציה של הרגולציה. המאמר מציג ניתוח השוואתי רב-שלבי של משטרי נתוני אשראי בארבע מדינות (ארה"ב, שבדיה צרפת וישראל) וביחס לשני ממדים רגולטוריים: הגבלת עסקים והעצמת צרכן. בהתבסס על גישת ה-'מודלים' בספרות הקפיטליזם ההשוואתי ובפרט זו המתמקדת במדינה, מבקש המאמר להסביר את הדמיון המפתיע בין שבדיה המאופיינת במודל מתאם לבין ארה"ב המאופיינת במודל ליברלי ביחס להגבלות החלשות על עסקים. כדי להסביר את הממצא המפתיע, המאמר משווה בין שני צמדים של מדינות: צמד אחד מורכב מארה"ב ושבדיה שלהן הגבלות חלשות על עסקים ולפיכך לשתיהן דירוג נמוך בממד הגבלת השוק, והצד השני מורכב מצרפת וישראל שלהן הגבלות חזקות על עסקים ולפיכך לשתיהן דירוג גבוה באותו ממד. אולם, מעבר לשוונות בממד הגבלת השוק, המאמר מצביע על שוונות גם בתוך הצמדים ביחס לממד ההעצמה, כאשר לארה"ב דירוג נמוך משבדיה ולצרפת דירוג נמוך מישראל. המאמר מסביר את ההבדלים בין ובתוך צמדי המדינות תוך שימוש בארבע תיאוריות מרכזיות של רגולציה ומדיניות ציבורית: אינטרס ציבורי, אינטרס פרטי, רעיונות ומוסדות. הממצאים האמפיריים של המאמר מצביעים על כך שמוסדות מדינת הרווחה מסבירים הבדלים בין שני צמדי המדינות על גבי ממד הגבלת העסקים, אולם אינטרסים ורעיונות הכרחיים בכדי להסביר ההבדלים בתוך הצמדים על גבי ממד העצמת הצרכן. ממצאים אלו מלמדים כי ממד הגבלת העסקים הוא משמעותי יותר בהקשר המסדי-היסטורי של המדינה. אולם, בחינת ממד ההעצמה במשטרי הרגולציה היא חשובה כי היא מאפשרת להבין טוב יותר כיצד פוליטיקה (אינטרסים ורעיונות) מעצבים משטרי רגולציה בעידן של ממשליות רב ממדית. מעבר לכך, ניתוח ממד ההעצמה וההגנה ביחד הוא חשוב כי הוא משקפת את ההמשכיות והשינוי של הסגנון הלאומי של המדינות; ההבדלים בין יחסי המדינה והעסקים בין שבדיה וארה"ב וההבדלים בין ישראל לצרפת ביחס לליברליזציה בא לידי ביטוי בדירוגן השונה על גבי ממד ההעצמה. למחקר ישנן גם השלכות יישומיות שכן הוא מראה כי איסוף, דירוג ועיבוד מידע צרכני אינם כלי מדיניות כלכלית שמשמשים למזעור כשלי שוק, אלא הם קשורים לתפיסה ומדיניות רחבה יותר ביחס לחובות ולתפקיד של אשראי בחברה כפי שהתעצבו ביחס למדינת הרווחה במדינה וכן מושפעים מהתפיסות והאינטרסים של קבוצות כלכליות ושחקנים פוליטיים.

המאמר השלישי שכותרתו היא: ***C&C vs. Consumer Empowerment: A portfolio***

approach to consumer regulation עוסק באינטראקציות בין שתי אסטרטגיות הגנה צרכנית בתוך ההקשר של התפתחות משטרי רגולציה רב-ממדיים ורב-גוניים בעידן הקפיטליזם הרגולטורי. המאמר בוחן כיצד ומדוע שתי הגישות המקבלות במדיניות הגנה צרכנית: פיקוח ושליטה (Command & control) והעצמה צרכנית (Consumer Empowerment) משולבות במשטרי רגולציה להגנה על נתוני אשראי.

המאמר מציג גישה ייחודית לבחינת משטרי הגנה צרכנית על פי שילובי - כלים (Policy Portfolios) באמצעות המשגה של משטרי "ממשליות מורכבים" (Big Governance) והבחנה בינם לבין יתר משטרי ההגנה הצרכנית שנהוג לזהות בספרות העוסקת במדיניות הגנה צרכנית השוואתית. ממצאי המחקר מראים כי משטרי "ממשליות מורכבים" מאפיינים את ארבעת המדינות שנבחנו במחקר זה - ארה"ב, שבדיה, צרפת וישראל ובכך ממצאים אלו מדגישים את הפער התיאורטי הקיים בספרות העוסקת במדיניות הגנה צרכנית השוואתית ביחס להתפתחותם של משטרי הגנה צרכנית בעידן הקפיטליזם הרגולטורי. ניתוח המאפיינים של שתי האסטרטגיות ביחס לעלויות הפוליטית, הרגולטוריות והחברתיות שלהן מעלה כי משטרי "ממשליות מורכבים" הם תוצר של התלכדות בין שחקני מדיניות בעלי תפיסות הגנה צרכנית מנוגדות, המייחסים לרגולציה תפקיד מרכזי באיזון השווקים או בהאצת ההתפתחות שלהם ואשר מקדמים את השימוש בה לקידום מטרות כלכליות או חברתיות. ממצאים אלו מקדמים את ההבנה הקיימת ביחס להתפתחות משטרי הגנה צרכנית בשני אופנים: ראשית, מבחינה תיאורטית הם מלמדים כי במשטרי "ממשליות מורכבים" הקואליציות הרגולטוריות הופכות מורכבות יותר ובהתאמה גם העמדות של עסקים, קבוצות צרכניות או המדינה ביחס למדיניות פחות צפויות. על כן, ההסברים המקובלים בספרות ההגנה הצרכנית המתייחסים להקשר המוסדי שבו קבוצות אינטרס והמדינה פועלים, עשויים להיות מוגבלים ביכולתם להסביר משטרי הגנה צרכנית בעידן של ממשליות רב-ממדית ורב-גונית. שנית, הממצאים מלמדים כי הביקוש לרגולציה ימשיך לגדול ככל שהשווקים הצרכניים ימשיכו להתפתח ולכן משטרי "ממשליות מורכבים" צפויים להמשיך להיות דומיננטיים בעידן הקפיטליזם הרגולטורי. אולם, משום שהשימוש ברגולציה נעשה על ידי שחקנים פוליטיים המונעים מאינטרסים והשקפות עולם אישיות, תוך תיעדוף של סיכונים, אוכלוסיות ומטרות מסוימות על פני אחרות, חשוב שהמדינה הרגולטורית תתרחב לצד ולא כתחליף למדינת הרווחה, למדינה המפתחת ולמדינת הסיכונים. המחקר תורם לספרות ההגנה הצרכנית ומעמיק את ההבנה לגבי אסטרטגיות הגנה צרכנית על ידי כך שהוא מציע להבחין בין האסטרטגיות על פי מושאי הרגולציה ולא על פי סוג הכלים הרגולטוריים ועוצמתם. גישה זו מאפשרת לבחון באופן מעמיק את הגורמים המסבירים שונות בין מדינות, מעבר להסברים המוסדיים המקובלים בספרות, ומתאימה יותר בכדי לאפיין את מגוון הכלים המשמשים כיום לעיצוב מדיניות הגנה צרכנית.

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Introduction

The ability of financial and governmental actors to collect, analyze and use individuals' personal and financial information is not a new phenomenon, but it has grown exponentially in recent years. In contemporary credit markets, consumers' personal and financial information has become a highly strategic and profitable resource for lenders, who use it to manage credit risk and to marketize and price products and services more efficiently. Consumer credit data are gathered, stored, and processed through complex networks of buyers and sellers who increasingly operate and cooperate not only in finance but also in various other consumer markets like retail, telecommunications, insurance, housing and for additional decisions such as hiring labor and socializing. Data mining methods have become more sophisticated, more databases have been created, and new technological tools have enabled more systematic collection and constant tracing of citizens' activities and habits.

The commercialization of credit data is growing and is expected to continue to grow with the never-ending expansion of credit markets and technological innovations. With the continuing fall in the price of digitalization, innovative information technologies make it increasingly easy to collect big data and analyze it for data scoring through automated algorithms and machine learning. Also, the worldwide growth in consumer credit markets following the financialization process has been accompanied by a growing demand on the part of consumer lenders to access consumer data. Credit data is also perceived as an economic regulatory tool for promoting economic goals of growth and competition in the credit market. These perceptions toward the use of credit data are grounded in economic research that emphasizes the tremendous economic advantages of a financial system in which consumer credit data is freely accessed and exchanged (Barron, 2001; Jappelli & Pagano, 2002; Miller, 2003; Padilla & Pagano, 2000).

However, the use of credit data without a proper regulatory framework can pose considerable social and economic harm and create different kinds of risks at the

individual and the social levels. Such practices compromise privacy (Cate, 2002; Ferretti, 2017; Jentzsch, 2007); allow the manipulation of consumers (Mahoney, 2014; Zarsky, 2016); exacerbate inequality (Citron & Pasquale, 2014; Fourcade & Healy, 2013; Rona-Tas, 2016); pose severe problems of inaccuracy without procedures for appeal (Dixon & Gellman, 2014; Mierzewski & Chester, 2012; Yu & McLaughlin, 2014); cause intended or unintended discrimination (O'Neil, 2016), and, in some cases, cause the abuse of fundamental rights and the freedom of individuals (Ferretti, 2017). These practices treat individuals as “financial assets” and define their financial rights as citizens who are driven by a desire to be more creditworthy (i.e., to improve their credit scores), and who are required to conform to financial behaviors dictated by the scoring companies and their clients, who are also market entities (Kear, 2017; Marron, 2009; Poon, 2013). In addition, they seem to promote a culture of credit use and of “life in debt” (Cate, 2002; Fourcade & Healy, 2017; Marron, 2009; Poon, 2013). Increasingly, credit scores are becoming an attribute of a responsible person and indicators of personal characteristics such as dignity and honesty (Klein, 1997). They identify certain people as better and worthier than others, attaching rewards to good data and good scores and punishment to dubious data and poor scores, thus acting as an instrument of social and economic engineering that makes individuals identifiable and available as “financial assets” (Aitken, 2017; Ferretti, 2017; Fourcade & Healy, 2017; Rona-Tas, 2016; Trumbull, 2010; Trumbull, 2014; Zuboff, 2015).

The vulnerability of consumers, and the major problems they fall prey to in credit data markets, may stem from several combined factors that are related to the structure of the industry. First, the credit data industry is a centralized market characterized by the consolidation of power in a few powerful monopolies that dominate the arena. This structure is created because credit data systems are natural monopolies, i.e., the wider the coverage, the higher the system’s efficacy (Ferretti, 2014; Jentzsch, 2007). Also, the market structure is complex, with the main consumers of the credit bureaus (the private companies that collect information about consumers

and score them) being private companies and not individual consumers. This is true for most existing credit data system models in the world. Thus, credit bureaus may only consider the effects of their decision on their direct customers – typically lenders – without considering the impact on consumers. They may therefore choose to include questionable negative information in their consumer reports, and while deciding what level of resources to put into the accuracy of the reports, and whether to include or exclude negative information, they may not consider the effects of those decisions on consumers. Mistakes and inaccuracies in the collected data could prevent individuals from accessing services or products, thereby impacting individuals’ lives tremendously (Ferretti, 2017; O’Neil, 2016; Zarsky, 2016). Additionally, many of the problems created in the credit market stem from the use of algorithms in decision making. As these algorithms are opaque, they allow score producers to manipulate and mislead individuals by designing the scoring formula to their advantage and including discriminatory or irrelevant data (Citron & Pasquale, 2014; Yu et al., 2014). The inscrutable manner of algorithmic scoring is even more pronounced when it uses machine learning genetic algorithms, which are “black boxes” even for their designers (Pasquale, 2015).

Thus, consumer data systems lie at the forefront of the surveillance economy, and their regulatory governance is increasingly important for both consumer welfare and the promotion and protection of liberal society. This doctoral dissertation has three major goals. The first goal is to measure and compare consumer protection in credit data regulation across countries in a systematic and multidimensional way. Second, to understand what the driving forces are behind these policies and how they explain variations across countries. Third, to understand how and why consumer regulatory regimes are designed in the regulatory capitalism order. Together, these goals contribute to achieving the broader goal of this doctoral dissertation, which is to explore the multidimensional character of regulatory regimes in the era of regulatory capitalism.

This research is a comparative, case-oriented, small N research (Levi-Faur,

2006). The research design includes a strategic, stepwise case choice, aimed to maximize explanatory leverage and the ability to generalize from the findings of a limited number of in-depth cases. It focuses on four countries: the US, Sweden, Israel and France. These countries (except Israel) are conventionally representative cases of comparative political economy (CPE) typologies representing distinctive patterns of state action and interaction with business and labor. The US represents the liberal – perhaps extreme – type of capitalism. Sweden is known for its corporatists structure and as an unusual system that combines enormous social protection for the individual with a remarkably liberal economy (Steinmo,2010). France is often described as illiberal and influencing and as a state which is more active in structuring economic relations (Schmidt 1996, 2002 Ch.6). Israel is often regarded by Israeli political economists as a formerly *étatist* country which has experienced intensified liberalization processes since 2000, particularly in finance (Maron & Shalev, 2017; Maman & Rosenhek, 2012).

This research project began at the MA level, with exploratory research into the historical development of consumer credit data regulation in Israel since 1980 (Mizrachi-Borohovich & Levi-Faur, 2019). Building on that initial research, this PhD project aims to develop a more in-depth comparative understanding of consumer credit data regimes (CCDR) by proposing an index that can be used in a comparative approach yet is sensitive to the many ways in which countries differ in their subregimes and in their regulatory strategies.

In the remainder of this introductory chapter, I will discuss the concept of CCDR, the theoretical gaps this dissertation aims to fill in comparative political economy and comparative consumer policy literature, and the empirical approach for studying regulatory governance in comparative perspectives. Next, I present an overview of the three articles in this dissertation.

The governance of credit data

Conventionally, comparative research on credit data regulation classifies countries according to the potential of their credit reporting structure to expand access to credit, and measures only limited and specific aspects of consumers' rights. The World Bank's Doing Business project is the institution that is most actively promoting this approach when it comes to consumer financial data. The project is based on the underlying assumption that availability of more credit information on more people will facilitate lending decisions. Similarly, other proposed indexes also deliberately focus on the economic impacts of credit data sharing – at either the credit market or the firm level – without sufficiently considering the consumer or the social implications.¹

However, these indexes seem, at best, to have inadequately represented the consumer interest, and in the worst cases, to have neglected the interests of the consumer in favor of the interests of the lender. First, while they mainly consider the credit reporting structure's potential to expand access to credit, they seem to marginalize, de facto, the vulnerabilities involved in living on debt. Overreliance on consumptive credit as an economic model for growth is one of the major causes of consumer over-indebtedness (Civic Consulting, 2014). Also, the credit system only exacerbates their effect on debtors' lives because they are recorded in the system, thus possibly penalizing the affected consumers even further (Rona-Tas, 2016). Second, the traditional economic regulatory approach assumes a rigid model of a consumer, without considering that individual consumers have differing circumstances, needs, and interests which require protection (Ferretti, 2014). Third, this economic approach applies a narrow interpretation to consumer welfare standards, measuring them in terms of economic efficiency and the correction of market failures. It envisions the consumer as an economic entity and is only concerned with protecting the consumer's economic interest, disregarding other important aspects, such as the individual's autonomy and

¹ For example, the ACCIS (European credit bureaus association) yearly survey (ACCIS, 2015), Miller (2003) and also Jappelli and Pagano (2002).

privacy interests. Thus, strict economic analysis of the consumer seems more geared toward corporate interests than toward the policy goal of maximizing consumer welfare. Access to personal data on individuals' preferences, behaviors, and habits serves the interest of lenders who can easily target "profitable" consumers and reinforce borrowing. Moreover, consumers are more exposed to the aggressive marketing of unsuitable financial products, risking their financial security and exposing them to manipulation (Gates, 2010; Rona-Tas, 2016).

Unlike most of the current literature, this research does not assume that the use of consumer information is good for everyone, or that stability is the single or primary concern of financial regulators. Rather, it argues that in order to promote markets that work for consumers and serve their interests, there needs to be a broader and more inclusive concept of consumer protection, especially in a sensitive sector like finance. Nor does this research settle for the traditional justification of consumer protection, that is, to correct market failures and to readjust the position of consumers in the market vis-à-vis businesses. A more recent justification of consumer protection in law claims that it is intended to promote social justice, redistribute wealth, and realign the position of consumers in society (Howells & Weatherill, 2005; Ramsay, 2012).

We define a consumer credit data regime (CCDR) as the regulatory system that governs (a) the collection, (b) profiling, and (c) use of consumer credit data. A CCDR is constituted by various regulatory agencies and commercial entities that govern different aspects of the process according to different norms, principles, laws, and regulations. In each regime, we measure two dimensions of consumer protection: business restrictions (BR) and consumer empowerment (CE).

BR is the conventional approach that is often examined in the national models of capitalism literature. BR is directed towards *businesses* and imposes on them legal boundaries and restrictions, such as limitations on the scope of the data collected or licensing requirements. CE regulates and empowers *consumers* by giving them rights and tools to navigate the market and improve decision-making skills, e.g., the right to

dispute, or the right to access the data collected. This strategy builds on notions of the “consumer-citizen” and the governmental technique of responsabilization (Shamir, 2008) through which the state holds individuals accountable for those aspects of market governance and social security that it formerly provided.

The study of comparative (regulatory) capitalism

This dissertation is located in the comparative capitalism literature and the broad tradition of “historical institutionalism,” (Hall, 1986). The foundation of the comparative analysis was laid during the second half of the twentieth century, following the liberalization changes from the 1970s onwards (Menz, 2017). Most of this scholarship focused on state capacity and the resulting ability of policymakers to implement reforms. Such work generally fell into one of two broad categories.

The first is the “national models of capitalism,” which identified different state-driven patterns and logics of political economic interactions. The most pioneering work with this approach is Andrew Shonfield’s (1965) seminal *Modern Capitalism*, which explored the diversity of post-war models of capitalism and the various relationships between the state and interest groups. Shonfield identified three models of capitalism – liberalism, statism, and corporatism – which differ on the role of the state in the economy. Scholars inspired by Shonfield’s work share an understanding of states’ capacities in terms of *degrees* of statism and tend to view states’ capacities as constituting predictable policy patterns.

The second, related approach focuses squarely on interest groups’ avenues of policy influence, which are shaped by the institutional relationships between state and society. The Varieties of Capitalism (VoC) approach, for example, is mainly concentrated in the organization of firms, and distinguishes between countries with “competitive market relationships” (liberal market economies, LMEs), and “non-market relationships” (coordinated market economies, CMEs) (Hall & Soskice, 2001). Scholars who use this perspective, and who explain cross-national policy variations by

the institutional context in which consumer groups operate, tend to assume relatively stable preferences among interest groups. As discussed further in my third paper, this approach has been applied by Trumbull (2012), who assumes that producers and consumer groups have a stable perception about the identity of consumers which would affect the chosen consumer protection measure (i.e., information-based or strong legal and regulatory protections).

This research aims to establish a firmer bond with the comparative political economy literature, in two ways particularly:

1. The second paper of this dissertation explores how institutional characteristics shape regulation. Specifically, how does a specific type of regulation relate particularly to the underlying polity and economy in an era of the globalization of regulation? Regulation scholars have emphasized the need for better understanding in this vein (Guidi, Guardiancich & Levi-Faur, 2020).
2. The third paper explores how the regulatory capitalism approach – hybridization of modes of control allowing the production of fragmented and multidimensional capitalist order (Levi-Faur, 2005) – may develop our understanding of how the institutional context in which consumer groups operated can explain regulatory outcomes in contemporary, multidimensional and multi-tool regulatory fields.

The empirical approach to studying variance in policy regimes

To compare regulatory protection systematically across countries, while still giving sufficient consideration to the social dimension and to the fundamental rights of citizen-consumers (rather than economic considerations only), this research has created a measurement scheme for credit data regulation. The scheme's design was based on the scale development method, which is a useful technique for clarifying similarities and differences among cases, facilitating comparison, and compiling a mass of detail into measurable values (DeVellis, 2016). The scale development process has been carried out systematically and includes three specific steps.

The first step involves iterating and selecting the indicators. The criteria were selected after thoroughly studying policy documents, rules, financial consulting companies' blogs and newspaper articles dealing with biases, consumer complaints and loopholes related to consumer credit data in different countries.

The second step was to assign scores to the criteria. Each criterion was defined as an ordinal variable and was given a final composite score of 0, 1, 2, or 3, with 0 representing the least protection for consumers.

In the final step, the index was validated by industry experts and policy officials from the following 11 countries: Sweden, Norway, Ireland, France, China, United States, United Kingdom, Italy, Germany, and Israel.

The index developed is unique in four ways. First, it focuses on the regulatory aspects rather than on industry structure or ownership patterns, which means that it is particularly apt from the comparative regulation perspective. Second, it focuses on three governance levels: national, sub-national and regulatory strategy and thus sets a basis for theory-driven, multidimensional measurement. Third, it is useful for the analysis of policy design, and policy portfolio in particular, as it identifies and distinguishes between various policy tools for each strategy and their interactions. Fourth, it may set a framework for the analysis of other consumer-regulation fields.

To account for each country's score, I studied four countries in depth – Sweden, US, Israel and France – as well as conducting field research in two of them: Sweden and France. The research in Sweden was split into two visits, each for 10 to 14 days. In France the research took 10 days. During my visits I had intensive meetings with policy stakeholders, financial and privacy regulators, academic scholars who specialized in the sociology of credit, finance, and political economy, and with representatives from private credit bureaus (in Sweden). In addition, in Sweden I toured the Parliament Library and from there collected material on the legislative processes of the Credit Data Act of 1978.

Overview of the articles in the dissertation

The three dissertation papers conceptualize and study CCDRs from a comparative perspective. The first paper measures and compares regulatory regimes across four countries, namely the US, Sweden, France, and Israel. The second paper explains the variations across these countries regarding two regulatory dimensions: market restrictions and consumer empowerment. The third paper shows how the two regulatory strategies interact in these countries and explains their interactions.

1. Varieties of Consumer Credit Data Regimes: A Regulatory Governance Approach.

This first dissertation paper was published as an article in 2020 in *Governance*. It develops an index to measure consumer protection in CCDRs. Unlike most academic and policymaking research in this policy field, which apply a narrow regulatory approach to consumer welfare standards, measuring them in terms of economic efficiency and correction of market failures, this research accounts for the regulatory considerations protecting overall citizen-consumer welfare. It argues that in order to promote markets that work for consumers and serve their interests, there needs to be a broader and more inclusive concept of protection for consumers, especially in a sensitive sector such as finance. To the best of our knowledge, this is the first article to provide a comprehensive analysis of this regulatory regime and to analyze the differences between regime comparatively across countries.

A better understanding of the regulatory governance of consumer credit data is increasingly important for both consumer welfare and for the promotion and protection of liberal society, especially since its growing commercialization has significant social and economic costs, as indicated by social sciences literature and policy reports (Cate, 2002; Citron & Pasquale, 2014; Dixon & Gellman, 2014; Ferretti, 2017; Fourcade & Healy, 2013; Jentzsch, 2007; Mahoney, 2014; Marron, 2009; Mierzwinski & Chester, 2012; O'Neil, 2016; Poon, 2013; Rona-Tas, 2016; Yu & McLaughlin, 2014; Zarsky, 2016).

The paper applies the scale development method (DeVellis, 2016) to measure consumer protections in a valid and reliable manner. To make our conceptualization and measurement approach more accessible, and to illustrate variations between countries, subregimes and regulatory strategies, the article examines the CCDRs of four countries: the US, Sweden, France, and Israel for the year 2019. Conceptually, the paper presents a measurement scheme that captures the degree to which regulatory regimes protect consumers across states, subregimes (collection, profiling and use) and different strategies of regulation (BR and CE).

The empirical findings demonstrate that variance at the national level can and should be complemented with analysis of variations among subregimes and diverse regulatory strategies. Such complex analysis enables us to gain a more in-depth comparative understanding of CCDRs. This may allow researchers to distinguish regimes in a more comprehensive and analytical way, compare distinct aspects of each national regime, and theorize these differences. We have exposed variations in form and direction. In this way, our approach points to a new direction in researching comparative regulatory capitalism which looks beyond national analysis toward an in-depth understanding of other, equally important levels of variation. We consider this contribution to be a first step toward developing a theory to explain variances of CCDRs.

2. National Varieties Still Matter: A Comparative Analysis of Consumer Credit

Data Regimes in the US, Sweden, Israel, and France (not published)

The second paper addresses gaps in the current comparative political economy literature, and specifically in the research of national models of capitalism which tends to understand that a state's capacity varies along a continuum from *faire* to *laissez-faire* (i.e., the conventional business restriction dimension), and thus misses important dimensions of contemporary regulatory regimes. Moreover, the paper addresses gaps in the study of comparative regulatory politics, since current scholarship

conventionally considers the national and the sectoral level of analysis but has not investigated variation of regulatory strategies.

Conversely, this paper complies with the scholarship, suggesting that state Involvement should be perceived in terms of qualitative differences in the modes by which it structures markets (Levi-Faur, 2005; Schmidt, 2007; Vogel, 2018, 1996) by adopting a multidimensional approach to studying CCDRs. It acknowledges the hybridization of modes of control which reflect and reshape new ways of making politics in the current capitalist order (Levi-Faur, 2005). Thus, at the center of the analysis lies the distinction between two regulatory dimensions: business restriction (BR) and consumer empowerment (CE).

Stressing the different state-driven patterns and logics of political economic interaction, this article explains why countries with different capitalist systems have taken similar paths towards regulating businesses in consumer credit data policies. As the national models of capitalism approach guides our expectations regarding the BR dimension, the paper explores the surprising similarity between the ‘corporatist’ Swedish state and the ‘liberal’ US who have limited restrictions on businesses and rank low on the BR dimension. To explain this surprising result, the paper compares two different country clusters: one comprising the US and Sweden which rank low on the BR dimension, the other comprising France and Israel which rank high on the BR dimension. But these paradoxes should not obscure the differences on the CE dimension, wherein the US has a lower score compared to Sweden, and France has a lower score compared to Israel. The paper traces these similarities and differences between and within the country clusters by applying the stepwise comparative analysis approach (Levi-Faur, 2006).

The case analysis has been guided by four theoretical approaches: public interest, private interests, ideas, and institutions. The first theory explores whether regulations develop in response to national economic challenges and specifically high levels of consumer credit. The second explanation explores whether regulations result

from pressure exerted by consumer lenders and the financial information service industry. The third explanation explores whether regulations develop according to the manner in which policy makers perceive the proper goals of government regulation and market promotion. The fourth explanation explores whether regulations develop in response to the welfare state context.

To explain the differences between the two dimensions, empirical data was gathered through document analysis and semi-structured interviews. The document analysis involved collecting publicly available policy papers, reports and statements from government agencies, as well as legislation and regulations. Furthermore, interviews with 24 stakeholders were conducted between the years 2017 and 2020. The interviewees were from different types of organizations, including private credit bureaus, financial regulators, privacy authorities and academic scholars from the four examined countries.

The paper originally develops a complex theory for explaining variation across CCDRs. The findings indicate that institutional forms of the welfare state explain the variation in BR *between* the two clusters, but politics (private interests and ideas) contribute to explaining variation in CE *within* the two clusters. Those findings reveal that the BR dimension is significant in terms of historical institutional tradition. However, considering the empowerment dimension is crucial to understanding how politics is expressed in current regulatory governance order and may be fruitful to comprehend the policy design process better and to explain why a particular policy is enacted.

Furthermore, the paper finds that the interaction between the two dimensions reflects the continuity and change of the countries' national style. The differences in the organization of state-businesses relations between the liberal US and the corporatist Sweden indeed have been found to be expressed in their different ranking on the empowerment dimension. The intensified liberalization processes structured by the state in Israel since 2000, compared with the illiberal character of France, have been

expressed in their variation on the empowerment dimension.

The paper also has practical contributions. It undermines the economic theories emphasizing that credit data is mainly an economic regulatory tool serving to eliminate the market failures of a-symmetric information or moral hazards in the credit market. This paper shows that credit data regulatory regimes are shaped according to the perceptions regarding debt and the role of credit in society as shaped by the country's welfare state system, as well as political actors' world views and interests of economic groups.

3. C&C vs. Consumer Empowerment: A Portfolio Approach to Consumer Regulation

The third dissertation paper addresses gaps in comparative consumer policy literature, which tends to perceive consumer regulatory regimes as varying along a continuum from weak to strong regimes and evaluating them in terms of the regulatory tools' level of intrusiveness. This approach to researching consumer regulation has missed an important dimension of contemporary consumer regulatory regimes. Moreover, this paper addresses gaps in consumer policy research, as current scholarship conventionally adopts a narrow perception of empowerment as simply a "soft" regulatory approach concentrated mainly on information remedies without adequately defining and exemplifying its various regulatory tools (Esposito, 2017; Reisch, 2017).

Conversely, this paper adopts a policy portfolio approach (Chapman, 2003; Givoni et al., 2012; Hennicke, 2004; Milkman et al., 2012) to studying consumer policies and suggests examining regimes on policy subjects (consumer vs. businesses) by exploring the interactions between regulatory strategies in consumer policy: command and control (C&C) and consumer empowerment. The paper presents a conceptualization of four ideal-typical styles of consumer regulation and focuses on one particular regime in which regulatory strategies are interacting. This regime is

depicted as Big Governance. It also defines the two strategies in a way that allows better comprehension of the changes in regulatory goals and techniques that have accompanied the rise of regulatory capitalism. This research perceives empowerment, not as a soft regulatory approach concentrated mainly on information remedies, but rather as representing the change toward “decentered” regulation and, specifically, a state’s efforts to share power with individuals – i.e., consumers – through multiple regulatory tools (Black, 2002; Levi-Faur, 2005; Scott, 2004).

The paper asks (1) How do the two strategies interact in CCDRs? (2) What are their advantages and disadvantages? and (3) What explains their interactions? The research uses the case study method with a focus on CCDRs. To explore the strategies’ interactions, I have used the measurement scheme developed in the first paper. I have identified the central regulatory techniques that are typically used in credit data policy, and mapped them onto the two strategies to yield a classification that identifies six general categories of techniques: on C&C: standards, market entry thresholds, and regulation of the production process, and on CE: information techniques, consent mechanism, and dispute-resolution.

To better understand what intensifies the emergence of Big Governance regimes, the paper discusses the strategies’ pros and cons and assesses them against three parameters: political cost, regulatory cost, and social cost. Political consideration describes the extent to which business and policy makers perceive the strategies to be legitimate as well as describing their political feasibility. Regulatory costs refer to two major outlays – supervision and information – and consider which strategy is more costly in terms of time, financial and human resources it requires from the regulatory authority. The third parameter concerns the social effects of each strategy at the individual and social levels which result from their distinctive conceptions of consumer protection.

The findings of this research illustrate how the four examined countries – US, Sweden, France and Israel – have each combined the two regulatory strategies in

multiple ways and adopted what I have called Big Governance regulatory approaches. The paper finds that Big Governance regimes do not emerge because they serve all, or even most, consumers' interests. They can in fact be less efficient and less fair and can actually undermine the interests of disadvantaged groups. Furthermore, they emerge even though they stand in contrast to the businesses' interests and perceived preference for advancing deregulation. Big governance regimes are found to result from the association between policy actors who perceive regulation as inevitable in the evolution of markets and promote regulation to advance social goals, and those who perceive regulation as complementary to market growth and therefore promote it to advance economic goals.

The paper presents three significant insights contributing to our understanding of the development of consumer policy regimes in the context of regulatory capitalism. First, with the transformation of regulation, not only is politics becoming complex but the regulatory coalitions advancing the Big Governance mode of regulation are also gaining in complexity. This may suggest important insights into the ability of the institutional context in which consumer groups operated to explain regulatory outcomes in contemporary multidimensional and multi-tool regulatory fields.

Second, by distinguishing the regulatory strategies by their different targets (consumers vs. businesses), we can better explain both the phenomenon under investigation and the complex sources of variation between countries; these explanations may be more useful than those conventionally offered by consumer policy scholars, who tend to perceive the strategies at the level of intrusiveness of the tools, i.e., hard or soft regulatory tools. Moreover, it advances a complex perspective on regulation and opens up new opportunities for grasping the innovative tools that are used in contemporary re-regulation.

The final point to emerge from this article suggests that Big Governance regimes are likely to continue to thrive in the age of regulatory capitalism. As consumer markets continue to grow, the use of regulation to control risks or to accelerate markets

will continue to grow as well. At the same time, the regulatory state could and should be expanding alongside the other important dimensions of the polymorphic state, the welfare and developmental state.

CHAPTER 1

Varieties of Consumer Credit Data Regimes: A Regulatory Governance Approach

Mizrahi-Borohovich, I. and Levi-Faur, D. (2020) ‘Varieties of consumer credit data regimes: A regulatory governance approach’, *Governance*, 33(1), 109-134.

<https://doi.org/10.1111/gove.12473>

Varieties of Consumer Credit Data Regimes: A Regulatory Governance Approach

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Funding information

Israel Science Foundation, Grant/Award Numbers: 1029/2015, 324/2018

Abstract

Credit markets are expanding, and with them also the automated, large-scale commercialization of personal credit data. The increasing use of data and scores for commodified decision making lends greater urgency to the study of credit data regulatory regimes. This article promotes a comparative regulatory governance perspective as the basis for theory-driven, multidimensional measurement. In order to measure consumer protection, we distinguish three different subregimes (collection, profiling, and use) and construct a two-dimensional index of consumer protection (market restriction and user empowerment). We then assess the index and demonstrate its applicability and validity, building on empirical analysis of the regulatory regimes in the United States, France, Sweden, and Israel for the year 2019. Our approach points to a new direction in researching and measuring regulatory regimes in a comparative manner, which looks beyond national analysis toward an in-depth understanding of other, equally important, levels of variation.

1 | INTRODUCTION

Comparing regulation is more demanding than comparisons of other instruments and policies, as regulations tend to vary on many significant dimensions. Therefore, our aim in this article is to develop, for the first time, a measure of regulatory regime for consumer protection in credit data regimes that captures this complexity and thereby enables a more valid and robust analysis (Levi-Faur, 2006; Levi-Faur, 2011). Consumer protection concerns regarding consumer credit data have arisen in recent decades following the expansion of financial markets that has been accompanied by growing demand for more and more consumer data, and also developments in

the field of big data and computing that have allowed—and indeed facilitated—the automated, large-scale collection, processing and utilization of consumers' personal data. Companies and government entities gather, store, process, and then sell consumer data; it is a highly strategic and profitable resource for lenders who use it to manage credit risk and to marketize and price products and services more efficiently. With the ever-falling price of digitalization, innovative information technologies make it increasingly easy to collect big data and analyze it through automated algorithms and machine learning. Consequently, consumer financial information has become an instrument of social and economic engineering that makes individuals identifiable and available as “financial” assets (Aitken, 2017; Ferretti, 2017; Fourcade & Healy, 2017; Rona-Tas, 2016; Trumbull, 2010; Trumbull, 2014; Zuboff, 2015). Consumer data lie at the fore-front of the surveillance economy, and their regulatory governance are increasingly important for both consumer welfare and the promotion and protection of liberal society.

The commercialization of credit data is growing and is expected to continue to grow. Financial economists commonly argue that this drift toward a more “liberalized” financial information market contributes to the competitiveness and effectiveness of the financial markets (Jappelli & Pagano, 2002; Miller, 2003). Yet, as recent social sciences literature and policy reports demonstrate, it comes at a cost. Such practices compromise privacy (Cate, 2002; Ferretti, 2017; Jentzsch, 2007), allow the manipulation of consumers (Mahoney, 2014; Zarsky, 2016), exacerbate inequality (Citron & Pasquale, 2014; Fourcade & Healy, 2013; Rona-Tas, 2016), pose severe problems of accuracy without procedures for appeal (Dixon & Gellman, 2014; Mierzwinski & Chester, 2012; Yu & McLaughlin, 2014), and incur intended or unintended discrimination (O'Neil, 2016) and, in some cases, abuse of fundamental rights and the freedom of individuals as economic actors (Ferretti, 2017). In addition, they seem to promote a culture of credit use and of “life in debt” (Cate, 2002; Fourcade & Healy, 2017; Marron, 2009; Poon, 2013). Credit data can be used in various spheres such as auto insurance assessments, cellphone contracts, residential rentals, and even employment decisions. The question of what constitutes legitimate use of data and scoring methods makes the study of the credit data regulatory regimes not only theoretically interesting but also socially important. Increasingly, credit scores are becoming attributes of a responsible person and indicators of personal characteristics such as dignity and honesty (Klein, 1997). They identify certain people as better and worthier than others, attaching rewards and punishments to dubious data and scores.

Unlike most of the current literature, our measure does not assume that the use of consumer information is good for everyone or that stability is the single or primary concern of financial regulators. We therefore define a Consumer Credit Data Regime (CCDR) as the regulatory system that governs the (a) *collection*, (b) *profiling*, and (c) *use* of consumer credit data. A CCDR is constituted by various regulatory agencies and commercial entities that govern different aspects of the process according to different norms, principles, laws, and regulations. In each regime we measure two dimensions of consumer protection: market restrictions (MR) and consumer empowerment (CE). This allows us to capture distinct national approaches more accurately than has been done in the literature so far. To illustrate how countries differ on the three subregimes and the two dimensions, we analyzed four countries for the year 2019: the United States, Sweden, Israel, and France. We then assessed the index and calibrated its components against the identified CCDRs.

The article proceeds as follows: Section 2 reviews the current dominant economic approach to consumer credit data regulation. Sections 3 and 4 develop and gradually present our methodology. Section 5 provides “proof of concept,” demonstrating the applicability of the measure and how consumer protection indeed varies on various dimensions in the four countries.

Section 6 concludes, asserting the advantages of our approach in the study of consumer credit regulation, which has so far been dominated by a narrow approach that only considers the interest of consumers in economic terms, without giving sufficient consideration to the social dimensions or the fundamental rights of citizen-consumers.

2 | THE GOVERNANCE OF CREDIT DATA AND STRATEGIES OF CONSUMER PROTECTION: A REVIEW

Traditionally, economists have emphasized the tremendous advantages of a financial system where consumer credit data is freely accessed and exchanged. It has been argued that information exchange among lenders eliminates the problem of asymmetric information between consumers and lenders (Stiglitz & Weiss, 1981). Economists have claimed that free use of credit data accelerates economic efficiency in the credit markets by making the risk assessment process in lending decisions more effective (Barron, 2001), decreasing the level of default rates (Jappelli & Pagano, 2002), and incentivizing borrowers to meet their obligations (Padilla & Pagano, 2000). However, these works seem to have neglected the interest of the consumer in favor of the interests of the lenders. They also seem to marginalize, de facto, the vulnerabilities involved in living on debt. As researches have shown, the major causes of consumer over- indebtedness have been confirmed to be external lifetime events exacerbated by poor macroeconomic factors, the increasing costs of living, and overreliance on consumptive credit as an economic model for growth (Civic Consulting, 2014). Such events are not predictable at the time of contracting a loan and credit data cannot foresee them, yet they are recorded in the system, potentially and possibly penalizing the affected consumers even further. Bad rating may create a vicious cycle wherein circumstances become worse and worse, trapping people in poverty or locking them in dispossession (Rona-Tas, 2016). All things considered, the problem of over- indebtedness is clearly rooted in factors that are beyond the remit or control of what credit data can achieve, ultimately questioning the reliability and proportionality of credit data as a means of eliminating this problem (Ferretti, 2017). This has been confirmed in a study by experts advising the European Commission, which found no evidence that the increased availability of credit data has helped prevent over-indebtedness, support prudential regulation, or facilitate access to affordable credit (FSUG, 2015).

The traditional economic regulatory approach assumes a rigid model of a consumer, without considering that individual consumers have differing circumstances, needs, and interests requiring protection (Ferretti, 2014). Besides potentially creating an unjust and nonegalitarian society, methods of tracking and classifying consumer behavior raise questions of possible discrimination and creation of social hierarchies and stratification through the allocation of credit (Ferretti, 2017). Fourcade and Healy (2013) call it a new “classification situation,” in which actuarial techniques are used to divide and sort individuals into categories that shape life-chances.

Also, this economic approach applies a narrow interpretation to consumer welfare standards, measuring them in terms of economic efficiency and correction of market failures. It envisions the consumer as an economic entity and is only concerned with protecting the consumer's economic interest, disregarding other important aspects. The collection, analysis, and sale of credit data poses harms to individuals' autonomy and regiments their behavior. It creates standardization dictated by the scoring companies and their clients (which are also market entities), reinforcing compliance by determining norms of conduct and defining who is “good” and

who is “bad” (O’Neil, 2016). This has implications for the formation of financial subjects; driven by a desire to be more creditworthy (i.e., improve their credit scores), people are required to learn the credit score game, to follow rules that adhere to a different logic than their everyday lives, and to conform to financial behavior that they often disidentify with (Kear, 2017). Also, extensive processing of personal data comes at the expense of individuals’ privacy interests; it may raise issues over data protection rights and create greater risks of misuse of personal information and identity theft (Cate, 2002; Jentzsch, 2007). Those risks are even greater when big data technologies are used to score the “credit invisible” people who have little or no scorable credit history (Aitken, 2017; Citron & Pasquale, 2014; Hurley & Adebayo, 2016). Furthermore, mistakes and inaccuracy of the data collected could prevent individuals from accessing services or products, thereby tremendously impacting individuals’ lives, especially considering their weak bargaining position as compared to the powerful corporations holding their information (Ferretti, 2017; O’Neil, 2016; Zarsky, 2016). It can be difficult to get data reporting mistakes corrected even if those companies are indeed willing to rectify those inaccuracies, especially if the data are harvested from dozens of sources. Strict economic analysis of the consumer seems more geared toward corporate interests than toward the policy goal of maximizing consumer welfare; access to personal data on individuals’ preferences, behavior, and habits serves the interest of lenders who can easily target “profitable” consumers and reinforce borrowing. Moreover, consumers are more exposed to aggressive marketing of inappropriate financial products, risking their financial security and exposing them to manipulation (Gates, 2010; Rona- Tas, 2016).

The World Bank's Doing Business project¹ is the institution that is most actively promoting this approach when it comes to consumer financial data. The project is based on the underlying assumption that availability of more credit information on more people will facilitate lending decisions. It classifies countries according to their credit reporting structure's potential to expand access to credit, and measures only limited and specific aspects of consumers’ rights. Other proposed indexes also deliberately focus on the economic impacts of credit data sharing, on either the credit market or firm level, without sufficiently considering the consumer or social implications.²

Not surprisingly, this focus on credit data systems’ effects on markets and firms (rather than on the consumer) has affected the selection of parameters to be measured. Comparative research in this policy field often focuses on the technical aspects of credit data sharing, such as data ownership (e.g., public or private) or depth of data (e.g., negative or positive) (Barron, 2001; Houston, Lin, Lin, & Ma, 2010; Luoto, McIntosh, & Wydick, 2007; Padilla & Pagano, 2000), and the data distribution practices (voluntary or obligatory) (Jappelli & Pagano, 1993, 2002; Laband & Maloney, 1994; Miller, 2003; Staten & Cate, 2003; Van Cayseele, Bouckaert, & Degryse, 1995). When the literature does cover social aspects, it is rarely with sufficient depth or coverage. Miller (2003), for example, is exceptional in that she classified countries according to regulatory aspects such as measures taken to determine accuracy, mechanisms for handling complaints, and when data can be deleted. She is also the first scholar to classify the types of data collected in each country, rather than simply distinguishing between negative and positive data. Nonetheless, her research does not cover the growing tendency in big-data technologies to collect data from nontraditional sources (such as information gathered from smartphones or social networks), a practice that is becoming more prominent as the financial services industry embraces digitalization (Ferretti, 2017; Mierzwinski & Chester, 2012).

We argue that in order to promote markets that work for consumers and serve their interest, there needs to be a broader and more inclusive concept of consumers’ protection, especially in a

sensitive sector such as finance. A more nuanced regulatory approach should be designed to deal with situations where markets do not function fairly, not simply to ensure they work efficiently. We therefore propose an index that can be used under a comparative approach, yet is sensitive to the many ways in which countries differ in their subregimes and in their regulatory strategies.

3 | CONCEPTUALIZATION OF CONSUMER PROTECTION IN CREDIT DATA REGIMES

We apply a broad definition of consumer interests. In CCDRs, consumer protections are defined as mechanisms to prevent the violation of consumers' rights, weakening of individuals' autonomy and freedom, or undermining of values of social justice and fairness. Our proposed approach does not settle for the traditional justification of consumer protection, that is, to correct market failures and readjust the position of consumers in the market vis-à-vis businesses, but rather represents a wider perception of consumer interests. A more recent justification of consumer protection in law claims that it is intended to promote social justice, redistribute wealth, and realign the position of consumers in society (Howells & Weatherill, 2005; Ramsay, 2012). We differentiate between two regulatory strategies used to protect consumers in the policy field of consumer credit data: (a) market restrictions and (b) consumer empowerment. The first regulatory strategy is based on a typical scheme of governance through compliance with rules; it endorses direct intervention in the market by formulating boundaries and imposing restrictions on businesses. The second strategy promotes the protection of consumers through the governmental technique of responsabilization (Shamir, 2008). Under this approach, consumers are autonomous entrepreneurs who are entirely responsible for their financial operations and therefore they are provided with the information and tools to navigate the markets. Although both dimensions are envisaged as equally able to promote consumer protection, the effectiveness of certain CE practices is questionable. One highly controversial empowerment strategy set in the EU's General Data Protection Regulation (GDPR)³ is the practice of forcing lenders to obtain consent from the "data subject" for the use of their personal information. It is argued that the consent mechanisms only serve the consumers' interests nominally, as people have no option but to consent if they do not want to be refused credit (Borghetti, Ferretti, & Karapapa, 2013). Furthermore, some CE practices are more beneficial to the business than to the consumer. For example, providing consumers with access to their score is considered to be an empowering practice for consumers, but in the case of the United States, the industry actually supported providing access to credit scores as a way to avoid liability for incorrect derogatory data (Kear, 2014). Thus, a two-dimensional concept of consumer protections can improve our description and explanation of variation in regulatory regimes.

Different consumer protection strategies create different regulatory regimes, which vary in their normative, legislative, and constructive frameworks. The normative, legal, and institutional settings that determine how information is collected, which actors can use it, and how and to which purposes they can process it, differ among countries and can be more or less transparent, punitive, reliable, or fair to individuals. The limitations and freedoms of consumers in each regime bear important implications that have not yet been analyzed in the literature, and therefore stand at the center of this research. To the best of our knowledge, this is the first article to provide a comprehensive analysis of this regulatory regime and analyze the differences in regime comparatively across countries.

3.1 | Empirical strategy

We measure consumer protections in a valid and reliable manner using a systematic three-step process of scale development. The scale development method is a useful technique for clarifying similarities and differences among cases, facilitating comparison and compiling a mass of details into measurable values (DeVellis, 2016). The first step involves iterating and selecting the indicators. The criteria were selected after thoroughly studying policy documents, rules, financial consulting companies' blogs and newspaper articles dealing with biases, consumer complaints and loopholes related to consumer credit data in different countries.

The second step was to assign scores to the criteria. Each criterion was defined as an ordinal variable and was given a final composite score of 0, 1, 2, or 3, with 0 representing the least protection for consumers. In the collection regime, there are five criteria for the MR dimension and three for CE. In the profiling regime there are three criteria for MR and four for CE. For the use regime, there are five criteria for MR and three for CE. To overcome the differences in the number of criteria both at the subregime level and in the two regulatory strategies, as also to enable comparison on the three levels (national, subnational, and regulatory strategy), we calculated the scores and presented them in percentages (100% represents the maximum score possible).

To calculate the level of consumer protection for each country on the three subregimes, the sum of the criteria for each subregime was divided by the highest value of the dimension (e.g., for the collection regime the maximum value is 15 on the MR dimension and 9 on the CE dimension). That was first calculated separately for each dimension, and then integrated into a single score representing the average between the two regulatory strategies (named Total Score and calculated for each of the three subregimes).

To calculate the level of consumer protection in the four countries, the total score of the three subregimes was divided by the maximum possible value on each regulatory strategy dimension (e.g., on the MR dimension there are 13 criteria and therefore the maximum value would be 39). According to this calculation, each subregime received the same weight in the total calculation of the level of consumer protection in a country. The national score was first calculated separately on each dimension, and then integrated into a Total Score representing the average between the two regulatory strategies (e.g., for the United States 10% MR plus 33% CE, divided by two). This Total Score was calculated for each country.

In the final step, the index was validated by industry experts and policy officials from the following countries: Sweden, Norway, Ireland, France, China, United States, United Kingdom, Italy, Germany, and Israel. The scores were calculated based on primary and secondary sources, including statutory rules, legislative documents, empirical studies, and interviews with experts. Reliance on both primary and secondary sources allowed us to examine the practical aspects of the regime alongside its legal and formal aspects. While we are not the first to develop an index dealing with some of these aspects, ours is unique in three ways. First, it focuses on the regulatory aspects rather than the industry structure or ownership patterns, which means that it is especially apt from the comparative regulation perspective. Second, its design advances a comparative structure both at the level of the sub-regime and at the national level. Third, it distinguishes between regulatory strategies and therefore allows an additional layer of comparison between regulatory regimes and explanations of the phenomenon.

4 | MEASURING CONSUMER PROTECTIONS— DEVELOPING THE INDEX

We now present the consumer protection index. Appendix A includes tables of criteria.

4.1 | Data collection regime

The data collection regime for consumer protection refers to the institutions, rules, and actors involved in gathering, analyzing, and storing financial data on consumers. It covers both MR and CE measures, using five criteria for the former and three for the latter (Table A1). The first criterion deals with the question of who is allowed to collect data. At the extremes are regimes where only the lender collects information on its own consumers, versus regimes where collection is unregulated. In between are regimes where data are collected from the lender and non-profit organizations (e.g., public institutions or industry associations) and regimes where licensed commercial institutions are also allowed to collect data. The second criterion ranks regimes on the question of who is allowed to furnish data. At the extremes, it distinguishes between regimes where data are collected from public institutions (e.g., bankruptcies, liens, and judgments) and regimes where data are collected by any individual (e.g., landlords, employers). In between are regimes where data are collected from both public institutions and authorized companies (that meet specific requirements), and regimes where data are collected from public institutions and commercial companies. The third criterion ranks regimes on the question of the type of financial data that can be collected. At the extremes, it distinguishes between regimes where only data on defaults can be collected and regimes where collection is unregulated. In between are regimes where data on defaults and credit data (e.g., repayment history, amount of credit available, and amount of credit in use) are collected and regimes where data about the consumer's financial status are also collected (e.g., assets, income, etc.). The fourth criterion ranks regimes by the type of complementary data that can be collected. At

the extremes, it distinguishes between regimes where no complementary data are collected and regimes where complementary data relating to individuals' nonfinancial behavior (e.g., purchase preferences, GPS location, social network, etc.) are collected. In between are regimes where complementary data related to individuals' payment history with nonfinancial institutions (e.g., cable, electricity, gas, water, etc.) are collected and regimes where complementary data about spouses are collected. The fifth criterion ranks regimes on the issue of when data on defaults can become reportable. At the extremes, it distinguishes between regimes where data on defaults are collected according to parameters indicating the severity of debt (the number of arrears that were not paid on time or the sum of the debt), and regimes where data on defaults are collected immediately. In between are regimes where data on defaults are collected after a grace period has been granted to the consumer and regimes where collection is unregulated.

On the CE dimension, the first criterion ranks regimes by the institutions to which consumers can turn to for data correction. At the extremes, it distinguishes between regimes where consumers can complain to a state authority, the data collectors and the data provider versus regimes where there is no regulation. In between are regimes where consumers can apply to a supervisory state authority and the data collectors, and regimes where consumers can apply only to the data collectors. The second criterion ranks regimes on the question of whether consumers have access to the data collected about them. At the extremes, it distinguishes between

regimes where consumers have access to the data collected about them and to the identity of the sources from where the data are collected, versus regimes where consumers do not have access to the data collected about them. In between are regimes where consumers have access to the data collected about them but not to the identity of the sources, and regimes where each data collector sets its own policy. The third criterion ranks regimes according to the consent mechanism whereby a consumer allows data to be collected about him. At the extremes, it distinguishes between regimes wherein a consumer's consent is required before data can be collected (except for high-risk consumers), versus regimes where data are collected automatically without the consumer's consent. In between are regimes where data are collected automatically without the consumer's consent unless the consumer requests that the collection of data about him be stopped (and on condition that they are not high-risk consumers), and regimes where data are collected automatically without the consumer's consent but only on high-risk consumers.

4.2 | Data profiling regime

The data profiling regime for consumer protection refers to the institutions, rules, and actors involved in processing financial data on individuals into numerical scores. It covers both MR and CE measures, using three criteria for the former and four for the latter (Table A2). The first restrictive criterion deals with the score generators. At the extremes, it distinguishes between regimes where only lenders generate scores on their potential borrowers versus regimes where, in addition to commercial companies, state authorities also calculate scores. In between are regimes where only lenders and licensed companies produce a score and regimes where any commercial company can produce a score. The second criterion ranks regimes on the supervisory procedures imposed upon scoring producers. At the extremes, it distinguishes between regimes where the accuracy of the risk assessment process is supervised (e.g., whether the level of credit defaults is too high and the risk assessment procedure inefficient) versus regimes not subject to regulatory supervision. In between are regimes where the type of data used for the calculation of scores is checked (e.g., whether it is fair or relevant to the purpose for which it is used) and regimes where the accuracy of the data is checked (e.g., whether the data are well protected and managed, whether it is deleted on time, etc.). The third criterion ranks regimes on the question of what data (not provided by the borrower or belonging to the lender) can be used. At the extremes, it distinguishes between regimes where public identifying data (e.g., zip code, gender, etc.) and data on defaults can be used for the score versus regimes where, in addition to all the types of data mentioned, data about consumers' requests for credit and credit denials can also be used (inquiries). In between are regimes where scores can be calculated based on public identifying data, defaults and credit data, and regimes where personal data (e.g., data about marital status, employment, place of residence, age, etc.) can also be used to calculate scores.

On the CE dimension, the first criterion ranks regimes by consumers' rights in case of a dispute with the score producer. At the extremes are regimes where the consumer has a right to bring his/her dispute before a company representative, versus regimes where a consumer is not entitled to dispute the score. In between are regimes where the consumer has a right to insert an explanatory statement on his credit report, and regimes where the consumer must be provided with a compulsory answer within a certain timeframe. The second criterion ranks regimes according to the rights of consumers regarding access to their credit score. At the

extremes are regimes where the consumers are entitled to access the same score as that provided to other entities, versus regimes where consumers cannot access their personal score. In between are regimes where consumers are entitled to access a credit score but not necessarily the same score provided to other entities, and regimes where the matter is unregulated. The third criterion ranks regimes on the question of how the consent mechanism works when a score is produced by an intermediary. At the extremes are regimes where the consumer's consent is required, versus regimes where there are no intermediaries scoring individuals and therefore this criterion is not applicable. In between are regimes where prior consent from the consumer is not required but the consumer may request not to be scored, and regimes where a score produced by an intermediary does not require the consumer's consent. The fourth criterion ranks regimes on the question of whether the score producers are transparent about the data used for the score. At the extremes are regimes where all agencies producing scores are required to be transparent about the data used for the score, versus regimes where score producers are not transparent about the data used for the score. In between are regimes that require some of the score producers to be transparent about the data used for the score, and regimes where transparency is provided by some of the companies producing the score.

4.3 | Data use regime

The data use regime for consumer protection refers to the institutions, rules, and actors that govern the use of and access to financial data on individuals. It covers both MR and CE measures, using five criteria for the former and three for the latter (Table A3). The first restrictive criterion deals with how access to data is determined. At the extremes, it distinguishes between regimes where the consumer determines who can access his data, versus regimes where access to data is determined through trade agreements between commercial entities. In between are regimes where the state determines who gets access to the data, and regimes where it is determined by an industry association. The second criterion ranks regimes on the economic spheres in which the scores can be used. At the extremes, it recognizes regimes where profiling is used solely for consumer credit, versus regimes where profiling is unregulated. In between are regimes where scores can be used also in other economic sectors (utilities, telecommunication, etc.) and regimes where scores can additionally be used for screening a potential tenant. The third criterion ranks regimes by the purpose for which the data can be used. At the extremes are regimes where data can be used only for credit decisions and supervision of the financial market, versus regimes where use is unregulated. In between are regimes where data can be used for credit decisions, supervision, and specified financial decisions (e.g., in the retail market or regarding employment in professions related to finance) and regimes where data can be used to identify the most profitable consumers. The fourth criterion refers to the protections against misuse and theft of data and ranks regimes by the prerequisites required to use the data and scores. At the extremes are regimes where authorization from the consumer is required, versus regimes where the matter is unregulated. In between are regimes where data can be used by providing consumers' bank or credit card account numbers, and regimes where data can be used by providing citizens' ID/social security number. The fifth criterion ranks regimes by when data on defaults can no longer be used. At the two extremes are regimes where data on defaults cannot be used immediately upon payment of the debt, and regimes where the matter is unregulated. In between are regimes where data on defaults cannot be used from 1 to 3 years after the debt is paid, and regimes where it cannot be used more than 3 years after repayment of the debt.

On the CE dimension, the first criterion ranks regimes by the circumstances wherein an individual is informed about their data being used. At the extremes are regimes where the individual is informed every time their data are used, versus regimes where the individual has no right to be informed. In between are regimes where the individual is informed when there is a risk of data breach, and regimes where the individual is informed if the use of their data has prevented their access to credit or worsened their credit terms. The second criterion ranks regimes on the question of the mechanism whereby the consumer gives consent to the use of his data. At the extremes are regimes where the consumer's consent is needed before data can be used (except for high-risk consumers), versus regimes where data are used automatically without the consumer's consent. In between are regimes where data are used automatically without the consumer's consent unless they request that the use of their data be stopped (and on condition that they are not a high-risk consumer), and regimes where data are used automatically without the consumer's consent but only on high-risk consumers. The third criterion ranks regimes according to consumers' access to the identity of data users. At the extremes are regimes where consumers have access to the identity and dates of data users, versus regimes where consumers do not have access to such information. In between are regimes where consumers have access to the list of data users and regimes where the matter is not regulated.

The indexes for the three subregimes were drawn up after a process of iteration and selection of indicators. In the process of structuring our model many criteria have been considered. Most of the criteria excluded from the model included data that reflected little on the permissiveness of the subregime or data that were hard to measure. Regarding the data collection sub-regime, we excluded criteria such as (a) the time period for which data are saved in the database; (b) the price of access to data; (c) the scope/coverage of citizens on whom information is collected; and (d) the response time to a citizen's appeal regarding the veracity of their personal data. Regarding the data profiling subregime, we excluded criteria such as (a) whether prerequisites are needed for a profiling company to operate; (b) who grants permission to calculate a score on an individual; and (c) whether there is a regulatory obligation to update the credit score at certain intervals. Regarding the data use subregime, we excluded criteria such as (a) whether credit reports and scores are accessible at a fair price; and (b) the regulatory sanctions on reporting inadequate information.

5 | THE INDEX IN PRACTICE: PROOF OF CONCEPT

To make our conceptualization and measurement approach more accessible and to illustrate variations between countries, subregimes and regulatory strategies, this section examines the CCDRs in four countries. Appendix B includes the scores and explanations for the classification. The cases were selected primarily to achieve maximum variance along the two dimensions. The United States scored low on both dimensions; Sweden scored low on the MR dimension and higher on the CE; France is diametrically opposed to Sweden, with an extremely high score on the MR dimension and lower consumer protections on the CE dimension; Israel has the highest score on both dimensions. Figure 1 shows their distribution upon the two dimensions.

This article presents the research findings in three sections, one for each level: national, sub-regimes, and regulatory strategies. Table 1 shows the scores on consumer protection for each country and additional parameters for comparison, and summarizes the main findings discussed below. First, to examine the variance between the subregimes in each country we

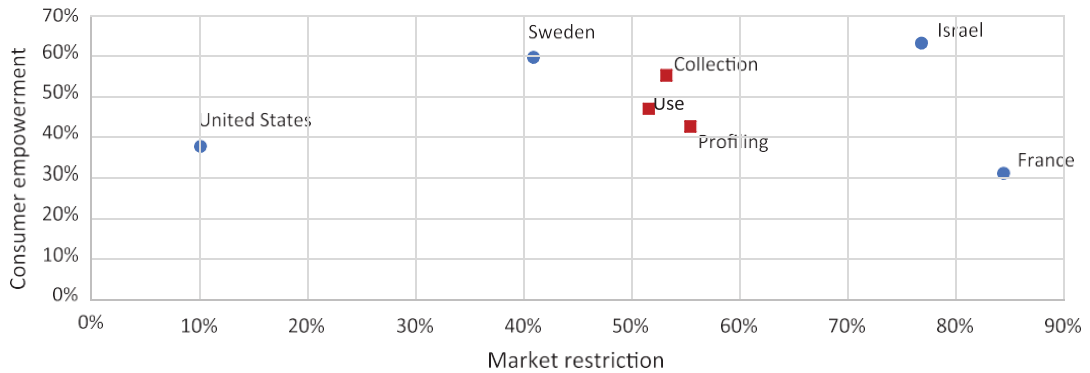


FIGURE 1 Consumer protection: national and Subregimes scores (percentages, 2019)

calculated the National Range, which represents the gap between the highest and lowest scores on consumer protection among the three subregimes. This was calculated for the two regulatory strategies separately and then integrated into one score representing the average between them (named National Range Total Score). Second, to compare the subregimes we calculated their average in all four countries (named Sub-regime Average). This was calculated for the two regulatory strategies separately and then integrated into one score representing the average between them (named Sub-regime Average Total Score). Last, to examine variation in the use of regulatory strategies we calculated the gap between the highest and lowest national scores for each regulatory strategy (named Strategies Range).

5.1 | National level

The credit data industry in the United States has a long history that goes back to the first half of the nineteenth century (Cole & Mishler, 1998). However, the industry has grown intensively since the late 1970s with a new wave of financialization based on both deregulation and technological advance. The industry is dominated by the three major CRAs, Trans Union, Equifax, and Experian, and FICO that specializes in credit scoring products. These three companies have operated as major players at the global level and have expanded their activity into more than 37 countries worldwide.⁴ Besides them, there are dozens of smaller, regional, and industry-specific CRAs (CFPB, 2016). The United States has the lowest level of consumer protections as compared to the other countries; its Total National Score stands at 23%. Consumers are protected more through CE strategies (37%) than through MR strategies (10%). Its regime is characterized by a narrow approach to regulation of firms and legislation that applies only to “traditional” industry and does not address other data-driven firms and start-up companies using Big Data capabilities and increasingly being drawn into the consumer financial services marketplace. Also, consumers are at a disadvantage as compared to the powerful industry actors, and are provided with limited protections by government authorities; most of the CRAs are not bound by the supervision of the Consumer Financial Protection Bureau (CFPB), which is not responsible for handling consumer complaints.

TABLE 1 Consumer protection score on three levels: national, sectoral, and the regulatory strategy (2019)

Restrictions (MR) empowerment (CE) Total score [TS]	Data									National score			National range		
	Data collection			Profiling			Data use			MR	CE	TS	MR	CE	TS
	MR	CE	TS	MR	CE	TS	MR	CE	TS	MR	CE	TS	MR	CE	TS
United States	7	33	20	11	50	31	13	22	18	10	37	23	7	28	13
Sweden	40	56	48	56	58	57	33	67	50	41	60	51	22	11	9
France	87	67	77	100	8	54	73	22	48	85	30	57	27	58	29
Israel	80	67	73	56	50	53	87	78	82	77	63	70	31	28	29
Subregime avg	53	56	54	56	42	49	52	47	49	53	48	50	4	14	6

The Swedish CCDD regime was established as early as the 1890s by private credit bureaus (Jentzsch, 2007). As in the United States, it has been growing more intensively following the expansion of the credit markets in Sweden (Bos & Nakamura, 2014; Ölcer & Santen, 2016). There are about 15 CRAs in Sweden, the major ones being Upplysningscentralen (UC), Bisnode, and CreditSafe. After the United States, Sweden has the lowest level of consumer protections; its Total National Score stands at 51%. As in the United States, consumer protection is provided mainly through CE strategies (60%) rather than MR strategies (41%). CRAs have access to extensive data about individuals, and scores are produced and used extensively by credit intermediaries and lenders. There are also limitations in the CE dimension, for example, the CRA's instantly record late or missed payments to state authorities and data collection, production of scores and data use are not contingent upon consumer consent.

The French centralized credit information system developed in 1989, following advances in computerization, a deregulation process, and the shift from indirect sale of credit through retailers to direct-to-consumer lending, which drove demand for a new credit data service (Trumbull, 2010). France has a relatively high level of consumer protections; its Total National Score stands at 57%. Consumer protection is provided mainly through MR (85%) rather than CE strategies (30%). It is prohibited for private companies to collect, process, or trade in individuals' information. Banque de France manages a database containing only data on payment incidents. CE practices are limited in France, and consumer protections are granted mainly through MR.

The Israeli regime evolved relatively late, in the late 1990s, and has developed slowly and gradually. Until 2002 it was structured like the French regime, with a few public databases gathering data on payment incidents. But in 2002 private companies were allowed to collect data on individuals, and since 2011 they have been allowed also to score individuals. The latest change, which has altered the regime most significantly, took place in 2016. Israel has the highest level of consumer protection; its Total National Score stands at 70%. As in France, consumer protection is provided mainly through MR strategies (77%) rather than CE strategies (63%). The Bank of Israel manages a centralized database; there are restrictions on the data collected and strict requirements placed upon data furnishers. Only licensed companies can score individuals, solely for consumer credit purposes. Consumers are also granted rights to access their data, to know which institutions have used their data, and to dispute the data. There are nevertheless limitations in Israel's CE dimension, for example, prior consent is not required from the consumer before data can be collected; this opt-out mechanism might be less to the benefit of consumers (Borghi et al., 2013). Also, the supervisory structure in the Israeli regime does not include a body designated to supervise the central database and be accountable for consumer protections, such as exists in France.

5.2 | Subregime level

As shown in Figure 1, variation also exists at the subregime level (the National Range indicates 6% difference). This variation is more pronounced in the CE dimension (the National Range indicates 14% difference between the subregimes) than in the MR dimension (the National Range indicates 4% difference).

In examining the level of consumer protection of the subregimes in each country, we find variation also within the countries (Figures 2 and 3 describe that variation between the use regime and the two other subregimes). In the United States the profiling regime is the exception (its Total Profiling Score is 31%). This high protection in the profiling regime provides consumers with access to their score and grants them information about the parameters used in its calculation. Those protections, it is important to mention, were granted with the encouragement and support of the data corporations themselves (Kear, 2014). In Sweden too, the profiling regime is exceptional (the Total Profiling Score stands at 57%). The high protection in the profiling regime is expressed through tight supervision of the scoring producers, especially regarding the type of data used for the calculation of scores, a fair dispute mechanism for consumers, and full access to their score. In France, the exceptional regime is the collection regime (the Total Collection Score stands at 77%). High protection in the collection regime provides consumers with empowering regulatory practices, for example, they have access to the information held about them in the database. Also, in cases of complaints regarding the data collection process, consumers may apply not only to the Banque de France (which administers the database) but also to the National Commission for Data Processing and Liberties (CNIL), a powerful independent agency that handles consumer issues. The high score in the collection regime is in accordance with the general perception of the right to privacy, which is strictly guarded in the French system; France ranks among the countries with the world's highest data protection standards (Jentzsch, 2007). In Israel is the profiling regime is the exception (the Total Profiling Score stands at 53%). The low protection in this regime, as compared to the other two highly regulated subregimes, is expressed through limited supervision of the processing of data, no requirements for transparency about the use of data in the calculation of scores, and no way for individuals to forestall being scored.

There is variation at the subregime level also between countries. In Israel the scoring regime is the least protected subregime (the Total Profiling Score stands at 53%), whereas in the United

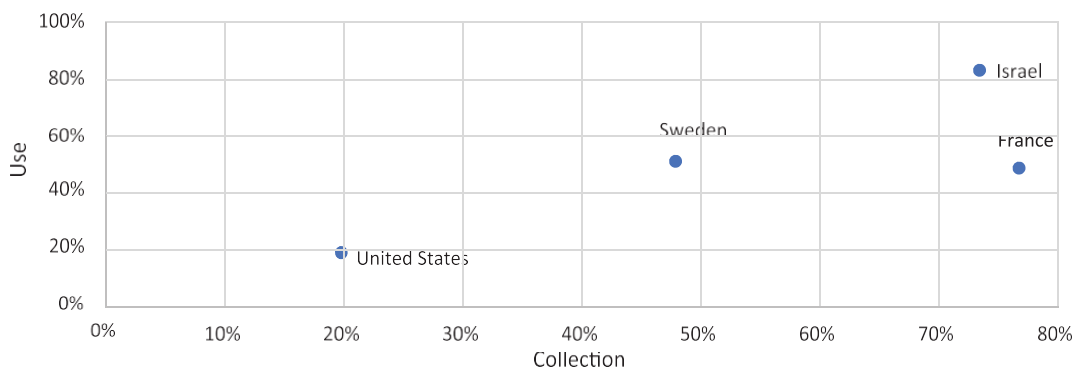


FIGURE 2 Consumer protection: scores for data use and collection (percentage, 2019)

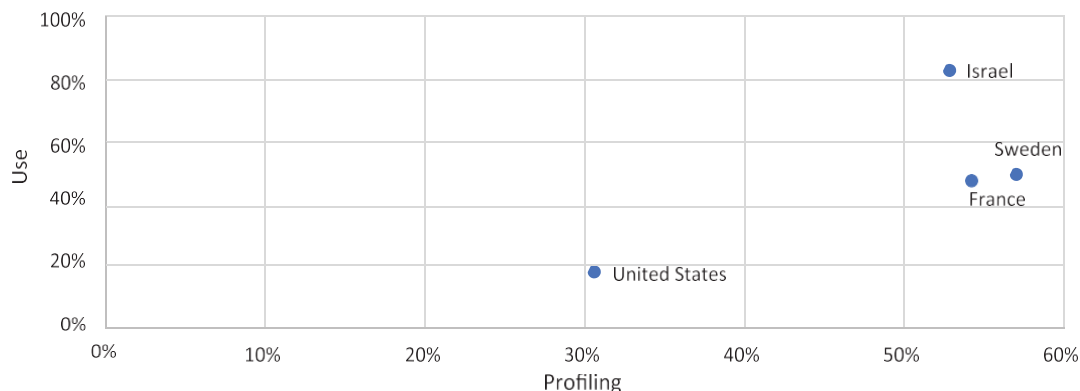


FIGURE 3 Consumer protection: scores for profiling and data use (percentage, 2019)

States and Sweden it is the most protective subregime (the Total Profiling Scores stand at 31% in the United States and 57% in Sweden).

5.3 | Regulatory strategy

Among the countries examined, MR strategies were more prominent than CE strategies. As shown in Table 1, the average of the four countries on the MR dimension stands at 53% as compared to 48% on the CE dimension. As shown in Figure 1, the variation among countries is more prominent on the MR dimension (the Strategies Range stands at 74%) than on the CE dimension (the Strategies Range stands at 33%).

To summarize the main findings presented in this article, the national level of consumer protection ranges from 23% (United States) to 70% (Israel). These findings are in line with the traditional comparative literature on the “varieties of capitalism,” which has demonstrated how states vary across many political dimensions and how these variations often have significant effects on their citizens’ welfare and their political and economic performance (Esping-Andersen, 1990; Hall & Soskice, 2001). Surprisingly, we found that Sweden is less protective than France, something that should be further examined in future research. Figure 1 illustrates this diversity on the national level.

Variations also present at the subregime level. When comparing the subregimes within each country, we found that in the United States the profiling regime was the most protective of the three regimes, as also in Sweden. In France, the collection regime was found to be exceptionally protective as compared to the other two regimes. Israel’s profiling regime was found to be less protective than the two other regimes. We also found variations between countries at the subregime level, In Israel the profiling regime was the least protective subregime, whereas in the United States and Sweden it was the most protective.

The use of regulatory strategies also differs among the four countries. In Sweden and the United States, CE was a more common regulatory approach as compared to France and Israel, where MR was the more common strategy. Overall, MR was more prominent as compared to CE.

Understanding those differences on three distinct levels (national, subregime, and the regulatory strategy) is something that should be examined in future research.

6 | DISCUSSION AND CONCLUSIONS

Several combined forces—including the revolution and reforms in computerization and telecommunications, as well as financial deregulation—have given rise to more and more consumer lending. The expansion of the credit industry and evolution of new lending platforms have increased the demand for new credit data services, and massive technological innovations have enhanced the supply of ever-evolving data mining techniques, enabling the large-scale collection, processing, and transposition of data. However, the use of credit data without a proper regulatory framework can potentially cause major social and economic harms, as discussed in Section 1.

This leads to policy questions of how to design the regulatory architecture so as to improve the citizen-consumer's overall welfare. So far, academic and policymaking research has adopted a narrow regulatory approach that reduces the interest of consumers to its economic aspects only, without giving sufficient consideration to the social dimension or to the fundamental rights of citizen-consumers. This dominant market paradigm is heavily emphasized in the World Bank's "Doing Business" index, which measures how a country's regulatory practices promote more efficient competition in markets. The need, therefore, for a more appropriate conceptual tool to measure the social aspects and consumer perspective of credit data policy is what motivated this article.

Conceptually, we have presented a measurement scheme that captures the degree to which regulatory regimes protect consumers across states, subregimes (collection, profiling, and use) and different strategies of regulation (MR and CE). This may allow researchers to distinguish regimes in a more comprehensive and analytical way, compare distinct aspects of each national regime and theorize these differences. We have exposed variations in form and direction. Our approach points to a new direction in researching comparative regulatory capitalism, which looks beyond national analysis toward an in-depth understanding of other, equally important, levels of variation. We consider this contribution to be a first step toward developing a theory to explain variance in CCDRs.

Though we are committed to cross-national comparisons in general, comparative capitalism in particular (see also Apaydin, 2018; Križić, 2019; Mathieu & Rangoni, 2019), we would also like to know which subregime or sector is more or less likely to accord us a better understanding of national varieties of regulation. Our empirical findings demonstrate that variance at the national level can and should be complemented with analysis of variations among subregimes and diverse regulatory strategies. Such complex analysis enables us to gain a more in-depth comparative understanding of CCDRs. Israel, for example, demonstrates why a multilevel analysis is beneficial; if we look only at the national consumer protection level in Israel, we cannot account for the relatively low protection on the Profiling regime. Comparison between sub-regimes highlights differences that might otherwise be overlooked, and avoids potentially misleading conclusions regarding the cross-national similarity of regulatory regimes. Findings from the U.S. case revealed how the distinction between regulatory strategies can better explain the phenomenon under investigation. Specifically, our findings have shown that in the United States (and Sweden), CE strategies were more prominent than MR; this may shed light on the politics around the construction of the CCDR in the United States and the players who have shaped the regime. Our proposed framework clears the way for a more in-depth political economy analysis to account for the institutionalization of state and economy relations in capitalist states and the financial sector's political power and influence on the regulatory structure in the country. At this stage, we relegate explanations to subsequent papers and focus here on

conceptualization and measurement; we believe that the construction of the index can set a basis for further research in this direction.

ENDNOTES

- ¹ Doing business web, Getting Credit Methodology, retrieved from <http://www.doingbusiness.org/methodology/getting-credit>.
- ² For example, the ACCIS (European credit bureaus association) yearly survey (ACCIS, 2015), Miller (2003) and also Jappelli and Pagano (2002).
- ³ Article 6 of the GDPR.
- ⁴ Experian web, About, Retrieved from: <http://www.experian.com/corporate/about-experian.html>; Equifax web, About, Retrieved from: <http://www.equifax.com/about-equifax/company-profile>; Transunion web, About, Retrieved from: <https://www.transunion.com/about-us/about-transunion>.

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How to cite this article: Mizrahi-Borohovich I, Levi-Faur D. Varieties of consumer credit data regimes: A regulatory governance approach. *Governance*. 2020;33:109–134. <https://doi.org/10.1111/gove.12473>

APPENDIX A: TABLES OF CRITERIA

TABLE A1 Data collection regime: criteria and indicators

	Criteria	Description	Value range
1	Market restriction	Data collection	Who is allowed to collect data?
			3—Only the lender on its own consumers 2—The lender and public institutions or associational bodies 1—The above and licensed commercial institutions 0—Unregulated
2		Data providers	Who is allowed to furnish data?
			3—Public institutions 2—Public institutions and authorized companies 1—Public institutions and commercial companies 0—Any individual
3		Collection of financial data	What type of financial data can be collected?
			3—Only data on defaults 2—Both data on defaults and credit data 1—The above and financial status (assets, income) 0—Unregulated
4		Collection of complementary data	What type of complementary data can be collected?
			3—No complementary data are collected 2—Data relating to individuals' payment history 1—Complementary data about spouses 0—Data relating to individuals' nonfinancial behavior
5		Restriction on reporting data on defaults	When can data on defaults become reportable?
			3—According to the number of arrears that were not paid on time or the height of the debt 2—After a grace period has been granted to the consumer 1—Unregulated 0—Immediately
1	User empowerment	Investigation of disputes	To which institutions can consumers appeal for data correction?
			3—State authority, data collectors, data providers 2—State authority and data collectors 1—Only data collectors 0—Unregulated
2		Access to the data collected	Do consumers have access to the data collected about them?
			3—Consumers have access to the data collected about them as well as to the identity of the data providers 2—Consumers have access to the data collected about them 1—Unregulated 0—Consumers do not have access to the data collected
3		Consent mechanism	By which mechanism does a consumer allow data to be collected about him?
			3—A consumer's consent is required before data can be collected (except for high-risk consumers) 2—Data are collected automatically without a consumer's consent, unless the consumer requests that the collection of data about them be stopped (and on condition that they are not a high-risk consumer) 1—Data are collected automatically without a consumer's consent but only on high-risk consumers 0—Data are collected automatically without a consumer's consent

TABLE A2 Consumer profiling regime: criteria and indicators

	Criteria	Description	Value range
1	Market restrictions	Scoring producers	Who calculates the score? 3—Only lenders on their own consumers 2—Lenders and licensed companies 1—Any commercial company 0—Commercial companies and state authorities
2		Supervision of the scoring producer	To what supervisory procedures are scoring producers subject? 3—The accuracy of the risk assessment process 2—The type of data used for the calculation of scores 1—The accuracy of data 0—No regulatory supervision
3		Data used for scoring	What data can be used? 3—Public identifying data and defaults 2—The above and credit data 1—The above and personal data 0—The above and inquiries
1	Consumer empowerment	Consumers' rights in case of a dispute	What are the rights of the consumer in case of a dispute with the score producer? 3—Examination of his/her dispute by a company representative 2—Add an explanatory statement on his credit report 1—A compulsory answer within a certain timeframe 0—A consumer is not entitled to appeal the score
2		Access to scores by individuals	What are the rights of consumers regarding access to their credit score? 3—Consumers are entitled to access an identical credit score as the one provided to other entities 2—Consumers are entitled to access a credit score, but not necessarily the same score provided to other entities 1—Unregulated 0—Consumers cannot access their personal score
3		Consent mechanism	How does the consent mechanism work when the score is not produced by an intermediary? 3—A score produced by an intermediary requires the consent of the consumer 2—A score produced by an intermediary does not require consent, but the consumer may request not to be scored 1—A score produced by an intermediary does not require the consent of the consumer 0—N/a
4		Transparency of data used to process the score	Are the score producers transparent about the data used for the score? 3—All score producers are required to be transparent about the data used for the score 2—Some of the agencies producing scores are required to be transparent about the data used for the score 1—Some of the agencies producing scores are transparent 0—Score producers are not transparent about the data used for the score

TABLE A3 Data use regime: criteria and indicators

	Criteria	Description	Value range
1	Market restrictions	Access to the data	How is access to data determined?
			3—The consumer determines who gets access to his/her data 2—The state determines who gets access to the data 1—An industry association determines who gets access to the data 0—Access to data is determined through trade agreements between commercial entities
2	Score use restrictions	In which economic spheres can the score be used?	3—Consumer credit 2—The above and companies that advance goods or services to consumers that will be paid at a later stage 1—The above and residence shopping 0—Unregulated
3	Data use restrictions	For what purpose can data be used?	3—Credit decisions and supervision over the financial market 2—The above and specified financial decisions 1—The above and marketing 0—Unregulated
4	Prerequisites for data use	What prerequisites are required to use the data and score?	3—Authorization from the consumers 2—Citizens' bank or credit card account numbers 1—Citizens' ID\national security number 0—Unregulated
5	Time limitation on data use	When can data on defaults no longer be used?	3—Immediately after the debt is paid 2—One to three years after the debt is paid 1—More than three years after the debt is paid 0—Unregulated
1	Consumer empowerment	Informing an individual about data use	Under what circumstance is an individual informed about their data being used?
			3—Every time their data are used 2—If there is a risk of data breach 1—If the use of their data has prevented their access to credit or worsened their credit terms 0—The individual has no right to be informed
2	Consent mechanism	By which mechanism does the consumer give consent to the use of his data?	3—A consumer's consent is needed before data can be used (except for high-risk consumers) 2—Data are used automatically without a consumer's consent unless they request that the use of their data be stopped (and on condition that they are not high-risk consumers) 1—Data are used automatically without a consumer's consent but only on high-risk consumers 0—Data are used automatically without a consumer's consent
3	Transparency about the data users	Do consumers have access to the identity of data users?	3—Consumers have access to the identity of data users and the dates on which they used the data 2—Consumers have access to the list of data users 1—Unregulated 0—Consumers do not have access to the list of data users

APPENDIX B: CLASSIFICATION DECISIONS AND DATA

Our classification decisions are elaborated below—as response to the criteria in the tables—starting with the collection regime before moving to the profiling and use regimes. Decisions are summarized also in Table B1.

B.1. The collection regimes

United States: Market restrictions: (a) Any person can engage in the practice of collecting consumer credit information or other information on consumers; 0. (b) Any person can furnish data to a CRA, including public institutions (bankruptcy records, civil court monetary judgments, and government tax liens), financial institutions (bank credit cards, retailer credit cards, auto loans, student loans, and mortgages) and also individuals (employers, landlords); 0.

(c) Any type of financial data can be collected, including credit data (the type of credit, the credit limit or loan amount, account balance, the account payment history, etc.), income, assets, purchasing habits; 0. (d) Complementary data can be collected, including “alternative data” about consumers’ payment behavior with nonfinancial institutions, and data about other individuals who are listed as a borrower on a given credit. Alternative credit reporting companies use similar data and also network data (e.g., information from social network and individuals’ phone activity); 0. (e) The FCRA (Fair Credit Reporting Act) does not directly address the issue of when late payments can become reportable to a CRA, and therefore each CRA has its own policy. Nonetheless, the joint credit reporting manual used by NCRAs, states that a delinquency must extend 30 days past the billing due date in order to be reportable; 1. *Consumer empowerment:* (a) The FCRA grants consumers the right to dispute with CRAs. Regarding the government agencies, the Federal Trade Commission and the Consumer Financial Protection Bureau do not represent individuals individually, but they may send an inquiry to the company, and if there are enough complaints or other evidence of wrongdoing by the company, they may take legal action against the company; 1. (b) Consumers have access to the data collected about them by CRAs and once a year this access is free of charge, this according to the FCRA; 2. (c) Consumers’ data are collected automatically, without their consent; 0.

Sweden: Market restrictions: (a) Only companies that have a license from the Swedish Data Inspection Board. Currently there are 15 companies that have been granted a license to work with credit information; 1. (b) Data are furnished from public registers (such as the Swedish Tax Agency, the Enforcement Agency, land-keeping authority, the Swedish Companies Registration Office, and more), and financial institutions; the regulation does not state which institutions can furnish data; 1. (c) Financial data about defaults from the Kronofogden and loan brokers, credit data from banks and income figures from the tax authority; 1. (d) Complementary data cannot be collected; 3. (e) Government payments (childcare or driving fines) are collected immediately; with private companies a delinquency must extend 30 days past the billing due date in order to be reportable. During this time, a notification letter will be sent to the person in question with information about the payment remark and registration date; 0. *Consumer empowerment:* (a) Consumers can bring their dispute to the data inspection authority and also to the CRAs; 2. (b) Consumers have access to the data collected about them as well as to the identity of data providers; 3. (c) Consumers’ data are collected automatically, without their consent, this according to the Credit Information Act; 0.

France: Market restrictions: (a) Data are collected to a database held by the public registry—the National Register of Household Credit Repayment Incidents—which is under the

supervision of the Banque de France; 2. (b) Data are furnished from the French over-indebtedness commissions and from authorized financial institutions; 2. (c) Only negative data about the incidents on all types of credit granted for nonprofessional purposes, including overdrafts and repayment schedules; 3. (d) Complementary data cannot be collected; 3. (e) The threshold for incidents and overdrafts is about 500 euro. Also, an incident is reported to the Banque de France after 1 month has passed the billing due date; 3. *Consumer empowerment*:

- (a) Both The French Data Protection Authority (“CNIL”) and Banque de France deal with citizens’ complaints; 2. (b) The reporting institution must inform the borrower about the inscription in the database, therefore the consumer is informed what data are reported and by whom; 3. (c) Data are collected automatically on debtors without their consent; 1.

Israel: Market restrictions: (a) Data are collected to a database held by the Bank of Israel; 2. (b) Data are furnished from public sources (such as the Official Receiver, Bank of Israel, Writ of Execution), courts, and authorized financial institutions; 2. (c) Both negative data about payment disarrays and credit data can be collected. Credit data include information such as: the type of credit transactions, the purpose for taking the credit, terms and conditions, payments history; 2. (d) Complementary data cannot be collected; 3. (e) A delinquency must extend 30 days past the billing due date and the amount of debt must be higher than 200 NIS (in the case of a bank), or 60 days past the billing due date and the amount of debt must be higher than 500 NIS (in the case of “certified sources”); 3. *Consumer empowerment*: (a) Despite the fact that the Bank of Israel is the data collector, it is also responsible for dealing with citizens’ complaints; 1. (b) Consumers can have access to the data collected about them and to the identity of data providers; 3. (c) Data are collected automatically without a consumer’s consent, unless the consumer requests to stop the collection of data about him (and on condition that they are not a high-risk consumer); 2.

B.2. The profiling regimes

United States: Market restrictions: (a) Commercial companies calculate the score, the major ones being FICO and Vantage Score, but besides them many other alternative scoring companies and data brokers have developed the technological infrastructure enabling them to score individuals; 1. (b) Score producers are not subject to regulatory supervision of the calculation of scores and data processing; 0. (c) Scores can be calculated using all types of data except discriminatory data such as race, national origin, age, or gender, this according to the Equal Credit Opportunity Act (ECOA); the data used by alternative scoring companies are even more pervasive and may rely on thousands of data points, not all related to traditional financial risk, for example: educational history, employment history, and even seemingly nonfinancial information such as social media data; 0. *Consumer empowerment*: (a) Consumers have the right to file a brief statement, often referred to as an “explanatory statement,” explaining their dispute; 2. (b) The credit score individuals have access to is an “educational score,” which differs from the score lenders use to make loan decisions; 2. (c) Consent from the consumer is not required; (Id.) Some companies, like Fair Isaac, the makers of the FICO score, do give the weights of various criteria that they look at, but this is not a binding restriction, and other scoring companies are not transparent about the data used for the calculation of scores; 1. *Sweden: Market restrictions*: (a) Any company planning to conduct credit-scoring operations must have a license from The Data Protection Authority; 2. (b) The Data Inspection Board is authorized to check what data is being used in the scoring model; 2. (c) The data that can be used to calculate the score includes data on defaults, public identifying data, credit data, and

TABLE B 1 Detailed scores for the four countries and subregimes

		Consumer protection measures	United States	Sweden	France	Israel	
Data collection	Market restrictions	Data collection	0	1	2	2	
		Data providers	0	1	2	2	
		Collection of financial data	0	1	3	2	
		Collection of complementary data	0	3	3	3	
		Restriction on reporting data about defaults	1	0	3	3	
	Consumer empowerment	Investigation of disputes	1	2	2	1	
		Access to the data collected	2	3	3	3	
		Consent mechanism	0	0	1	2	
	Total collection regime			4	11	19	18
	Profiling	Market restrictions	Scoring producers	1	2	3	2
Supervision of the scoring Producers			0	2	3	1	
Data used for scoring			0	1	3	2	
Consumer empowerment		Consumers rights in case of a dispute	2	3	0	2	
		Access to scores by Individuals	2	3	0	3	
		Consent mechanism	1	1	0	1	
		Transparency of data used to process the score	1	0	1	0	
Total profiling regime			7	12	10	11	
Data use	Market restrictions	Access to the data	0	0	2	2	
		Score use restrictions	0	1	3	3	
		Data use restrictions	0	1	3	3	
		Prerequisites for data use	1	1	2	3	
		Time limitation on data use	1	2	1	2	
	Consumer empowerment	Informing an individual about data use	1	3	1	1	
		Consent mechanism	0	0	1	3	
		Transparency about the data users	1	3	0	3	
	Total use regime			4	11	13	20

personal data (such as a person's age or family status); 1. *Consumer empowerment*: (a) CRAs must have an investigation department with employees who examine individuals' disputes; 3. (b) Individuals automatically get a copy of the score accessed by other entities; 3. (c) Consumers' data can be processed without the consent of the individual, this according to

the Credit Information Act; 1. (d) Score producers are not transparent about the data used for the score; 0.

France: Market restrictions: (a) Scores are calculated only by the financial institutions about their own costumers; 3. (b) Financial regulators check that the risk assessment procedures taken by banks are accurate; 3. (c) The only source of information for credit providers is the FICP, which gives them access only to publicly identifying data and defaults; 3. *Consumer empowerment:* (a) A consumer is not entitled to appeal the score; 0. (b) Consumers cannot access their personal score; 0. (c) Scores are not produced by intermediaries, but only by banks; 0. (d) Each bank has its own policy; 1.

Israel: Market restrictions: (a) Credit scores are calculated by lenders and by private companies holding a license; 2. (b) The Bank of Israel is authorized to check that the score producers use accurate data; 1. (c) The data that can be used include data on defaults, public identifying data, credit data; 2. *Consumer empowerment:* (a) Consumers have the right to file a brief statement, often referred to as an “explanatory statement,” explaining their dispute; 2. (b) Individuals can ask for the score accessed by other entities; 3. (c) Consent from the consumer is not required; 1. (d) Score producers are not transparent about the data used for the score; 0.

B.3. The use regimes

United States: Market restrictions: (a) Access to the data is determined in commercial agreements between CRAs and other institutions; 0. (b) Scores can be used in all economic spheres; 0. (c) According to the FCRA, if an entity has a legitimate business need, it can use the data for any purpose; 0. (d) To use the data the data user must provide the national security number of the citizen; 1. (e) Late or missed payments, accounts that have been sent to collection agencies, accounts not being paid as agreed, or bankruptcies stay on credit reports for approximately 7 years; 1. *Consumer empowerment:* (a) When a data user takes adverse action on the basis of information contained in a consumer report, he is obligated to provide the consumer with oral, written, or electronic notice of the adverse action; 1. (b) *According to the Fair Credit Reporting Act, credit grantors with a permissible purpose may inquire about a person's credit information without their prior consent;* in some states individuals' permission is required when data are used for employment purposes; 0. (c) The three NCRAs provide consumers with access to the list of data users and also the date on which the data were accessed. Nonetheless, this is not a binding practice and each CRA adopts a different policy on this issue; 1.

Sweden: Market restrictions: (a) In some companies, for example, Bisode, access to the data are determined though trade agreements. But in UC, the major CRA in Sweden, a closed users group consisting of industry players decides which institutions are allowed to use the data; 0. (b) Scores are used in consumer credit, companies that advance goods or services to consumers that will be paid at a later stage (such as cellular or utilities companies), and for residence shopping; 1. (c) Credit intermediaries use the data to target potential consumers, market and supply them with credit products; 1. (d) To use the data the data user must provide the citizens' ID number; 1. (e) The time in which data can be used are limited to 1 to 3 years; 2. *Consumer empowerment:* (a) The individual gets a copy of the data and score from the credit bureau every time their data are used, this according to the Credit Information Act in Sweden; 3. (b) Data are used automatically and the consumer's consent is not required; 0. (c) Consumers have access to the identity of data users and the dates on which they used the data; 3.

France: Market restrictions: (a) The state determines who gets access to the data; 2. (b) Scores are used only for consumer credit; 3. (c) Data can be used for credit decisions and also for policymaking and supervision by the central bank; 3. (d) To use the data the financial institution must provide a citizen's bank or credit card account numbers in addition to his ID number; 2. (e) Records of judicial measures and repayment plans are kept for 8 years; 1. *Consumer empowerment:* (a) Individuals are informed if the use of their data have worsened their credit terms or denies them access to credit; 1. (b) Data are used automatically on debtors without their consent; 1. (c) Consumers do not have access to the list of data users; 0.

Israel: Market restrictions: (a) The state determines who gets access to the data; 2. (b) Scores are used only for consumer credit; 3. (c) Data can be used for credit decisions and also for policymaking and supervision by the central bank; 3. (d) Permission from the individual is required and the individual can also restrict its validity to a limited time period; 3. (e) The time in which data can be used are limited to 3 years; 2. *Consumer empowerment:* (a) Individuals are informed if the use of their data has worsened their credit terms or denies them access to credit; 1. (b) A consumer must give his consent every time before data are used; 3. (c) Consumers have access to the identity of data users and the dates on which they used the data; 3.

2. National Varieties Still Matter:

A Comparative Analysis of Consumer Credit Data Regimes in the US, Sweden, Israel, and France

Abstract

Before we ask *why* countries vary, we should ask *how* they differ and which difference is more significant in terms of their historical institutional tradition. This argument is demonstrated via a stepwise comparative analysis of consumer credit data regimes in the US, Sweden, France, and Israel regarding two regulatory dimensions: business restrictions and consumer empowerment. Stressing the different state-driven patterns and logics of political economic interaction, this article explains why countries with different capitalist systems have taken similar paths towards regulating businesses. The study explores variation on the conventional businesses' restriction dimension, and underscores two distinctive country clusters (the US and Sweden who rank low on the BR dimension, compared to France and Israel), but also points to variation within these country clusters on the consumer empowerment dimension. The last section explains the differences between and within these two country clusters. The paper concludes that considering the empowerment dimension is crucial to understand how politics is expressed in current regulatory governance order, but more significantly it is important for understanding how nations matter in the regulatory arena.

Key words: comparative political economy; national variation; regulatory strategies; consumer credit data; stepwise comparative method.

Introduction

Scholars inspired by national models of capitalism approach tend to understand states' capacities as varying along a continuum from *faire* to *laissez-faire*. Nonetheless, extensive scholarship suggests that the standard binary understanding of the state's role in terms of interventionist vs. non-interventionist is misleading, and state involvement should be perceived in terms of qualitative differences in the modes by which it structures markets (Levi-Faur, 2005; Vogel, 2018, 1996; Schmidt 2007). Following that literature, this research uses a consumer regulation measurement scheme developed by Mizrahi-Borohovich & Levi-Faur (2020), which distinguishes between two regulatory dimensions: Business restriction (BR) and consumer empowerment (CE), to explain the different paths taken towards regulating consumer credit data, and to discuss how we should approach variations in regulatory regimes while still drawing on the literature suggesting that nations matter.

This paper focuses on the governance of consumer credit data, demonstrating the social complexities of the interplay between technology, politics, and economics. Consumer credit data lies at the forefront of the surveillance economy and its regulatory governance can be transparent, punitive, reliable, or fair to individuals to a lesser or greater degree. The two regulatory strategies interact in various ways, creating different regulatory regimes which vary in their normative, legislative, and constructive frameworks. Studying the consumer credit data regulatory governance is thus increasingly important for both consumer welfare and the promotion and protection of liberal society.

As mentioned above, credit data regulation is applied through two distinct regulatory dimensions (Mizrahi-Borohovich & Levi-Faur, 2020): BR is the conventional approach often examined in the national models of capitalism literature. It is directed towards *businesses* and imposes on them legal boundaries and restrictions such as limitations on the scope of data collected or licensing requirements. CE regulates and empowers *consumers* by giving them rights and tools to navigate the market and improve decision-making skills, e.g. the right to dispute, or access to data collected. This strategy builds on notions of the "consumer-citizen" and the governmental technique of responsabilization (Shamir, 2008) through which the state holds individuals accountable for aspects of market governance and social security that it formerly provided.

As the national models of capitalism approach guides our expectations regarding the BR dimension, the paper traces the surprising similarity between the 'corporatist' Swedish state and the 'liberal' US who have limited restrictions on businesses and rank low on the BR dimension. To explain this surprising result the paper compares two different country clusters:

one comprising the US and Sweden which rank low on the BR dimension, the other comprising France and Israel, which rank high on the BR dimension. But these paradoxes should not obscure the differences on the CE dimension, wherein the US has a lower score compared to Sweden, and France has a lower score compared to Israel. The paper traces these similarities and differences between the country clusters by applying the stepwise comparative analysis approach (Levi-Faur, 2006).

The article is organized into five sections. The first reviews the literature and underlines the explanatory framework presented in this article. Section two outlines the methodology and case selection. Section three describes the regulatory regimes in the four countries. The fourth and fifth sections explain the differences across the countries, initially on the BR dimension and within the countries on CE. The final section discusses the results and inferences.

1. Varieties of Capitalism on method not extent

The study of politics in general and comparative political economy specifically emphasizes the notion of variations of capitalism. The foundation for the discovery of distinct models of capitalism was laid during the second half of the twentieth century, following the liberalization changes from the 1970s onwards. The “national models of capitalism” approach is founded on Andrew Shonfield’s (1965) seminal *Modern Capitalism*, which explored the diversity of postwar models of capitalism and varying relationships between the state and interest groups. Scholars identified with the national models of capitalism approach tend to view states’ capacities as constitutive of fairly predictable policy patterns, perceiving variance along a continuum from *faire* to *laissez faire* on each national variety.

Three distinctive state-driven patterns and logics of political economic interaction with business and labor are conceivable: liberal, corporatist and statist (Shonfield, 1965). Liberal states, like the US and UK, take an arm’s length approach to business and labor, and are generally expected to intervene minimally in the market. In corporatist states, identified with Scandinavian countries, the state is more present thus the political authority is divided through a collective bargaining system and consensus is highly valued. In statist countries such as France, the state tends to intervene rapidly and extensively where it sees a need to reshape the general economic and social environment.

However, as research has shown, states may not act as expected per their particular variety of capitalism. Specifically, corporatist states², despite their ideal-typical nonmarket

² In the article the authors use different terminology, corporatist states are named *enabling* states.

preservation function, may act to deregulate the economy in ways that jeopardize nonmarket coordination (Schmidt, 2009). Also, studies have found that statist states might play a pivotal role in initiating and advancing the liberalization of the economy and its growing integration into global markets (Maman and Rosenhek, 2012; Abdelal 2007; Etchemendy 2004). In addition, liberal states may appear much more interventionist than expected, either through direct government action or through regulatory agencies (Moran, 2003). Also, regulation scholars have discussed the applicability of ‘classic models’ in explaining variation in regulatory institutions and practices at the national and sectoral level (Levi-Faur, 2006; Bartle, 2006), particularly in the field of social policy (Menz, 2017, Haber, 2015).

The reason why the policy mix of states in different capitalist models appears unexpected results from the conventional yet reductionist method of examining government control over markets. The standard binary understanding of the state’s role in terms of interventionist vs. non-interventionist is misleading, and state involvement should be perceived in terms of qualitative differences in the modes by which it structures markets (Levi-Faur, 2005; Vogel, 2018, 1996; Schmidt 2007). Vogel (1996) argues that the changes in state-society relations since 1975, and the ensuing trend of regulatory reforms, represent not deregulation but a combination of liberalization and re-regulation. Similarly, Schmidt (2009) proposes to add another dimension to the distinction between states; in addition to the simple continuum from *faire* (state action) to *laissez-faire* (market action), states also move toward *faire-faire* (state-set guidelines for market action) or *faire avec* (state acting with market actors). Continuing this line of argument, I suggest adding to the conventional BR dimensions the CE dimension to better capture and explain variance across countries.

1.1 Explanatory framework

The case analysis has been guided by four regulation theories: public interest, private interests, ideas and institutions. The first perspective suggests that public welfare is the driving force behind regulation. This functionalist approach regards policy-making as a more or less rational process of problem-solving. According to this approach, regulation would develop in response to national economic challenges and focusing event exacerbated them. In the context of credit data markets two major economic problems are conceivable: high level of consumer credit and bankruptcy.

Thus, to respond to social needs and reduce excessive debt, regulation would involve minimal restriction on access to consumer credit data while providing the consumer with greater tools

to act responsibly. Therefore, high levels of consumer credit and bankruptcy may result in a low score on BR and high score on CE.

The second approach focuses on power and suggests that economic actors are pressing the state to protect their interests (Stigler, 1971). In consumer policies, economic groups which are small groups with high stakes in policy, could press their views more effectively and exert more influence on the policy making process than larger groups with a smaller stake per capita, such as consumers (Strünck, 2005). According to this approach, regulation would develop in response to pressures from consumer lenders and the financial information service industry - specifically, these groups may exert pressures resulting in low scores both on BR and CE.

A perspective focused on ideas argues that regulation is affected by ideologies (Campbell, 2002; Schmidt, 2008). According to this approach, regulation would develop according to the manner in which policy makers perceive the proper goals of government regulation and market promotion. In this case, the dominant ideas may emphasize either the *regulation for competition* rationale to develop the credit data markets, or the market failure rationale (*regulation of competition*) to prevent anti-competitive behavior in them (Levi-Faur, 1999). According to the market creation rationale, regulation should reduce the information monopoly of individual lenders and the competitive advantage of large financial institutions by enabling the exchange of information on consumers between lenders (through low BR) while ensuring the consumer interest is protected through empowerment. However, according to the market failure rationale regulation should nurture competition in the market and focus on concerns over market competition and power in credit data markets³ by providing greater business restrictions. As this type of regulation is mainly narrow and aimed at correcting market failures, consumer empowerment would be beyond its scope. Specifically, policy goals emphasizing market creation (i.e., regulation for-competition) rather than protection of competition may result in a low score on BR and high score on CE.

An institutionalist perspective would focus on established policies and their influence on regulation. Historically evolved policies operate as constraints and as a strategic resource for actors engaged in contests over the types of practices that are coded as appropriate or desirable (Pierson, 2000; Thelen, 2003). Applying this approach to credit data regulation may suggest that regulation would develop in response to the welfare state context. The political economy literature has long recognized the relationship between financial markets and welfare

³ These are typical problems in the credit data market as credit information systems are natural monopolies (the wider the coverage, the higher the system's efficacy) (Ferreti, (Ferretti, 2014; Jentzsch, 2007).

states as substitutive (Kumhof, Ranci re and Winant 2015; Rajan 2010; Ahlquist and Ansell 2017; Prasad 2012). Indeed, scholars like Colin Crouch (2011), Raghuram Rajan (2010), Wolfgang Streeck (2011) and Monica Prasad (2012) have all observed lawmakers around the world using easy credit to compensate citizens for low wages and frayed social safety nets in the era of neoliberalism. Recently, Wiedemann (2021) has shed light on the conventional understanding in political economy regarding the relations between credit and welfare state and showed that the credit markets not only substitute for limited welfare states but also coexist with comprehensive but stratified welfare states as credit markets come into play for individuals who are incompletely covered by the welfare system. This scholarship promotes the assumption that regulation would develop in response to the ways in which welfare states distribute social benefits across individuals, as it impacts the socio-economic problems that policy-makers face and creates vested interests, which in turn impact the extent to which they are likely to introduce regulation to entice lenders to lend and consumers to borrow. As each strategy affects either the supply or the demand for credit, the institutional context may affect them differently; BR affects the supply of credit, as extensive access to credit data tends to be perceived as a significant facilitator of access to more affordable and better-quality credit for consumers.⁴ CE affects the demand side, as it is aimed at enhancing consumers' confidence in the market through the provision of information and rights. Thus, it is expected that weak coverage for affluent groups and inadequate protection for them by welfare would result in a low score on BR and high score on CE.

2. Methodology

To explain the differences on both dimensions, this research conducts a stepwise comparative analysis (Levi-Faur, 2006). Cases were chosen according to two major considerations: first, they vary along the two regulatory dimensions (Mizrahi-Borohovich & Levi-Faur, 2020)⁵ (Figure 1). Of the four countries, the United States was found to have the lowest level of consumer protection (its Total National Score stands at 22%) and to be more dominated by CE (33%) than BR strategies (10%). Sweden has the second-lowest level of consumer protection

⁴ OECD, Facilitating access to finance - Discussion Paper on Credit Information Sharing, at <https://www1.oecd.org/globalrelations/45370071.pdf>; Those claims are based on the economic literature on credit reporting systems, that argues that the "free" collection, processing and distribution of consumer credit data improves the risk assessment process in lending decisions and thus increases lending rates in a country (Barron & Staten, 2003; Jappelli & Pagano, 2002).

⁵ Minor differences can be seen between the numbers presented here and the scores presented in the first paper of the dissertation, due to changes taking place as part of the index's validation and development. The updated index is presented in the Appendices (1,2, and 3).

in the group (its Total National Score stands at 56%) and also, like the US, it is dominated by CE (77%) rather than BR strategies (41%). France has a relatively high level of consumer protection (Total National Score 57%) and it is dominated by BR (87%) rather than CE strategies (27%). Israel has the highest level of consumer protection (Total National Score 73%) and like France, is dominated by BR strategies (79%) but is, unlike France, also high in CE strategies (67%).

Second, the countries (except Israel) are conventionally representative cases of CPE typologies representing distinctive pattern of state action and interaction with business and labor. The United States represents the liberal – perhaps extreme – type of capitalism. Sweden is known for its corporatists structure and unusual system that combines enormous social protection for the individual with a remarkably liberal economy’ (Steinmo, 2010). France is often described as illiberal and interventionist with the state being more active in structuring economic relations (Schmidt 1996; 2002 ch.6). Israel is often regarded as a formerly statist country which has experienced intensified liberalization processes since 2000, particularly in finance (Maron & Shalev, 2017; Maman & Rosenhek, 2012).

The empirical data was gathered through document analysis and semi-structured interviews. The document analysis involved collecting publicly available policy papers, reports, and statements from government agencies, as well as legislation and regulation. Furthermore, interviews with 24 stakeholders were conducted between the years 2017-2020. The interviewees were from different types of organizations including private credit bureaus, financial regulators, privacy authorities and academic scholars.

3. A comparison of the consumer credit data regimes in four countries

This section outlines significant divergences in state’ patterns towards the regulation of businesses in credit data market, as indicated by the measurement of business restrictions. The four countries examined fall into two distinct clusters: on the one hand, the US and Sweden which introduce minimal BR regulation and highly developed credit data industry, and on the other hand France and Israel, which introduce expansive BR regulation and limited credit data industry.⁶ The differences within the country clusters in regard to the level of consumer empowerment are also described.

⁶ The specific regulatory principles on both dimensions for each country are presented in Mizrahi-Borohovich & Levi-Faur (2020).

Cluster One: business-driven regulation

The United States.

Public credit information services evolved in the first half of the nineteenth century. Initially, credit reporting companies were mainly local, as merchant associations traded financial information about their customers (Olegario, 2000). By the late 19th century, these associations had become institutionalized in the form of independent credit bureaus; by 1950 there were 1,500 commercial rating agencies in the US (Trumbull, 2010). Over the years, the industry has developed within a loose regulatory environment allowing credit bureaus to accumulate erroneous records, with intrusive characterizations and prejudiced or biased reports. Also, information-sharing about solvency, prospects, and the personal character of individuals was common and credit bureaus behaved secretly and tried to avoid contact with consumers (Jentzsch, 2007; Marron, 2007). Concerns were also raised regarding how the industry exacerbates inequality (Citron & Pasquale, 2014; Fourcade & Healy, 2013; Rona-Tas, 2016), and promotes a culture of credit use and of “life in debt” (Fourcade & Healy, 2017; Marron, 2009; Poon, 2013). Against this background, consumer organizations exerted pressure to regulate the credit reporting industry. The regulatory and legal environment in the US evolved much later than the credit industry, and even after the regulatory changes it still lags behind the increasing technological innovations and new business models and has limited success in enhancing the protection of consumers and improving fairness (Mierzwinski & Chester, 2012; Roderick, 2014). The industry was first regulated in 1971 with the initiation of the FCRA. Despite being considered the most important law in the history of the US credit reporting industry, it failed to solve the multiple problems that the industry had created. For 25 years, any attempt to bring about further regulatory change was stalled by strong objection from the industry (Jentzsh, 2007). In 2010, under the Dodd-Frank Act, the Consumer Financial Protection Bureau (CFPB) was established as the main authority [supervising the](#) credit data industry. Under the Trump administration, the authority has been weakened to great extent and law enforcement activity at the CFPB dropped precipitously.⁷ The US credit data industry has evolved as one of the most powerful institutions in contemporary American life and as one of the most developed in the world (Lauer, 2010). There are four main companies which lead the industry: the “Big Three” consumer reporting agencies (Trans Union, Equifax, and Experian) that each maintain files on and score more than 200 million Americans, and FICO which

⁷ Peterson, C. L. (2019) *Dormant: The Consumer Financial Protection Bureau's Law Enforcement Program in Decline*, Washington D.C., Consumer Federation of America (CFA). Retrieved May 23rd, 2020 from: <https://tinyurl.com/y6kdh6xq>

specializes in credit scoring; the four companies profile nearly every credit-active consumer in the United States. All four operate as major players at the global level and have broadened their activity into more than 37 countries worldwide⁸. Besides them, there are dozens of smaller, regional, and industry-specific credit bureaus which collect their data from smaller, local lenders and then share it with one or more of the Big Three companies. In the past two decades, the credit data industry has grown steadily, with other unregulated online data firms engaged in credit-related practices. Having the ability to access multiple sources of off- and on-line information, create an online score for assessing a consumer's "intent" for a product or service, and to link it to other online records, this industry has blurred the line between the traditional definitions of consumer reporting agency and target marketing (Fourcade, & Healy, 2017; Mierzwinski & Chester, 2012).

Sweden.

As early as the 1890s, public credit information services were common, and were provided by independent credit bureaus. But lenders only started to share their data with them during the 70's; until then credit bureaus in Sweden mainly used public data held in state registries. The bureaus relied on information like taxable income and owned wealth or property, which was accessed through publicly available sources under the 1766 Freedom of Press Act and the 1949 Freedom of the Press Act, which are both regarded as integral components of the Swedish Constitution. Only in 1970, following the credit liberalization processes enhancing lenders' interests with better risk assessment methods, the six largest banks established the company Upplysningscentralen (UC) and started to share their data through it (Ölcer & Santen, 2016). Following UC, other bureaus established commercial agreements with consumer lenders and began to trade consumer data. Once private bureaus started to collect and process non-public personal information, concerns over privacy and fairness to consumers were raised by policymakers and eventually led to the legislation of the Credit Information Act in 1977. The most important change this law brought about was the Data Inspection Board's authorization to license and supervise private bureaus. The founding of independent boards was a relatively well-established Swedish practice that goes hand in hand with the long and stable legacy of statehood in that country (Frosini, 1984). The authority closely guards credit bureaus, it licenses them, and is authorized to object to the use of certain types of data by the bureaus, as it did with Creditsafe which was banned from using information about government loans and

⁸ Experian (n.d.) *About Experian*. Retrieved May 24th, 2020 from: <https://tinyurl.com/235b2ba6>
Equifax (n.d.) *Company Profile*. Retrieved May 24th, 2020 from: <https://tinyurl.com/26vda527>
Transunion (n.d.) *About Us*. Retrieved May 24th, 2020 from: <https://tinyurl.com/ppvemckh>

grants to students in their scoring models.⁹ The credit data market has become consolidated over the years with two companies, UC and Bisnode, holding 80% of the market,¹⁰ plus about 15 smaller bureaus. UC has operated since 1970s and it is Sweden's largest and leading bureau with over 141 reporting banks.

Thus, the US and Sweden are both characterized by a liberal credit data market in which private credit bureaus are limitedly regulated. Yet, one should recognize that although they belong to the same country cluster, the US and Sweden are far from being identical cases as empowerment is much more extensive in Sweden than in the US. Consumers have access to the data collected about them as well as to the identity of data providers. Also, their score is automatically sent to them each time it is accessed by lenders or other entities, and the dispute resolution mechanisms are more adequate as consumers can dispute to a state authority.

Cluster two: State-driven regulation

France.

Public credit information services evolved only in 1989, because the privacy authority, CNIL, had always applied strict data privacy principles both on public and private databases. At the time of CNIL's establishment, the credit bureau business didn't exist in France. Specifically, lenders did not rely on their services and thus they did not oppose the same strict data privacy principles being applied both on public and privately held data. Traditionally, credit was offered mainly by independent finance companies which did not depend on credit bureaus, but rather relied on retailers to assess the creditworthiness of their borrowers. Also, the number of lenders was relatively small, roughly 100 in 1970; with large internal databases, they had to worry less about outstanding loans to other lenders (Trumbull, 2014). Only in 1980, when commercial banks moved aggressively into the consumer lending sector, Bank of France proposed setting up the public credit register. The proposal was raised at a time when household indebtedness had grown from 3 to 7 percent of disposable income in only four years (1984-1988) and policymakers were looking for ways to reduce excessive debt. CNIL's strict stance remained unchanged, and despite efforts by the Bank of France to allow more extensive information to be shared, the authority used all its might to halt any proposal on the subject. CNIL claimed that positive information is susceptible to being diverted from its original purpose, since the richness of the data might lead to usage for other purposes such as marketing

⁹ Credisafe (2018, April) Interview with representative.

¹⁰ Bisnode (2018, November) Interview with representative.

or employment screening (Jentzsch, 2007). As a result of these strict regulatory practices combined with the late and limited development of the French consumer credit market, credit data industry has not evolved in France.

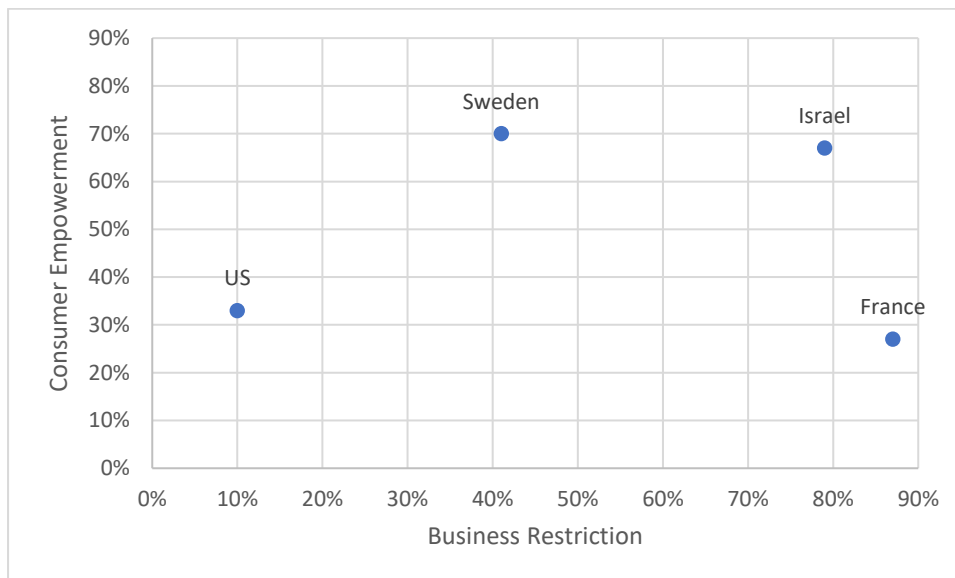
Israel.

As in France, public credit information services only started operating during the 1980s. Until 1990 the government was the main supplier of consumer credit, but since then banks have become the major credit providers. Furthermore, Israel's banking system is highly centralized; As of 2012, the two major banks, Leumi and Hapoalim, together held about 57% of credit for the public (Bank of Israel, 2018). With large internal databases, the three major banks providing consumer credit were less concerned about consumers' outstanding loans to other lenders or earlier defaults elsewhere, and efforts to create public credit data services were led by the financial regulators and government's financial advisors, rather than consumer lenders (Mizrahi-Borohovich & Levi-Faur, 2019). State regulators' motivations to further liberalize access to credit data have changed over the years, and the initial purpose of reducing the problem of bad debts has been trumped by promoting competition in the credit market. The first stage in structuring a public credit data system took place during the 1980s, when national databases were established to provide information about insolvent and high-risk consumers. Then in 2004, the Credit Data Services Law allowed private companies, for the first time, to collect and trade consumer credit data. This law was modified in 2016 and a central database held by the Bank of Israel was implemented. The legislative and regulatory framework has set obstacles for credit bureaus which have prevented this industry's development. A vivid example of this was that the data collection mechanism was determined according to the opt-in principle, which is why until 2016, data was collected only on 5% of the population and under strict limitations. Additionally, amendment of the 2016 law has granted the Bank of Israel exclusivity over consumer data. Consequently, the consumer credit information market is not highly developed in Israel and its two major credit bureaus: Dun & Bradstreet and BDI are not so dominant in the market.

Thus, France and Israel are both characterized by a tightly regulated credit data market in which private credit bureaus only operate limitedly. Yet, one should recognize that although they belong to the same country cluster, France and Israel differ in the empowerment protection they provide. Empowerment is much more extensive in Israel than in France, and consumers are also granted rights to access their data, to know which institutions have used their data, and to dispute the data.

Below, Figure 1 illustrates the countries' spread upon the two dimensions.

Figure 1: Interactions between Business Restriction and Consumer Empowerment in four countries



4. Explaining variation between and within country clusters

The above presentation of the consumer credit data regimes in the US, Sweden, France and Israel highlights the contrast between two country clusters. On the one hand are the US and Sweden with long-developed credit data industries and a regulatory framework presenting minimal BR. On the other hand are France and Israel, with conservative credit data markets and a regulatory framework introducing expansive BR. The contrast between these two country clusters should not hide the internal differences in empowerment within each cluster. As mentioned earlier, within Cluster One, United States' consumer credit data regime ranks lower on CE than Sweden. Within Cluster Two, France's consumer credit data regime ranks lower on CE than Israel. The next task is to explain these cross-national differences through two distinct pairs of comparisons drawing upon the four theoretical approaches presented earlier (public interest, private interest, ideas and institutions).

4.1 Explaining difference between two country clusters: The BR dimension

This chapter addresses the question of why the US and Sweden have lower business restriction than France and Israel; to answer this question, four potential explanations are discussed.

Social welfare

From a social welfare perspective, low BR in the US and Sweden compared to France and Israel may be related to social needs and focusing events that highlighted or exacerbated them. The findings show no clear connection between social need and low BR. On the one hand, the comparative analysis shows that the extent of BR is indeed contingent upon the level of household debts but not upon the level of bankruptcy. Indeed, the level of consumer debts (as percentage of GDP) has been consistently higher in the US and Sweden compared to France and Israel since 1990 (Table 1). Nonetheless, problems of bankruptcy are less severe in Sweden than in the US; the US’s bankruptcy statistics indicate that the number of bankruptcy filings in 2018 was 753,333.¹¹ In Sweden, the District Courts rendered judgments on 141 bankruptcies involving private individuals.¹² thus, it cannot be concluded that low level of BR results from social needs. Furthermore, comparison of the cases shows that the same policy response may or may not be elicited by focusing events, such as credit booms. For example, in 1980 both the US and France experienced a boom in credit extension. Even though in nominal terms the level of indebtedness in France only reached the level of indebtedness already experienced by US households in the early 1950s, the growth rate was high; in four years the level of debt in France has doubled and grown from 3 to 7 percent of disposable income. Also the share of households with outstanding consumer debt increased from 39 percent to 53 percent. (Trumbull, 2014). Nonetheless, France, unlike the US, has resisted the sharing of positive credit data which was introduced by the 1989 credit data reform’s advocates as a way to reduce excessive debt.

Table 1: level of consumer debts (percent of GDP)¹³

Country	1995	2010	2018
The U.S.	64.37	91.63	75.86
Sweden	43.92	76	87.87
France	34.1	53.73	60
Israel	34.7	39.66	41.85

¹¹ United States Courts web, June 2018 Bankruptcy Filings Fall 2.6 Percent, retrieved from: <https://www.uscourts.gov/news/2018/07/24/june-2018-bankruptcy-filings-fall-26-percent>

¹² Statistics Sweden (SCB) web, finding statistics, retrieved from: http://www.statistikdatabasen.scb.se/pxweb/en/ssd/START_NV_NV1401/KonkurserForet07/?rxid=c623390a-dd8c-4615-92ca-2cb0ead92c53#

Power and private interests

An explanation focused on power would suggest that low BR in the US and Sweden compared to France and Israel may be related to pressures exerted by credit bureaus and major consumer lenders. This explanation lacks significant evidence. The evidence from Sweden undermines any explanation based on market actors' effects. First, banks in Sweden do not seem to have an interest in minimal BR regulation, but rather the contrary; this is because of the credit market structure. Even more than in France and Israel, Sweden's banking sector is highly concentrated¹⁴ and controlled by the four big banks which accounting for 70 percent of domestic deposits. The level of banking concentration in Sweden has already been high since the 1990s, and it has increased further in the second half of the 2000s (See figure 2). This may explain why powerful consumer lenders may not exert pressures to reduce boundaries on the access to their data; large banks, which have a competitive advantage in the market, prefer to keep their monopoly on information and are less in favor of sharing their data (Guseva & Ronat, 2014).

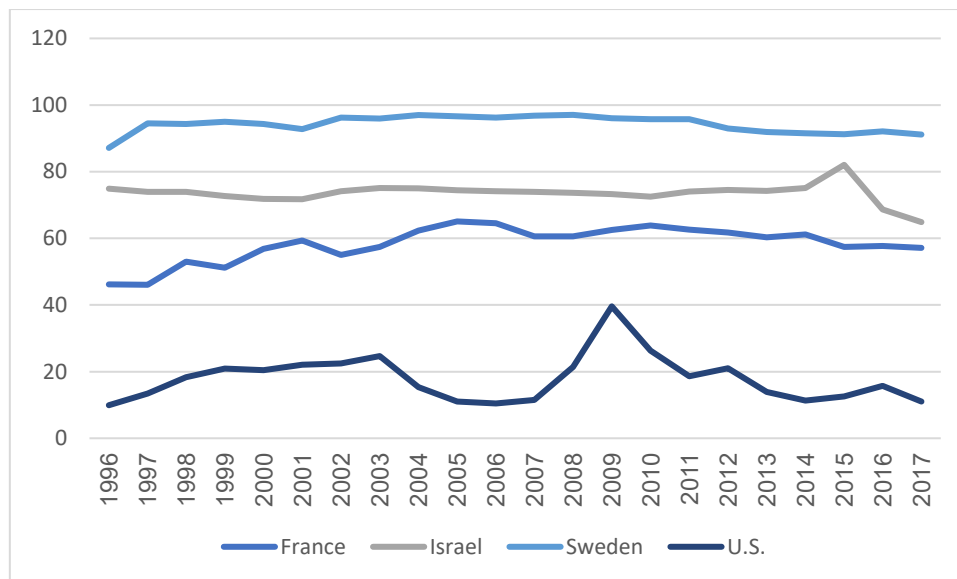
A similar conclusion appears when considering the influences of financial information companies in Sweden. While credit bureaus by and large tend to resist business restriction, Sweden's case exemplifies a circumstance in which credit bureaus favor some kind of restrictions due to the structure of the credit information market. For example, the major credit bureau in Sweden (UC) was until recently owned by the six large banks in Sweden, and therefore it supported restrictions on the scope of collectable data as well as on the range of institutions having access to the data. Thus, credit bureaus' approach towards certain BR regulations depends also upon the institutional structure of the credit providers operating in this market.

In addition, Sweden's credit bureaus seem less well-organized compared to the US and didn't appear to operate or act upon a common interest. Whereas credit bureaus in the US established an association called the National Consumer Reporting Association through which they represent their interest in the policymaking process, no equivalent organization exists in Sweden and the industry is less consolidated than in the US.

Figure 2: Bank concentration level, percentages, 1996-2017¹⁵

¹⁴ Data is based on the bank concentration index calculated by the World Bank; concentration level is calculated as the fraction of assets held by the three largest banks.

¹⁵ Data retrieved from global financial development database, The World Bank
<https://www.worldbank.org/en/publication/gfdr/data/global-financial-development-database>



Ideas

An explanation focused on ideas would suggest that low BR in the US and Sweden compared to France and Israel may be related to the manner in which policy makers perceive the proper goals of government regulation and promotion of markets. The evidence from Israel does not support ideational explanation. Even though ideas of regulation for competition are dominant in Israel, business restrictions are high. Bureaucrats, primarily from the treasury, The Bank of Israel, and the national economic council all highlighted how the idea of establishing a competitive credit data market is essential for the maximizing efficiency in the Israeli credit market. As one important advisor to the Bank of Israel, who was also former commissioner of the antitrust authority, stated in his interview: “The role of regulation is to allow as much transparency as possible regarding consumers’ risks, in order to enable the market to have a competitive dynamic and create a ‘threatened’ market that simulates a competitive price”.¹⁶ Also the governmental committee that was authorized to explore improvements in the Israeli Credit Data System has emphasized the state’s role in promoting the credit data market: “knowledge is power, and in order for this power to be used for the welfare of the public (and not just for the welfare of the great lenders), it must be ensured that no lender has a monopoly on information...This is exactly the task assigned to the committee: to create a symmetrical infrastructure of information that is a basic condition and necessary for competition in the credit market in Israel”.¹⁷ However, the strength of such arguments was limited in practice, and even

¹⁶ Interview with Dror Shtrum, 2015.

¹⁷ National Economic Council. The Committee for the Improvement of the Credit Data Sharing System, AUG 2015,

though they were raised still business restrictions are still low in Israel. Despite the dominance of the approach emphasizing regulation for competition rationale, i.e., the creation of credit data market, this market is still strictly limited.

Existing institutions and policy context: The role of the welfare state

An institutional approach would suggest that low BR in the US and Sweden compared to France and Israel may be related to the structure of the welfare state, and specifically to differences in the ways in which welfare states distribute social benefits across individuals. Evidence shows that existing welfare state institutions impact the way social problems develop and set the context within which BR are developed. The US is a residual welfare state which provides limited social policy coverage, mainly for those with demonstrable need (Esping-Andersen, 1990). Therefore, credit has become a private alternative to public social policies (Prasad, 2012; Trumbull, 2014). Furthermore, Wiedemann (2021) provides micro-level evidence that households borrow money as a consequence of varying social policy generosity and shows that for unsecured credit, which is a key source of liquidity during times of economic distress, indebtedness stretches across the income spectrum and is particularly prevalent among financially vulnerable low-income groups. Unlike the US, in Sweden credit has not evolved as a substitute for welfare but rather as complementary. The Swedish model, having a universalistic structure, takes particular care of its low-income population; the set-up with flat-rate benefits and proportional taxation allows individuals to ‘receive *on average* the same sum in the form of cash benefits or subsidized public services’ independently of their income (p. 219). Thus, despite the lack of progressive taxation, the universalistic model crowds out less egalitarian institutions (such as market insurance) and has a redistributive character (Rothstein, 2001; Korpi & Palme, 1998). This is known as the ‘paradox of redistribution’ because of the somewhat counterintuitive finding that in a system wherein low, middle and high-income earners are equally entitled to benefits, low earners gain the most as ‘taxes are usually relative (percentage of income for example) and benefits or services are nominal’ (Rothstein 2001, p. 219). Furthermore, values of social democracy and equality made up the basis for the creation of the social democratic regime (Esping-Andersen, 1990), and therefore the high and middle layer populations, who are incompletely covered by the welfare state, are more likely to experience financial shortfalls and thus tend to rely on credit to fill financial gaps. Sweden’s indebtedness level is extremely high despite its generous welfare state. Based on a survey conducted in the wake of the financial crisis in 2008 and 2009 to check how individuals in

different countries address income losses, Wiedemann (2019) shows that in Sweden comprehensive welfare states and credit markets complement each other in providing individuals with financial liquidity. In the survey, some of Sweden's respondents indicated they rely on government transfers, while others borrow money to address income losses. This contrasts with liberal welfare states such as the UK, where borrowing was found to be more heavily utilized by individuals compared to government transfers,

Conversely, the French and Israeli welfare models primarily benefit the middle and upper economic classes, where these groups depend less on borrowing money to address socio-economic risks and income losses. The French model exemplifies the corporatist model in Esping-Andersen's typology, that provides extensive benefits but these benefits are nearly entirely dependent on contributions from employment (Esping-Andersen, 1990, p. 22). In this model the state upholds existing class status differences and traditional family models and is not very redistributive in its actions. As Timothy B. Smith suggests in *France in Crisis*, "French social policy is not geared towards the interests of those stuck in poverty and the 2.5 million unemployed" (2004, p. 6). Money is instead channeled to the so-called "insiders", the comfortably employed who make up the welfare state's main supporters. As social policies provide financial support for middle and high groups, i.e., for the majority of consumer borrowers, credit is not so central in France as it is in the US or Sweden. Debt levels in France are visibly low compared to the US and Sweden (Table 1). Similarly, in Israel the welfare state provides economic and social security on different levels to different population groups according to ethnic origin, nationality, and citizenship (Rosenhak, 2007). This has been embedded in the Israeli welfare state since its establishment, with extensive clientelist networks having distributed various resources in the fields of labor, housing, education, and social security in exchange for party loyalty (Doron, 2003). In light of the development of these networks, programs based on the pattern of categorical benefits have been ingrained in the Israeli welfare state, with half of total social security spending devoted to categorical programs (Gal, 2008). Since social policies provide financial support to middle and high income groups, the likelihood of individuals' experiencing financial shortfalls and thus needing to rely on credit to fill financial gaps is reduced. As in France, Israel's debt levels are visibly low compared to the US and Sweden. Further to this (and unlike Sweden, for example) its welfare policy is characterized by the allocation of scant resources for programs that raise the level of equality and reduce social stratification, such as employment policy, housing, support for families with children and old age benefits (Shalev, Gal and Azri-Wiesel, 2012). Consequently, inequality

rates in Israel are among the highest compared to Western countries.¹⁸

4.2 Explaining difference within each cluster: The consumer empowerment dimension

This chapter explains (1) why the US has lower CE than Sweden, and (2) why France has lower CE than Israel. To answer these questions, it discusses four potential explanations.

Social welfare

A social approach would suggest that low CE in the US compared to Sweden may be related to less severe social need there than in Sweden. The evidence regarding this explanation is mixed: on the one hand, comparison of the cases shows that long-term changes in social needs may or may not elicit the same policy response. While both Sweden and the US have experienced high levels of consumer debt (as shown in the data presented in Table 1), Sweden's CE is higher than the US. On the other hand, as already mentioned, the number of bankruptcy filings in Sweden is considerably lower than the US, seeming to indicate ties between social needs and provision of CE.

Regarding Cluster Two, an explanation focused on social need would suggest that that low CE in France compared to Israel may reflect less severe social need there than in Israel. Yet the evidence shows that social needs cannot account for the differences between France and Israel: neither country has serious problems of consumer debts, and their bankruptcy levels are relatively low: in Israel there were 168,268 filings (Bank of Israel, 2018) and in France 162,936 (Bank of France, 2018). Thus, variation in social need cannot explain the aforementioned differences between them (i.e., low level of empowerment in France compared to Israel).

Power of interest

An explanation focused on power would suggest that low CE in the US compared to Sweden may be related to pressures exerted by credit bureaus and major consumer lenders. The evidence supports this explanation. Regarding the credit data industry, even though it is structured upon private, rather than public, agencies in both countries, there are significant differences in the development of the data service sector - the variety of companies operating in it, their structure, and the extent of cooperation between the businesses in the data service sectors – indicating their greater potential effect in the US than in Sweden. First, the credit data service industry in the US consists of various types of companies which in Sweden do not exist

¹⁸ Taub Center (May 2018) *State of the art charts on the subject of society and the economy*. Retrieved February 1st, 2021 from:

<https://tinyurl.com/2pcsxyxp>

or have evolved only in recent years. For example, the data brokerage industry is highly developed in the US and plays a key role in transmitting information to credit bureaus, whereas in Sweden data brokers do not cooperate with the credit bureaus. Also, in Sweden credit repair companies do not exist credit intermediaries have only been operating since 2014, while these industries are well established in the US. Another major difference is that in the US, in contrast to Sweden, credit bureaus are entirely independent from the banking sectors. In Sweden the biggest credit bureau, UC, was owned by the six largest financial banks until 2019 and that has prevented cooperation among credit bureaus in Sweden. Furthermore, the credit bureaus in the US are structurally a more consolidated industry compared to those in Sweden. Credit bureaus in the US have established an association called the National Consumer Reporting Association, (NCRA - formerly National Credit Reporting Association, Inc.) which is known to be a highly powerful and influential organization. Consumer lenders and their pressures have also played a part in creating low levels of empowerment in the US. Unlike Sweden, the credit market in the US is highly competitive - this is according to the banking concentration index calculated by the World Bank¹⁹. Thus, lenders in the US are more likely to have an interest in curtailing empowerment.

Regarding Cluster Two, an explanation focused on power would suggest that low CE in France compared to Israel may be related to pressures exerted by credit bureaus and major consumer lenders. Evidence does not support this explanation. In considering the potential effect of credit information companies, which are the ones to care most about the level of empowerment, the credit data industry is not so developed in either country. In France, the credit data industry has never really evolved; even though there are three credit reporting agencies in the market, Experian, Equifax and CRIF, they do not provide credit reporting services in the common sense. These companies are active in the field of cheque-processing or risk-management (Jentzh, 2007). In Israel the credit data industry is relatively new; private credit bureaus developed only during the 2000's and have limited authority over the collection and processing of data, as state authorities hold the monopoly on credit data.

Power of Ideas

An explanation focused on ideas would suggest that low CE in the US compared to Sweden may be related to the manner in which policy makers perceive the proper goals of government regulation and promotion of markets. The evidence does not support this explanation; even

¹⁹ as the fraction of assets held by the three largest banks

though Sweden has been dominated by ideas emphasizing regulation-of-competition, i.e., a market failure rationale for regulation, it has high empowerment regulation. In their policy discussion over the initiation of the credit information act, policymakers emphasized the state's commitment to arbitrate between lenders and consumers. The policy committee which promoted the law stated that lenders' efficiency requirements have essentially been met and there is no appreciable need for enhanced protection for creditors. Credit applicants, on the other hand, are in a vulnerable position and do not have the opportunity to negotiate or influence the activities of credit reporting companies. This has highlighted the need for regulation to strengthen the credit applicants' protection primarily against violations of personal integrity (SOU 1972: 79).²⁰

Regarding Cluster Two, an explanation focused on ideas would suggest that low CE in France compared to Israel may be related to the manner in which policy makers perceive the proper goals of government regulation and promotion of markets. The evidence supports this explanation. In Israel policymakers advanced the regulation *for competition* rationale, while in France they advanced the regulation *of competition* rationale. As opposed to Israel, France's policymakers did not aim to develop a credit data market but rather to ensure that lenders knew how much debt their borrowers had. Indicatively the basic logic underpinning the 1989 reform was protecting and nurturing competition in the credit market following the ascendancy of France's commercial banks, which were seen to be lending extensively without particular attention to riskiness. "The debate in France focused instead on the potential for more accurate credit data to force France's lenders to behave more responsibly" (Trumbull, 2014, p. 197). The goal is not, however, the same as in the US and Sweden, who wanted to control the power of credit data companies in the market and balance the powers between them and consumers, because in France there was no such industry at all. What was similar, was the French policymakers' perception regarding the policy objectives; as in Sweden and the United States, in France the approach was to *maintain* the competition in the credit data market rather than to *generate* competition.

Existing institutions and policy context: The role of the welfare state

An institutional approach would suggest that low CE in the US compared to Sweden may be related to the structure of the welfare state, and specifically differences in the ways in which welfare states distribute social benefits across individuals. The evidence does not support this

²⁰ Law proposition, No. 155 in 1973

explanation. First, the lower level of empowerment in The US compared to Sweden was not found to be related to the structure of the welfare state. The US, despite being a residual welfare state, has low consumer empowerment. This may indicate that policy maker in the US, to compensate for the welfare state's drawbacks, have concentrated in actions affecting the supply side, i.e incentivizing lenders to lend, rather than actions affecting the demand side, i.e. providing consumers with greater tools to borrow more responsibly. US' approach differs from Sweden's approach which acted through both the supply and the demand sides.

Regarding Cluster Two, an explanation focused the institutional context would suggest that low CE in France compared to Israel may be related to the structure of the welfare state, and specifically differences in the ways in which welfare states distribute social benefits across individuals. The evidence does not support this explanation. Israel, though characterized by a welfare model which primarily benefits the middle and upper economic classes, has high consumer empowerment.

5. Discussion and Conclusions

Globalization of regulation, diffusion, and polycentric regulatory regimes are challenging the certainties around primacy of nations in the literature of comparative capitalism. In the age of regulation, degrees of intervention cannot be the sole criterion for regulatory analysis. As Vogel states (2018, p.5): *“Any market solution constitutes a particular form of market governance. Real-world market governance varies across many dimensions: not just government versus market, but also public versus private governance, laissez-faire versus pro-competitive regulation, and so on”*. By dismantling the concept of state involvement into two regulatory strategies, this paper has shown how nations matter in the regulatory arena, and how policy and politics are expressed in the current hybrid regulatory capitalist order.

The findings indicate that institutional forms of welfare state explain the variation in BR between the two clusters, but politics (private interest and ideas) contribute to explaining variation in CE within the two clusters. The differences between the two country clusters (i.e., US and Sweden vs. France and Israel) on BR were found to be related to the structure of the welfare state, and specifically to differences in benefit generosity within welfare states. Policy makers in both countries have embraced access to credit data (i.e., through low BR) to entice lenders to lend, and respond to the demand of middle-high income population who are inadequately (or who are only relatively less) protected by the welfare state. Prasad (2012) has similarly described those effects in the context of the US, and describes how American families latched on to credit as a lifeline, which created pressure for government officials to ensure its

supply. Similarly Krippner (2011) has argued that the expansion of credit markets through deregulation is by and large an unintended consequence of policy makers' attempts to deal with growing societal demands in light of limited fiscal capacity. Conversely, the French model and Israeli welfare model primarily benefit the middle and upper economic classes and therefore policy makers have not endorsed the use of credit as in the US and Sweden. Noticeably, the demand of middle-high borrowers for credit, and thus the public legitimacy of expansive credit data market, differs between the country clusters; for example the emergence of large armies of beneficiaries in the US and Sweden who are more likely to rely on credit to fill financial gaps and thus to support policies enhancing access to credit, can generate electoral power for policy makers and raise their willingness to introduce such policies. These findings strengthen Lazarus & Lacan's (2020) statement that credit and credit markets cannot be understood separately from the social and historical contexts of their development; this research's findings demonstrate how credit (and credit data) policy is connected to the historical contexts of credit market development, and specifically to elements of the fine-grained organization of the welfare system.

The differences within the clusters (i.e., between the US vs. Sweden and France vs. Israel) on CE were explained by politics. Lower score on CE dimension in the US compared to Sweden is explained by the power of market actors in the finance industry. As the findings regarding the CE dimension have shown, business in the US credit industry has played a major role in the institutionalization of the credit data regime. But as previous research has shown (Queen, 2020, Krippner 2011), the political context in which they operated was also significant; even within the supposedly *laissez-faire*-friendly context of the US, private and public actors work together to build markets. Regarding difference within the second cluster, lower score on CE dimension in France compared to Israel is explained by policy makers perception about the proper goals of government regulation; in Israel they portrayed the rationale of *regulation for competition*, i.e., the goal of creating a credit data market, while in France policy makers emphasized the market failure rationale of preventing anti-competitive behavior.

Even though the public need approach was not found to explain any of the research questions, it is worthwhile to emphasize how they affect the consumer credit market. The findings from Sweden indicate that low scores on the BR dimension are not entirely related to social needs, as consumer bankruptcy is significantly low; however, they are found to be related to high levels of consumer debts. Therefore, it may be more accurate to consider the extensive access to credit data as a response to states and firms' interest in expanding consumer markets for financial products rather than a solution for consumers' irresponsibility in debt repayment.

However, these findings shed light on practical contributions suggested in this paper. The paper undermines the economic theories emphasizing that credit data is mainly an economic regulatory tool serving to eliminate the market failures of a-symmetric information or moral hazards in the credit market. Instead, it shows that credit data regulatory regimes are shaped according to the perception regarding debt and the role of credit in society as shaped by the country's welfare state system, as well as political actors' world views and interests of economic groups.

Here we perceive two significant insights that contribute to the study of regulatory politics. First, the interaction between the two dimensions exposes the continuity of the national style of regulation. The paper shows how, upon examining the interaction between the two strategies, what may seem like a similarity between “strange” pairs on the conventional BR dimensions turns out to be a reflection of the capitalist model. The differences in the organization of state-businesses' relations between the liberal US and the corporatist Sweden are indeed expressed in their different rankings on the empowerment dimension. In the US, companies in the data service sector could affect the policy process to greater extent than in Sweden as they operated very differently in the two countries. Therefore, Sweden's regulatory regime was balanced with high empowerment protection, while the US was found to have minimal protection on both dimensions.

The interaction between the two dimensions exposes not only the continuity, but also the change in national capitalist models. The intensified liberalization processes that have been structured by the state since 2000 in Israel, compared to the illiberal character of France, have been expressed in their variation on the empowerment dimension. In Israel, policy makers portrayed the rationale of *regulation for competition*, i.e., the goal of creating a credit data market, while in France policy-makers emphasized the market failure rationale of preventing anti-competitive behavior. Accordingly, Israel with its “liberal statist” character (Maron & Shalev, 2017; Maman & Rosenhek, 2012), was ranked high on the empowerment dimension, while France's illiberal model ranked low on this dimension.

Second, as regulatory regimes become hybrid and multifaceted, it becomes necessary to unleash the notion of regulatory governance by developing concepts and measures that allow us to better distinguish between different dimensions and strategies. This would, as this research has shown, facilitate understanding how politics is expressed in current regulatory governance order. The research found that consumer empowerment is a strategy more affected by power, i.e., ideas and interests, while business restrictions are influenced by the institutional context. This can be fruitful for better comprehension of the policy design process and explain

why a particular policy enacted.

The research also has limitations; it has only considered a single policy area (credit data regulation) in four liberal democracies, and further research across a wider range of fields and countries is required before definitive conclusions can be drawn. Particularly, as this research demonstrates, analysis of variance at the national level can and should be complemented with analysis of variations upon the two regulatory strategies as it enables the connection between the literature of political economy and regulation to better correspond with each other (Guidi, Guardiancich & Levi-Faur, 2020).

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3. C&C vs. Consumer Empowerment: A Portfolio Approach to Consumer Regulation

Abstract

The consumer policy literature has long recognized two major approaches to consumer regulation: command and control (C&C) and consumer empowerment (CE). Yet it has offered only a partial understanding of their interactions in consumer regulatory regimes. Contemporary multi-level and multi-goal governance structures require a better understanding of consumer policy portfolios. This paper aims to explore the expansion of regulation via diverse consumer policy portfolios and the sources of that expansion. To do so, it asks (1) How do the two strategies interact in credit data regulatory regimes? (2) What are their advantages and disadvantages? and (3) What explains their interactions? To answer these questions, the paper focuses on the case of consumer credit data regulation and raises three significant insights into contemporary consumer regulatory governance: (1) In the era of regulatory capitalism, not only do policies become complex, but so do the regulatory coalitions that advance them; (2) To identify and distinguish consumer policy regimes, the question of which tools are used is less important than the question of how policy subjects are targeted, and (3) With consensus on the regulatory state, the prominence of “Big Governance” regimes is almost natural, but alongside it the welfare state, the development state and risk state should be nurtured as well.

Key words: consumer policy; consumer protection; consumer empowerment; regulatory strategies; policy portfolio.

1. Introduction

The consumer policy literature has recognized two strategies for regulating consumer markets: command and control (C&C)²¹ and consumer empowerment (CE) (Delgadillo, 2013; Esposito, 2017; Howells, 2005; Ioannidou, 2018; Strünck, 2005). But how do these strategies interact in consumer regulation? Who or what promotes their interaction? These questions have not yet been examined in the literature. Drawing on the regulation literature which has emphasized the changes in governance structures, and particularly the decentralization and diversification of politics (Black, 2002; Braithwaite, 2008; Jordana & Levi-Faur, 2004; Lehmkuhl, 2008; Levi-Faur, 2005; Scott, 2004), this paper promotes a portfolio approach to studying consumer policies (Braathen, 2007; Howlett, 2005, 2011; Chapman, 2003; Henniske, 2004; Givoni et al., 2012; Milkman et al., 2012). Although the literature has recognized these two strategies for consumer regulation, it has yet to explore how and why sets of tools from both approaches are incorporated in consumer regulation.

Comparative consumer policy research tends to perceive consumer regulatory regimes as varying along a continuum from weak to strong, and to evaluate them in terms of the level of intrusiveness of the regulatory tools. This approach to researching consumer regulation has missed an important dimension of contemporary consumer regulatory regimes. Moreover, this paper addresses gaps in consumer policy research, as current scholarship conventionally adopts a narrow perception of empowerment as simply a “soft” regulatory approach concentrated mainly on information remedies, without adequately defining and giving examples of its various regulatory tools (Esposito, 2017; Reisch, 2017).

The paper poses three major questions: (1) How do the two strategies interact in credit data regulatory regimes? (2) What are their advantages and disadvantages? And (3) what explains their interactions? To answer these questions, the paper draws on the case of consumer credit data regulation, presents the range of regulatory techniques used in each strategy, and explores their political, regulatory and social costs. The paper makes three contributions: theoretically, it fills a theoretical gap in consumer policy research to better account for the development of consumer policy regimes in the context of regulatory capitalism. It advances the consumer protection literature by defining the regulatory strategies more precisely by their policy subjects rather than by the tool they use. The study also develops our understanding of the politics in consumer policies, and discusses the political tensions and considerations involved in each of the strategies, and how different actors exert their preferences through policy

²¹ This strategy is often named “consumer protection” (Esposito, 2017; Reisch, 2017; Strünck, 2005).

ideas.

The topic of consumer credit data was chosen because it poses significant consumer challenges, for two reasons: (1) The structure of the market is complex, with the main consumer of the credit bureaus – those private companies that collect information about consumers and score them – being private companies and not individual consumers. This is true for most existing credit data system models in the world. Thus, credit bureaus may consider the effects of their decisions only on their direct customers, typically lenders, without considering the impact on consumers. They may therefore choose to include questionable negative information in their consumer reports. While deciding what level of resources to put into the accuracy of their reports, and whether to include or exclude negative information, they may not consider the effects of those decisions on consumers. (2) The case of credit data demonstrates well the contemporary challenges consumers face as commodification, via both the datafication of individuals' data and algorithmic decision-making, spreads to all spheres of life. As new forms of data and novel methods of scoring are increasingly being used in new marketplaces, they are redefining the power relations between buyers and sellers. This makes the study of credit data regulatory regimes not only theoretically interesting but also socially relevant.

This case-oriented study is based on an in-depth and comparative study of credit data regulation in different countries. The study included the collection and critical analysis of primary sources such as policy documents, rules, financial consulting companies' blogs, newspaper articles dealing with biases, consumer complaints, and loopholes related to consumer credit data from those countries. Furthermore, interviews were conducted with 24 stakeholders between the years 2017 and 2021. The interviewees were from different types of organizations, including private credit bureaus, financial regulators, privacy authorities, and academic scholars from the following countries: Sweden, France, US, Italy, Germany, and Israel.

This paper begins by reviewing the literature on consumer policy and outlining the two main approaches to consumer policy: C&C and CE. Next, it conceptualizes four types of consumer policy governance, while focusing on the governance style in which the two strategies interact (i.e., "Big Governance"). The third chapter presents an empirical analysis and describes the interactions between the two strategies in four countries – the US, Sweden, France and Israel – by examining a range of consumer C&C techniques in the field of credit data. The fourth chapter discusses the advantages and disadvantage of the two strategies in terms of their political, regulatory, and social costs. The examples discussed in the paper are drawn from an in-depth analysis of credit data regulation, although the conclusions have

broader applications in other consumer policy domains.

2. Literature Review

2.1 Consumer policy

Consumer policy can be understood as all those laws and regulations that affect the consumption and the structuring of consumer markets (Ramsay, 2012). Since the mid-1960s, consumer protection has generated considerable enthusiasm, with the “consumers’ rights” agenda introduced by Kennedy in 1962 becoming widespread across the globe. Nowadays, fostering the interests of consumers has become an important concern, and consumer policy accordingly enjoys public attention regionally, nationally, and internationally (Austgulen, 2020; Micklitz & Saumier, 2018).

The foundation of consumer policy rests on the rather reductionist assumption that consumers stand on the weaker side of an asymmetric relationship. However, concerns about consumer harm might be considered as being more severe or less severe. Some researchers emphasize the problem of information disclosure and its costs (Cseres & Luth, 2010; Trebilcock, 2003); others argue the problem has substantial risk, such as unfair terms offered on a take-it-or-leave-it basis, or one-sided and complex terms (Oehler & Wendt, 2017; Mullainathan & Shafir, 2013). Also, aggressive commercial practices can manipulate their choices, and some consumption choices can be detrimental to the consumers making them (Bar-Gill, 2004). Thus, much information as well as behavioral biases shape consumption. Moreover, consumers are not as well organized as employees or business groups; they are a large and heterogeneous group suffering from “diffuse and weak interests” (Olson, 2003). This is yet another reason why governments act on behalf of consumers (Strünck, 2005).

The challenges that consumers face become more severe as society changes (Howells, 2019; Micklitz & Saumier, 2018; Ramsay, 2012). Thus, changes from the consumption society to the service society, and from the service society to the information society, have posed new challenges for consumers. The rise of the service sector has highlighted the issue of quality control. The financial crisis has shown that even the fiercest competition does not keep consumers from being ripped off, and it highlights the need for creating transparency and setting enforceable quality standards (Campbell et al., 2010; Bar-Gill & Warren, 2008). Additionally, regulating digital markets poses a huge challenge to consumer policy as it blurs the boundaries of local markets and might challenge consumers’ ability to enforce their rights (Strünck, 2005). With rapidly changing consumer markets that demand higher levels of knowledge and skill on the part of consumers, and growing public expectations of the protections available to consumers, policy makers are increasingly expected to respond with

greater speed and effectiveness. There are, however, numerous regulatory techniques available for addressing the challenges that consumers face, usually classified into two regulatory strategies: C&C and CE. The next chapter presents the comparative consumer policy literature and the conventional way of researching consumer policy regimes.

2.2 Consumer regulation: Toward a portfolio approach

Comparative consumer policy literature has long recognized that the national approach to consumer policy varies across countries. The literature has been of particular interest for identifying and explaining variation in consumer policy between countries (Cafaggi & Micklitz 2009; Cseres 2005; Micklitz, 2003; Nessel, 2019; Repo & Timonen, 2017; Trumbull, 2006). This scholarship tends to identify national regulatory approach along a continuum from more intrusive to less intrusive regulatory regimes. Specifically, Trumbull (2006, 2012), and Cseres (2005) have evaluated the level of the regimes' intrusiveness according to the dominant regulatory tools in each regime. Regulatory involvement in less intrusive regimes would focus on information rules, while more intrusive regimes would rely on strong legal and regulatory protections. Furthermore, each regulatory regime is placing the overwhelming burden of consumer safety on a different regulatory object, be it consumers or businesses, but not on both. In that sense, these researchers' regulatory approach advances a government vs. market dichotomy perspective (Vogel, 2018).

This regulatory perception, i.e., assessing regulation in terms of the level of its intrusiveness, has largely shaped how these studies explain national diversity as well. Often, consumer regulation is seen as a result of institutional and historical characteristics, and specifically states' preferences and positions in negotiations (Austgulen, 2020). Specifically, Trumbull (2006, 2012) argues that national consumer policy models came about as a result of how the governments' regulatory efforts were dictated by the struggle between the organized interests of producers and consumers. He assumes that the preferences of interest groups are permanent and would be identical in every country. That is, consumer groups would promote a strict regulatory regime (in his classification, the "protection model"), and industry groups would promote soft regulation (the "information model"). Based on the varieties of capitalism (VoC) approach (Hall & Soskice, 2001), Trumbull argues that the organization of firms in a country explains variation between countries. Thus, countries with "competitive market relationships" – liberal market economies (LMEs) – are associated with the "protection model", and countries with "non-market relationships" – coordinated market economies (CMEs) – are associated with the "information model".

This evidence demonstrates how contemporary comparative consumer policy literature has conventionally studied and measured consumer policy regimes. However, this regulatory perception has not given enough emphasis to the changes undergone in governance structures, and particularly to the decentralization and diversification of politics (Black, 2002; Braithwaite, 2008; Jordana & Levi-Faur, 2004; Lehmkuhl, 2008; Levi-Faur, 2005; Scott, 2004). Therefore, the comparative consumer policy literature lacks an understanding of how consumer policy regimes develop in the era of contemporary regulatory capitalism.

To better understand the difference between the two regulatory perceptions, I conceptualize consumer policy regimes and propose an analytical framework that identifies four types of regime (see Table 1). The regulatory models I describe are, therefore, not linearly distributed but clustered by regime type. The two conventional regimes that have been acknowledged by the comparative consumer literature are *statist* and *liberal*. The *statist* governance mode of regulation provides solely C&C techniques, without empowerment. This model contrasts sharply with a model I refer to as the *liberal* governance regime: a scenario in which techniques of empowerment are dominant, but C&C regulatory techniques are absent. As I previously argued, this dichotomy of ideal types does not, however, provide us with sufficient vocabulary to describe all empirically relevant consumer policy regimes in the era of regulatory capitalism. If a regime does not provide any regulatory techniques, the corresponding style of regulation is *de-regulation*. The opposite situation occurs if the policy includes both C&C and empowerment techniques. In such a scenario, we speak of a “Big Governance” model of regulation. This regulatory approach emphasizes the “growth and expansion of alternative modes of governance via increasing reliance on regulation” (Levi-Faur, 2012, p.16), and therefore it best suited for describing the interaction between regulatory strategies in contemporary consumer policy regimes and will be the focus of this paper. The next chapter presents the two regulatory strategies as they are often understood in consumer policy research and offers new definitions to distinguish between them.

Table 1: An analytical framework for consumer policy

Command and Control		
NO		
YES		
Consumer Empowerment		
NO	De-regulation	Statist governance
YES	Liberal governance	Big Governance

2.3 The two strategies of consumer policy

Regulatory authorities have several policy tools available to address problems in consumer markets. These range from those that focus on CE (demand-side measures such as withdrawal rights, remedies and disclosure rules), to those that focus on restricting businesses operations (supply-side measures such as mandating product standards, or rules controlling the quality of goods, services, and contracts, as well as their price). Consumer C&C has been the traditional approach in consumer policy. It emerged in response to the development of consumer markets and the attempts, even by mainstream traders, to impose unfair conditions on consumers (Howells, 2005). While the traditional emphasis of consumer policies has been on consumer C&C, governments are increasingly relying on CE, as part of the turn toward neoliberalism (Reisch & Zhao, 2017).

Conventionally, the consumer policy literature differentiates the strategies according to the intrusiveness level of their regulatory tools: CE is associated with soft tools like information, education and advice, while C&C is associated with stricter regulatory tools, such as standards and sanctions (Esposito; 2017; Reisch & Zhao, 2017). However, in contemporary complexes of regulatory architectures, this dichotomous distinction is inadequate for capturing the diversity of tools used in each strategy. In accordance with recent scholarship, which has suggested considering far more extensive measures besides information remedies to empower citizens (see Mak & Terryn, 2020), this research proposes distinguishing between the strategies primarily by their main policy subjects.

I therefore define the strategies as follows: *C&C* is the set of regulatory techniques based on a typical scheme of governance through compliance with rules. *C&C* determines what *businesses* are allowed to do, and by which methods. *CE* is the set of regulatory techniques built on notion of the “consumer-citizen” and the governmental technique of responsabilization (Shamir, 2008). *CE* determines the tools and rights provided to *consumers* by businesses and by the state.

I further discuss how these definitions change the way in which regulatory tools are conventionally categorized in the two strategies by presenting three examples. First, “nudge tools” – which, according to this paper’s definitions, are usually conceived as being distinct from empowerment tools (see Esposito, 2017) – can also be considered to be empowerment tools. For example, a default rule stating that a consumer’s positive action is required to subscribe to a newsletter is a technique of empowerment, because it does not restrict businesses’ operation but guides them as to what they should provide consumers. Similarly, a

rule stating that products containing a lot of sugar will be marked with prominent warning labels is also a technique of empowerment. Second, a dispute mechanism which provides consumers with the ability to obtain a resolution to their complaint should be classified as an empowerment tool because it gives a right to the consumers. Third, a regulatory technique that sets the length of time for a business to resolve a consumer dispute is a mechanism of C&C, since it applies a restriction to the business's activity.

3. Exploring Interactions Between Regulatory Strategies in Consumer Credit Data Regulation

3.1 Why consumer credit data regulation?

This paper focuses on consumer regulation in credit data markets. Credit data regulation sets the rules through which private and public institutions can collect, analyze and trade consumers' personal data to enable online and offline marketers to manage credit risk, and to marketize and price products and services more efficiently. Consumer protection concerns about consumer credit data have emerged in recent decades. This follows the expansion of financial markets and is accompanied by a growing demand for more and more consumer data. Also, developments in the field of big data and computing have allowed, and indeed facilitated, the automated, large-scale collection, processing, and utilization of consumers' personal information.

The credit data industry is known for the great dangers it implies for consumers, especially in countries where it is highly developed, as in the US. Its practices compromise privacy (Cate, 2002; Ferretti, 2017; Jentsch, 2007); allow the manipulation of consumers (Mahoney, 2014; Zarsky, 2016); exacerbate inequality (Citron & Pasquale, 2014; Fourcade & Healy, 2013; Rona-Tas, 2016); pose severe problems of accuracy, without procedures for appeal (Dixon & Gellman, 2014; Mierzwinski & Chester, 2012; Yu & McLaughlin, 2014); cause intended or unintended discrimination (O'Neil, 2016), and in some cases, abuse the fundamental rights and freedom of individuals as economic actors (Ferretti, 2017). Moreover, these practices seem to promote a culture of credit use and of "life in debt" (Fourcade & Healy, 2017; Marron, 2009; Poon, 2013).

3.2 C&C vs. Consumer empowerment: A classification of regulatory techniques

This chapter presents the central regulatory techniques that are typically used in credit data policy, and maps them onto the two strategies. This yields a classification that distinguishes six general categories of techniques. Classification of tools is based on Mizrahi-Borohovich

and Levi-Faur's (2020) measurement scheme. Each category comprises several techniques which refer to the three dimensions of credit data regimes: collection, profiling and use. Furthermore, for each regulatory technique, I present the range of criteria from the least intrusive to the most intrusive.

A. C&C regulatory techniques

1. Standards

Standards are among the key tools used in credit data policies to protect consumers. They are aimed at regulating industry's behavior to ensure services are safe, reliable, and consistently performing as intended. There are various standards which are typically used.

In the collection regime, standards set down the type of financial data that can be collected, whether only data on defaults can be collected, or whether additional information such as credit data is also permitted (e.g., repayment history, amount of credit available, and the amount of credit in use), as well as information indicating an applicant's financial status (e.g., assets, income, etc.). Standards also set down whether, and which type of, complementary data can be collected, and if it can be collected, can only data about an individual's payment history with nonfinancial institutions be collected, or is additional information also permitted, such as data about a spouse or data relating to the individual's nonfinancial behavior (e.g., purchase preferences, GPS location, social network, etc.). Additional standards set down the conditions upon which data on defaults can become reportable, thus giving borrowers an opportunity to repay a debt without their credit history being damaged. These standards determine whether data on defaults are collected according to parameters that indicate the severity of a debt – the number of arrears that were not paid on time, or the sum of the debt – after a grace period has been granted to the consumer, or whether data collection is unregulated, or whether the data can be collected immediately.

In the profiling regime, standards set down what data can be used that are not provided by the borrower or do not belong to the lender. They define whether only data about defaults can be used, or whether additional information – such as credit data, data about consumers' requests for credit and credit denials (inquiries), and personal data (e.g., data about marital status, employment, place of residence, age, etc.) – can also be used.

In the use regime, standards define the economic spheres in which the scores can be used. Can scores be used solely for consumer credit, or can they also be used in other economic sectors, such as utilities and telecommunications, or, for example, screening potential tenants? Additionally, standards set down the purpose for which the data can be used. Can the data only

be used for credit decisions and the supervision of the financial market, or can they also be used for specified financial decisions (e.g., in the retail market, or regarding employment in professions related to finance) or to identify the most profitable consumers?

Standards also set down the prerequisites for using the data and the scores, as well as for eliminating the misuse and theft of data. Is authorization from the consumer required, or can data simply be used by providing consumers' bank or credit card account numbers, or by providing citizens' ID\social security numbers? Moreover, there are time limits beyond which defaults data can no longer be used: Does data on defaults become unusable immediately upon payment of the debt, or can they be used for between one and three years after the debt is paid, or for more than three years after the debt is paid?

2. Market entry thresholds

To guarantee a minimum level of product quality, and to provide evidence of a minimum level of a firm's competency, regulation may impose threshold requirements for entering the market. This can be through licensing commercial entities that act as both recipients and receivers of information, as well as through other practices.

In the collection regime, institutions authorized to collect information might be limited to the institutions providing the financial services to the consumer, or they can also include non-profit organizations (e.g., public institutions or industry associations), and generally all companies holding commercial licenses. Additionally, the institutions authorized to furnish data might be limited to public institutions (e.g., bankruptcies, liens, and judgments), or they can also include authorized companies, any commercial company, and generally any individual.

In the profiling regime, score generators might be limited to the lenders of their potential borrowers only, or both lenders and licensed companies may be included, or any commercial company, or simply any individual (e.g., landlords, employers).

In the use regime, the institutions authorized to use the data might be limited to companies with certain requirements, such as their size and annual income, or they can be any company with a commercial license, or any company that agrees to share its information (the reciprocity principle). Alternatively, data use can be unregulated.

3. Regulating the production process

The production process might be regulated to control the quality of credit data services. In the profiling regime, regulators might control different practices run by a business. For example,

they might regulate the fairness of the risk assessment process, the use of permitted data, data accuracy, or they might not regulate any part of a business's operations.

B. Consumer empowerment regulatory techniques

1. Information techniques

Credit data policy's information remedies are aimed at helping consumers to better manage their financial obligations as well as to identify related issues such as reporting misleading and inaccurate information.

In the collection regime, consumers may be informed about the entities collecting their information as well as the data collected about them, or they can be informed only about the data collected about them, or only about the identity of the sources from where the data are collected. Alternatively, collection may be unregulated.

In the profiling regime, consumers can be entitled to access the same score as that provided to other entities, or they can simply be entitled to access a credit score, but not necessarily the same score provided to other entities, or they cannot access their personal score, or this matter can be unregulated. Also, consumers might be informed about their score. They might be informed every time their score is accessed, or once a year when it is automatically accessed, or upon consumers request, or only when the consumer's credit request has been denied.

In the use regime, consumers can be informed about the use of their data. They might be informed every time their data are used, whenever there is a risk of data breach, where the use of their data has prevented their access to credit or worsened their credit terms, or they may have no right to be informed. Also, consumers can have transparency rights regarding the use of their data. They can have access to the identity of the data users plus the dates on which they accessed the data and the purpose for which data was used, or access only to the identity of the data users and the dates, or access only to the identity of the data users. Alternatively, consumers may not have access to any such information.

2. Consent mechanisms

Consent mechanisms are structured through default rules which are used in determining the mechanism through which consumers give consent to the collection, use, and scoring of their data. These rules set out whether consumer consent is required (an opt-in system) or is not required (an opt-out system).

In the collection regime, consumer consent may be required before data can be collected

(except for high-risk consumers), or data can be collected automatically without the consumer's consent, unless the consumer requests that the collection of their data be stopped (and on condition that they are not high-risk consumers), or data can be collected automatically without the consumer's consent, but only on high-risk consumers. Alternatively, data can be collected automatically.

In the profiling regime, a consumer's consent may be required, or prior consent from the consumer is not required but the consumer may request not to be scored, or a score produced by an intermediary does not require the consumer's consent, or there are no intermediaries scoring individuals, and therefore this criterion is not applicable.

In the use regime, consumer consent might be needed before data can be used (except for high-risk consumers), or data can be used automatically without the consumer's consent, unless they request that the use of their data be stopped (and on condition that they are not a high-risk consumer), or data can be used automatically without the consumer's consent but only on high-risk consumers. Alternatively, data can be used automatically without the consumer's consent.

3. Dispute-resolution techniques

In cases where consumers are not satisfied with their credit score, or they identify incorrect data in their credit files, they have recourse to dispute. Mechanisms of dispute-resolution differ with regard to the institutions to which consumers can turn for data correction. Consumers can complain to a state authority, the data collectors and the data provider, or consumers can apply to a supervisory state authority and the data collectors, or consumers can apply only to the data collectors, or when there is no regulation.

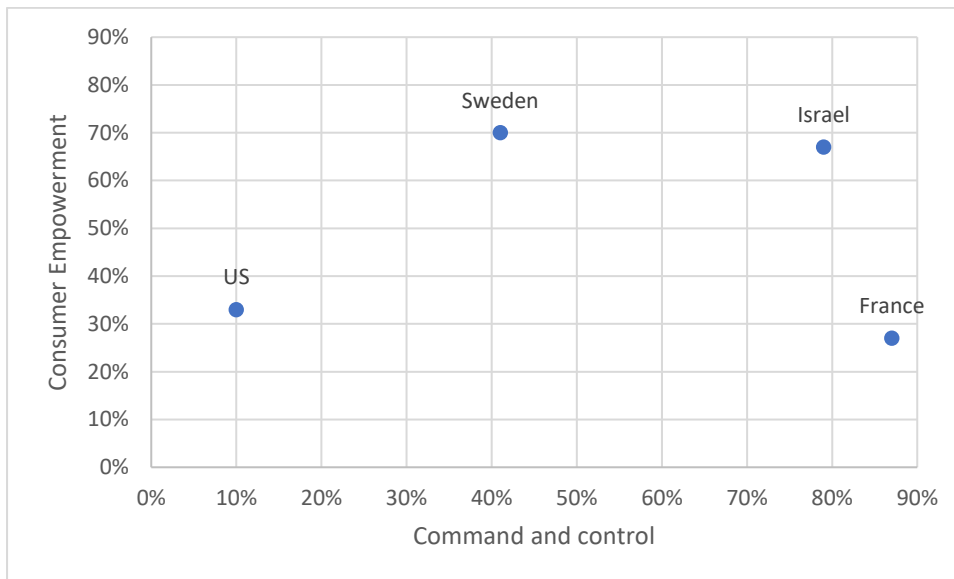
In the profiling regime, consumers might be provided with several rights in case of a dispute with the score producer. Consumers might have a right to bring their dispute before a company representative and might have a right to insert an explanatory statement into their credit report, Consumers must be provided with an answer within a certain timeframe. Alternatively, a consumer might not be entitled to dispute the score.

I will now illustrate how each strategy's various techniques vary across countries. Based on the measurement schemes presented by Mizrahi-Borohovich & Levi-Faur (2020), scores were calculated for each category of regulatory techniques in four countries: The US, Sweden, France and Israel. Scores are presented in Table 2 (Appendix A includes a table of criteria). A visual presentation of the interaction between the two strategies for the four countries is presented in Figure 1.

Table 2: Command and Control and Empowerment scores in four countries (2020)

	C&C	Empowerment
US	10	33
Sweden	44	70
Israel	79	67
France	87	27

Figure 1: Interactions between C&C and CE in four countries



4. C&C vs. Empowerment: Advantages and Disadvantages

As previously shown, the decision of how to regulate consumer markets is first and foremost a decision about the policy target, be it the consumer, the business, or both. Then, and only then, does it become a choice between more intrusive or less intrusive tools. In every case there exists a trade-off between the advantages and disadvantages of empowering consumers or restricting businesses. This section discusses the trade-offs between the two regulatory strategies by comparing three aspects: political costs, regulatory costs and social costs.

4.1 Political costs

This section presents the political consideration from the perspectives of businesses and the public. It refers to the legitimacy of the strategies, which is an important consideration because it indicates the extent to which a strategy is politically feasible. The two strategies might suffer from legitimacy shortfalls.

I begin by discussing the legitimacy of the two strategies for businesses. Businesses’

approach toward the strategies is important because they are a more well-organized group compared to consumers, and they have greater political impact on consumer policy design (Strünck, 2015). From the perspective of businesses, C&C is relatively less legitimate, while empowerment might have greater legitimacy.

First, a C&C strategy implies greater compliance costs than empowerment for businesses. C&C mechanisms require businesses to spend considerable amounts of time and money to comply with regulations in both the preparatory and implementation phases. For example, introducing digital and automated systems of data collection and distribution imposes heavy financial expenses upon businesses. Also, licensing requirements usually involve fees which impose heavy financial costs on credit bureaus. Additionally, C&C mechanisms come with a considerable administrative burden, including obligations on businesses to provide certain types of information to the regulator. For example, credit bureaus might be obligated to provide the regulator with information on the types of information they use. C&C mechanisms may also stipulate that credit bureaus have to draw up an annual report on the credit reports they have sold. This information obligation creates a substantial administrative burden that requires the monitoring, registration, analysis, and reporting of data.

An empowerment strategy, on the other hand, does not involve compliance costs for the regulatory authorities but rather for the consumers, and the latter costs are usually less significant. Compare for example the compliance cost of information provision requirements (which are considered demanding relative to other empowerment practices), against the high compliance costs of keeping up with licensing requirements for a C&C strategy. In the credit data policy, most empowerment mechanisms do not impose any costs on businesses, except in countries where it is required to establish dispute-resolution mechanisms which inform individuals when their data is collected. Besides, having lower compliance costs, empowerment has other potential advantages for businesses which may prompt them to consider it as legitimate. Some mechanisms can serve businesses' commercial purposes and profit maximization. For example, by providing free credit reports, credit bureaus increase consumers' awareness of their services and can better market their products and services to them. Indeed, in the US, since the Fair Credit Reporting Act (FCRA) authorized credit bureaus to provide consumers with one free credit score, the bureaus have developed additional economic revenue from selling credit scores to individuals. This has become a significant and profitable part of their operations. Also, empowerment mechanisms might enhance businesses' public legitimacy, as they present the businesses as fairer and more responsible. Indicatively, credit bureaus in the US took a more extreme stance on those empowerment protections that

served a commercial rationale for them, for instance by committing to address consumer disputes within 30 days, whereas the law simply required “a reasonable time limit”. This principle provides the National Consumer Reporting Association (NCRA) with greater public legitimacy.

The public, however, may perceive empowerment techniques as less legitimate, and because policymakers are mainly concerned with maximizing their political power, empowerment’s political feasibility might be limited. The legitimacy concerns with regard to empowerment stems from considerations of fairness and social justice.

Empowerment is built on the fundamental expectation that consumers would assume full responsibility for their choices and their behavior and would protect themselves in the market. However, as consumers are a heterogeneous group, with differing capabilities, needs, and problems, these expectations might prove unrealistic for disadvantaged populations, whose ability to respond to the regulation and implement it depends considerably on their socio-economic background. For example, the empowerment mechanism that requires obtaining consumer consent to process personal data might be *de facto* ineffective for disadvantaged populations who face greater constraints in terms of the time and skills required to properly evaluate their own decision to consent. These disadvantaged populations therefore willingly disclose information about themselves and their social activities without considering the effects of their disclosures (Ferretti, 2017). Furthermore, the validity of consumers’ consent for data processing is questionable when the data is requested in exchange for economic considerations. Consent is meaningless in cases where people have no option but to consent to obtain a service (Borghi, Ferretti & Karapapa, 2013). In such cases, by withholding consent, individuals would be forced to purchase services either at a much higher price or at a lower quality. Ferretti (2017) provides a citation which clearly explains why consumers will not in practice exercise their right to withdraw or erase their personal data. The Association of Consumer Credit Information Suppliers (ACCIS) warns that if and when a consumer does exercise their right to the withdrawal or erasure of personal data, the data subject would “join a potential group of financially excluded consumers who would have amended files. ... [This] may make attaining credit extremely difficult [for the consumer] in the future, and lenders would lack certainty on what has or hasn’t been deleted.” (Cited in Ferretti, 2017). Thus, the consumers’ ability to employ the regulation depends on the extent to which they need access to credit. Naturally, the more financially vulnerable people are, the less they can afford to apply the mechanism. The practice of giving consumers access to their data is yet another example of how only a small part of the consumer population can effectively benefit from it.

Furthermore, legitimacy concerns regarding empowerment stem from fairness considerations. Unlike C&C, empowerment practices provide a wide margin of discretion for how businesses are to implement a policy. In other words, the policy defines the “what”, but the “how” remains largely vague and is up to the business to decide on. Considering that businesses are profit maximizers, this may allow businesses to act unfairly toward the consumer and leave them prone to manipulation and abuse. For example, the regulatory technique that requires credit bureaus and lenders to provide consumers with appropriate appeal mechanisms leaves businesses a great deal of leeway for how disputes would be handled. As the US experience shows, the dispute process established under the FCRA, which gives consumers the right to a “reasonable reinvestigation” within a time limit of 30 days, is *de facto* inefficient, since in practice, reviews are referred for automated reinvestigation. This automation means that one computer simply confirms with another computer that it has identical information. It does not determine whether the information is correct or whether the information is from the right consumer. Consumer advocates have therefore called for rules that require credit bureaus to conduct manual reinvestigations of consumer disputes which involve the actual verification of disputed items via telephone calls, or other communication, and the review of consumer-provided materials.²² Another example is the practice that requires giving consumers a copy of their credit report once a year. As businesses have great autonomy regarding the application of this practice, credit bureaus in the US have found a way to bypass this requirement by developing an “educational” credit score²³, which is not the same as the consumer’s credit score that is furnished to industry institutions. In practice, this prevents consumers from knowing what their traded score is, and they are often completely unaware of it. Also, businesses may use mechanisms of empowerment to reduce responsibility for consumer injustice. For example, the three large credit bureaus in the US have suggested providing consumers with access to their credit scores to avoid their own liability for incorrect derogatory data (Kear, 2014).

4.2 Regulatory costs

This section discusses which strategy is more costly in terms of the time, financial and human resources it requires from the regulatory authority. In all three considerations, a C&C strategy

²² Unterreiner, M., Dutzik, T., Mierzwinski, E., & Murray, L. (Fall 2013). Big Credit Bureaus, Big Mistakes: The CFPB’s Consumer Complaint Database Gets Real Results for Victims of Credit Reporting Errors. U.S. PIRG Education Fund.

²³ Education credit scores are intended to help consumers monitor their credit score; however, they are biased in that they are based on partial information and are calculated differently from commercial credit scores.

is costlier than empowerment, and thus may be less efficient. This chapter presents two major costs: supervision costs and information costs.

Regarding supervision costs, a C&C strategy involves several types of outlay. First, that of monitoring the quality of the product or service provided by a business. For example, regulators ensure that illegally discriminatory data is not collected, and that the data collected or distributed is accurate. Those monitoring expenses include the costs of checks, inspections, or the data analysis of observed behavior. Also, C&Cs often entail a licensing process to screen businesses' access to credit information services. This involves some operational costs both in the phase of granting the license, when checking a businesses' eligibility for it, and the costs incurred when ensuring that licensed businesses meet the required regulatory standards. Also, a C&C strategy has high enforcement costs, as it might involve sanction devices such as fines. Enforcement costs comprise, for example, the involvement of the police and the justice system.

Conversely, the regulatory costs of empowerment are less substantial compared with those of a C&C strategy, as they require less significant financial resources or fewer human resources from the regulatory authorities. The administrative costs of an empowerment strategy may be lower than those of a C&C strategy because the cost of some empowerment practices can be imposed upon businesses rather than on the regulator, although the regulator might share those costs, depending on the specific regulatory practice. For example, the practice of investigating disputes can be carried out by the state, with some costs imposed on the regulatory agency, or it can be carried out solely by the business, without any regulatory involvement. In another example, a practice designed to motivate consumers to check their credit score can be implemented through a government campaign – incurring some costs for the regulator – or, alternatively, it can be implemented by an annual notification sent by the credit bureaus to the consumers. Another reason why empowerment is less costly, is that the regulatory mechanisms of empowerment are more normative and deal with consumer rights, and their provision does not incur cost. Examples of empowerment's regulatory mechanisms are practices such as the consumer's right to restrict access to their information, to refuse to be scored, or to determine the purpose for which their information will be used.

With regard to information constraints, regulation through C&C requires more in-depth understanding of the regulated area and a greater expertise, whereas empowerment techniques are more generic. Thus, regulation through C&C might be more complex and less feasible than empowerment. Information constraints might stem from policymakers' lack of time or lack of financial resources to research issues fully. Also, the regulated subject might be too complex, and regulators might lack information about how to regulate it. For example, there are no

legislative or other regulatory indications to determine which data and data sources are necessary to achieve policy goals regarding the assessment of creditworthiness and the prudent supervision of the financial system. Similarly, there is a lack of clarity around the question of how long judicial measures and consumers' repayment plans should remain un-erased in the case of repayment (Ferretti, 2017). Additionally, constraints on access to information might be related to objections from businesses. For example, one of the constraints on credit bureaus when developing C&C practices is the lack of transparency of the scoring process. Proprietary algorithms are considered trade secrets, and therefore the scoring methodology usually remains undisclosed, and its various uses remain opaque. Since policy makers do not know how the systems are built and operated, and as they do not have the necessary cooperation from industry players, developing an adequate C&C mechanism can be an unfeasible task.

Conversely, empowerment mechanisms are more generic, they involve relatively light information requirements, and might therefore be more feasible to develop. For example, mechanisms dealing with the transparency of the data users, the establishment of dispute mechanisms, or the requirement of consumer consent before data collection, do not necessitate expertise in the field in which supervision is done and are applicable to various consumer markets.

4.3 Social costs

This section discusses the social effects of the two strategies at the individual level and argues that consumer empowerment strategies have greater social costs than C&C strategies. Though both strategies are aimed at balancing the power relations between consumers and businesses to ensure the appropriate functioning of consumer markets, they represent distinctively different concepts of protection. C&C is grounded on a social conception of protection, and based on mitigating risks, preventing unfair marketplace practices and punishing fraud and other wrongdoings. Consumer empowerment is based on a market conception of protection and is aimed at facilitating and enhancing consumers' choices for reducing barriers to participation in the market and for engaging consumption activities that maximize utility.

Therefore, empowerment is more concerned with consumers' economic function in the market (i.e., as buyers), while C&C is more concerned with the social rights of consumers, identifying individuals with a more encompassing view of economic, socio-cultural and moral issues (i.e., as citizens) (Devinney et al., 2006). The words used by the OECD emphasize how much the empowerment approach is prioritized and aimed at advancing market goals. The OECD Consumer Policy toolkit explains that, "when they are empowered, consumers can

improve economic performance by helping to drive competition and business innovation”. In contrast, the C&C strategy protects the broader aspects of the individual rather than simply protecting the economic realm. Treating individuals solely or mainly as economic actors – as the empowerment strategy does – means that their rights and identities are shaped *by* the markets and within the limits *of* the market. This results in two worrying social effects. First, it structures a society that recognizes and privileges materiality over citizenship. Individuals are moralized to evaluate products based almost entirely on functional attributes, because businesses put functional attributes in conflict with social attributes. For example, in countries where consumers are indeed provided with the right to choose whether to allow the collection of their data, they are actually confronted with the question of whether to trade their privacy for material products, such as getting a loan. This also reduces the importance of values such as privacy by placing them on the same level as other product attributes, such as price and quality. Second, the rights and limitations provided to consumers are first and foremost aimed at serving the market goals, and the market entities’ goals, which may contrast with individuals’ personal preferences. For example, the right to transparency of the data and the credit score is yet another way of structuring consumers’ economic behavior and driving them to be more creditworthy (i.e., to improve their credit scores), by learning the credit scoring game (Kear, 2017).

5. Discussion

Examining the advantages and disadvantages of the two strategies raises the question of what can explain choosing a portfolio of C&C and empowerment regulatory tools: a regime of Big Governance? To answer this question, I use three regulation theories: public interest, private interest, and ideas.

5.1 Public interest

A theory of public interest purports to explain the choice of a Big Governance regime as a result of public needs. As the previous chapter has shown, Big Governance is not necessarily a response to social needs. First, when considering the general public, C&C might impose high compliance costs on businesses that could be reimposed them on consumers and thus impair the quality or the price offered to them. It might also jeopardize the efficiency and quality of the public service, since it implies greater regulatory and information costs. Empowerment might work against the public interest as well, since it leaves a wide margin of discretion as to how businesses are to implement it. It also enables them to act unfairly toward the consumer,

leaving them open to manipulation and abuse by businesses. Second, a hyper-governance regime does not equally impact all groups in society. It has a greater potential to harm disadvantaged populations, as their ability to respond to the regulation and to implement it depends considerably on their socio-economic background.

5.2 Private interests

A theory focused on the role of private interest groups purports to explain the choice of Big Governance regimes as a result of pressures from business groups. The legitimacy consideration discussed above indicated that business groups have a mixed role in structuring hyper-governance regimes. Indeed, there are several reasons for businesses to support empowerment, since empowerment imposes low compliance costs on businesses, and it may also serve their commercial and profit maximization interests and enhance their public legitimacy – all of which may explain why businesses may be in favor of empowerment. Business support for C&C, however, seems less plausible, since it would impose high compliance costs on them – expressed as considerable amounts of time and money to comply with regulations – in both the preparatory and implementation phases as well as dealing with a considerable administrative burden. Thus, even if industries often support the introduction of empowerment, they probably object to C&C.

5.3 Ideas

A theory focused on the role of ideas purports to explain the choice of Big Governance regimes as a result of the dominance of neoliberal paradigms. The notion that neoliberal ideology gave strong impetus to the change in the ways in which polities, societies, and economies are governed is not new; neither is the notion that in practice neoliberalism's effects promote regulation (Levi-Faur, 2005). What is interesting from exploring the emergence of Big Governance regulatory regimes is how they are promoted by policy actors who have contrasting perceptions about the role regulation in consumer markets. The discussion about social costs reveals that two distinctive conceptions of consumer protection shape the regulatory strategies: C&C is grounded on the social conception of protection, and empowerment is grounded upon economic perceptions. Each of these perceptions promotes the reliance on regulation in a different manner. Policy actors associated with the social approach would consider regulation through the C&C strategy as a necessary condition for the functioning of the market. The social protection perception, while taking care of the consumer's moral considerations and social rights, reflects the trend toward using regulatory instruments

for promoting welfare norms and outcomes in privatized and liberalized markets (Benish & Levi-Faur, 2020). Indeed, this perception is in accordance with the change in government and public welfare preferences, as well as the demand for more cost-effective welfare governance.

However, policy actors associated with the economic approach would consider that regulation through empowerment advances market goals. The perception of economic protection, while acting to facilitate and enhance consumers' choices to reduce barriers to participation in the market and to engage consumption activities that maximize utility, advances a central feature of neoliberal governmentality: the transfer of responsibility from government to individuals for economic conduct and outcomes (Avigur-Eshel, 2015; Finlayson, 2009; Langley, 2007).

The recognition of the regulatory state, both as a solution to emerging problems in the market and as an auxiliary power to markets, created a consensus among political actors with opposing ideologies. This may explain the emergence of complex and multi-tool regulatory regimes, which we present here as Big Governance regimes. With the continuous evolution of consumer markets, both with the risks they produce and with their inexhaustible desire to grow, the development of Big Governance regimes seems to be the shaping model of governance in the age of regulatory capitalism.

6. Conclusions

Regulatory strategies of consumer regulation are not merely a collection of soft or hard regulatory techniques, selected according to the institutional organization of interest groups in a country. They tell us a story about the new ways of “governancing” by means of multiple goals, tools and policy targets. By exploring the interactions between C&C and empowerment regulatory strategies in consumer credit data regimes, this paper has shown how consumer policy regimes develop in an era of regulatory capitalism and what drives their development.

The research has illustrated how the four countries examined – the US, Sweden, France and Israel – have combined the two regulatory strategies in multiple ways and adopted what I have called Big Governance regulatory approaches. The paper also showed that Big Governance regimes are not emerging because they serve all, or even most, consumer interests; they can be less efficient, less fair, and they can even undermine the interests of disadvantaged groups. Furthermore, they emerge even though they stand in contrast to the businesses' interests and perceived preferences for promoting de-regulation. This study found that Big Governance regimes are the result of the association between policy actors who hold distinctive conceptions of consumer protection, who perceive regulation to be inevitable

or complementary to the evolution of markets, and who promote its use for advancing economic and social goals.

This paper presents three significant insights which contribute to our understanding of the development of consumer policy regimes in the context of regulatory capitalism. First, with the transformation of regulation, not only is politics becoming complex, but the regulatory coalitions advancing Big Government mode of regulation are also gaining in complexity. Unlike the conservative regulatory coalitions that Trumbull identifies – in which interest groups motivated by predicted and stable preferences are incorporated in the state's defined preferences – the regulatory coalition in a Big Government regime is much less expected and is promoted by policy actors who have distinctive, even contrasting, state ideologies and who similarly promote their goals via regulatory means (Trumbull, 2012). Theoretically, this may yield important insights into the institutional context in which consumer groups operate, such as its ability to explain regulatory outcomes in the era of regulatory capitalism.

Second, to better identify and explore consumer policy regimes, it is necessary to consider how they target the policy subjects: consumer vs. businesses. This should be done by exploring the interactions between C&C and empowerment strategies. This may be more useful than what consumer policy scholars conventionally do when they focus on the intrusiveness level of the tools – i.e., soft or hard regulatory tools – for two reasons: this can better explain the phenomenon under investigation and can explain the complex sources of variation between countries. Second, it advances a complex perspective on regulation, and opens up new possibilities for grasping the innovative tools that are used in contemporary re-regulation.

The last point that emerges from this article suggests that Big Government regimes are likely to continue to thrive in the age of regulatory capitalism. As consumer markets continue to grow, the use of regulations to control risks or to accelerate markets continues to grow as well. In this process regulation is used to promote the interests and world views of dominant policy actors, preferring some type of risks over others, servicing certain groups while abandoning others, and enhancing better or worse goals. Therefore, to better account for the public welfare, the regulatory state should operate together with, and not as a substitute for, the welfare state, the development state and risk state.

This study does have certain limitations, prompting some recommendations for future research. First, the comparison between the strategies of the political, regulatory and social considerations is based on a particular case of consumer credit data regulation. Therefore, additional characteristics may be involved when studying other cases. Moreover, this study has suggested that a more complex understanding of regulatory strategies will consist of a range of

regulatory techniques rather than an association with a certain family of policy tools. In future research, it is recommended to further explore how regulatory techniques vary between the two strategies in other areas.

Two additional recommendations for future research are also suggested. First, to deepen our understanding of what affects the design of a particular consumer policy portfolio, we should place the distinction between the two regulatory strategies at the center of the analysis. A potentially interesting avenue of research in this direction would be to examine the approaches of different political actors – bureaucrats, consumer groups and businesses – toward each strategy. Another contribution would be to examine the explanations proposed in this paper between policy domains.

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APPENDIX A TABLE OF CRITERIA

Table 1: C&C vs. CE: Regulatory Tools Classification in the US, Sweden, France and Israel

Regulatory strategy	Category	Regulatory techniques	US	Sweden	France	Israel
C&C	Standards	(1) financial data collection (2) complementary data collection (3) reporting data about defaults (4) data used for scoring (5) score use (6) data use (7) prerequisites for data use (8) time limitation on data use	3	10	21	21
	Market entrance thresholds	(1) data collection (2) data providers (3) scoring producers (4) access to the data	1	6	10	9
	Regulating the production process	(1) supervision on the scoring producers	0	2	3	1
Total protection:			4	18	34	31
Consumer Empowerment	Information techniques	(1) access to the data collected (2) access to scores (3) informing an individual about their score (4) informing an individual about data use (5) transparency of data use	6	15	4	11
	Consent mechanism	(1) data collection consent (2) profiling consent (3) use consent	1	1	2	6
	Dispute-resolution techniques	(1) investigation of disputes (2) consumers rights in case of a dispute	3	5	2	3
Total protection			10	21	8	20

Conclusions: Researching comparative regulatory capitalism

Since 1980, the commercialization of credit data has been on the rise, following the liberalization of credit markets and the technological innovations that accompanied them. Consumer credit data are gathered, stored and processed through complex networks of buyers and sellers who increasingly operate and cooperate not only in finance but also in various other consumer markets. The increased use of credit data poses considerable problems and different kinds of risks at both the individual and the social level and their regulatory governance is thus of significant importance. Specifically, it prompts an urgent and better understanding of how to design the regulatory architecture to improve the citizen-consumer's overall welfare. Further, it calls for the exploration of fundamental questions about the interests, institutions, policy context, and social norms that shape regulatory governance in a pivotal and unexplored field.

Summary of the research project and the work process

At the start of this research project, my experience with credit data policy was shaped to a large extent by the dominant economic approach in research that emphasized that the development of credit data markets is natural and inseparable from that of the modern credit market, and that credit data's liberalization is fundamental for the economic efficiency of consumer credit markets (Barron, 2001; Jappelli & Pagano, 2002; Miller, 2003; Padilla & Pagano, 2000). These market justifications were supposed to lead me to assume that these markets will prevail in all countries, and that failure to do so would probably be reflected in their economic performance as a greater problem of consumer defaults. With an intuitive critique of this thesis, I was interested to assess whether different regulatory regimes for consumer credit data exist in the first place, and if they differ, then how did they differ.

The dissertation's first paper, titled *Varieties of Consumer Credit Data Regimes: A Regulatory Governance Approach* is, to the best of my knowledge, the first article to provide a comprehensive analysis of this regulatory regime and to analyze the differences in regimes comparatively across countries. This yielded novel results from exploring and measuring regulation in comparative manner. I found variation at different levels, in both direction and in form. The distinction between various regulatory dimensions sheds light on differences that might otherwise be overlooked and avoids potentially misleading conclusions regarding the cross-national similarity of regulatory regimes. This research's proposed framework clears the way for a more in-depth analysis of political economy to account not only for the

institutionalization of state and economy relations in capitalist states but also for the financial sector's political power and influence on the regulatory structure in the country.

This motivated me to delve further into the comparative political economy approaches and better understand whether regulatory regimes develop in accordance with national state-driven patterns. The dissertation's second chapter *National Varieties Still Matter: A Comparative Analysis of Consumer Credit Data Regulatory Regimes in the US, Sweden, Israel, and France*, offers a new analytical approach for the analysis of regulatory regimes which looks beyond the conventional state-business dimension. Therefore, it corresponds with the extensive scholarship which suggests that the standard binary understanding of the state's role in terms of interventionist vs. non-interventionist is misleading (Levi-Faur, 2005; Schmidt 2007; Vogel, 2018, 1996).

The paper shows that even in the era of globalization, states' national characteristics continue to shape regulatory governance regimes. However, identifying how these national characteristics are expressed and shape regimes is a complex task that requires better concepts and measures to capture contemporary complex regulatory regimes. The papers' findings have shown that the unexpected similarities on the conventional BR dimensions between Sweden and the US should not put in doubt the certainties around primacy of nations. As the paper's findings show, the interaction between the two regulatory dimensions indeed reflects the continuity of the countries' national styles. Thus, the unexpected similarities on the conventional BR dimensions are simply the result of the complexity involved in measuring and comparing regulatory regimes (Levi-Faur, 2006). Sweden's market actors are less influential than in those in the US, and the state is more dominant, and it therefore has higher empowerment protection than the US.

The interaction between the two dimensions exposes the continuity, but also the change in national capitalist models. Israel and France are both countries with similar statist tradition, however, since 2000 the Israeli state promotes intensified liberalization processes, leading scholars to describe its national model as 'liberal statism' (Maron & Shalev, 2017; Maman & Rosenhek, 2012), this in contrast to the illiberal character of the French state. The different evolution of the capitalist model in both countries, have been reflected in the high empowerment regulation in Israel compared to France.

The paper originally develops a complex theory for explaining variation across CCDRs. The differences between the two country clusters (i.e., US and Sweden vs. France and Israel) on BR were found to be related to the structure of the welfare state, and specifically to differences in benefit generosity within welfare states. These differences have affected the

policy context in which credit data regulation has developed and demonstrate how credit (and credit data) policy is connected to the historical contexts of credit market development, and specifically to elements of the fine-grained organization of the welfare system. However, the findings have shown that additional factors, besides the policy context, are significant for understanding contemporary regulatory regimes. The differences within the clusters (i.e., between the US vs. Sweden and France vs. Israel) on CE were explained by political factors. Specifically, lower score on the CE dimension in the US compared to Sweden is explained by the power of market actors in the finance industry and lower score on the CE dimension in France compared to Israel is explained by policy makers perception about the proper goals of government regulation.

These findings may contribute to the study of regulatory regimes as they highlight how policy and politics are expressed in the current hybrid regulatory capitalist order. They reveal that consumer empowerment is a strategy more affected by power – i.e., ideas and interests – while business restrictions are influenced by states’ institutional context. This can be fruitful to comprehend the policy design process better and to explain why a particular policy is enacted.

This encouraged me to focus on the two regulatory dimensions and examine them from a policy design perspective to further explore how and why they are incorporated in consumer regulation. The third dissertation paper, *C&C vs. Consumer Empowerment: A Portfolio Approach to Consumer Protection Regulation*, originally promotes a portfolio approach to study consumer regulatory regimes by conceptualizing Big Governance regimes and distinguishing them from the conventional regulatory models that have been recognized by the comparative consumer policy literature. This allows to fill a theoretical gap in consumer policy research to better account for the development of consumer policy regimes in the context of regulatory capitalism.

The findings have shown that Big Governance regimes develop through the association between policy actors holding distinctive conceptions of consumer protection, who perceive regulation to be inevitable *or* complementary to markets evolvement and who promote its use for advancing economic and social goals. These findings have both theoretical and policy implication contributing to our understanding of the development consumer policy regimes in the context of regulatory capitalism.

Theoretically, they show that the regulatory coalitions in contemporary, multidimensional and multi-tool regulatory field are complex and so their positions towards a policy are less expected. Unlike the conservative regulatory coalitions Trumbull (2012)

identifies, in which interest groups motivated by predicted and stable preferences are incorporated with the state's defined preferences, the regulatory coalition in a Big Governance regime is much less expected, and it is advanced by policy actors with distinctive, even contrasting, state ideologies, who similarly promote their goals via regulatory means. This may yield important insights into the institutional context in which consumer groups operate, namely its ability to explain regulatory outcomes in the era of regulatory capitalism.

The findings also bear policy implications as they indicate that Big Governance regimes are likely to continue to thrive in the age of regulatory capitalism. As consumer markets continue to grow, the use of regulation to control risks or to accelerate markets will continue to grow as well. At the same time, the regulatory state should be growing alongside the other important dimension of the polymorphic state.

Furthermore, this paper presents the approach of identifying the difference between regulatory strategies in terms of policy objects and not in terms of the level of the instruments' intrusiveness, which allows more in-depth exploration of the factors affecting regulation and how these differ across countries. This may advance the comparative consumer policy literature – which so far has relied on institutional factors to explain variations across countries – to use and integrate additional factors such as ideas to better theorize the differences across countries. Furthermore, this approach is more appropriate in order to grasp the variety of tools that characterize the regulatory arena today.

Going back to the dissertation's objectives

Overall, the aims of this dissertation have been fulfilled. First, the research has presented a measurement scheme that captures the degree to which regulatory regimes protect consumers across states, subregimes (collection, profiling, and use) and different strategies of regulation (BR and CE). This scheme allows us to measure and compare consumer protection in credit data regulation across countries in a systematic and multidimensional way, and it advances a multi-level comparative regulation perspective to gain in-depth and systematic understanding of the explored regulatory policy. In this research, the scheme has allowed us to explore the various ways in which the US, France, Sweden and Israel deal with both consumer risks and with problems in consumer credit data markets through regulatory means. In addition, the measurement scheme focuses on consumer protection regulatory considerations rather than on structural considerations, as has been suggested by economic scholarship so far. The measurement scheme is thus more oriented towards comparative research design.

Second, the research has identified the driving forces behind credit data regulation and has shown how those forces change between the two strategies. Moreover, the research has found that despite being framed as vital elements in contemporary credit markets in countries where credit data systems are less developed, problems of consumer debt or bankruptcy are *not* more prominent. This may weaken the common perception that liberalized credit data markets develop to serve the public need by other factors related to politics and by the reliance on credit as a substitute for, or as a complement to, the welfare state.

Third, the research has shown that contemporary consumer regulatory regimes integrate the two traditional consumer protection regulatory strategies in different ways that all fit into the Big Governance regulatory style. Big governance regimes are found to be the result of the association between policy actors who hold distinctive conceptions of consumer protection, who perceive regulation to be inevitable *or* complementary to market evolution, and who promote the use of regulations to advance economic and social goals.

At the general level, the research project has expressed the different ways through which the multidimensional character of the regulatory state is expanding in the era of regulatory capitalism, how it diversifies through combinations of C&C and empowerment tools, and how it becomes decentralized, with consumers gaining protection through consumer empowerment and thus becoming regulation makers rather than regulation takers.

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Appendix 1: (Updated 2021)

Table1: Data Collection Regime criteria and indicators

		Criteria	Description	Value range
1	Business restriction	Data collection	Who is allowed to collect data?	3 - Only the lender on its own consumers 2 - The lender & public institutions or associational bodies 1 - The above & licensed commercial institutions 0 - Unregulated
2		Data providers	Who is allowed to furnish data?	3 - Public institutions 2 - Public institutions & authorized companies 1 - Public institutions & commercial companies 0 - Any individual
3		Collection of financial data	What type of financial data can be collected?	3 - Only data on defaults 2 - Both data on defaults & credit data 1 - The above & financial status (assets, income) 0 - Unregulated
4		Collection of complementary data	What type of complementary data can be collected?	3 - No complementary data are collected 2 - Data relating to individuals' payment history 1 - Complementary data about spouses 0 - Data relating to individuals' nonfinancial behavior
5		Restriction on reporting data on defaults	When can data on defaults become reportable?	3 - According to the number of arrears which were not paid on time or the height of the debt 2 - After a grace period has been granted to the consumer 1 - Unregulated 0 - Immediately
1	Consumer empowerment	Investigation of disputes	To which institutions can consumers appeal for data correction?	3 - State authority, data collectors, data providers 2 - State authority & data collectors 1 - Only data collectors 0 - Unregulated
2		Access to the data collected	Do consumers have access to the data collected about them?	3 - Consumers have access to the data collected about them as well as to the identity of the data providers 2 - Consumers have access to the data collected about them 1 - Unregulated 0 - Consumers do not have access to the data collected
3		Consent mechanism	By which mechanism does a consumer allow data to be collected about him?	3 - A consumer's consent is required before data can be collected (except for high-risk consumers) 2 - Data is collected automatically without a consumer's consent, unless the consumer requests that the collection of data about him be stopped (and on condition that he is not a high-risk consumer) 1 - Data is collected automatically without a consumer's consent but only on high-risk consumers 0 - Data is collected automatically without a consumer's consent

Table 2: Consumer Profiling Regime: criteria and indicators

		Criteria	Description	Value range
1	Business restrictions	Scoring producers	Who calculates the score?	3 - Only lenders on their own consumers 2 - Lenders & licensed companies 1 - Any commercial company 0 - Commercial companies & state authorities
2		Supervision of the scoring producer	To what supervisory procedures are scoring producers subject?	3 - The accuracy of the risk assessment process 2 - The type of data used for the calculation of scores 1 - The accuracy of data 0 - No regulatory supervision
3		Data used for scoring	What data can be used?	3 - Public identifying data & defaults 2 - The above & credit data 1 - The above & personal data 0 - The above & inquiries
1	Consumer empowerment	Consumers' rights in case of a dispute	What are the rights of the consumer in case of a dispute with the score producer?	3 - Examination of his\her dispute by a company representative 2 - Add an explanatory statement on his credit report 1 - A compulsory answer within a certain timeframe 0 - A consumer is not entitled to appeal the score
2		Access to scores by individuals	What are the rights of consumers regarding access to their credit score?	3 - Consumers are entitled to access an identical credit score as the one provided to other entities 2 - Consumers are entitled to access a credit score, but not necessarily the same score provided to other entities 1 - Unregulated 0 - Consumers cannot access their personal score
3		Consent mechanism	How does the consent mechanism work when the score is produced by an intermediary?	3 - A score produced by an intermediary requires the consent of the consumer 2 - A score produced by an intermediary does not require consent, but the consumer may request not to be scored 1 - A score produced by an intermediary does not require the consent of the consumer 0 - N\ a
4		Informing an individual about their score	Under what circumstance does an individual is informed about their score	3 - Every time his score is accessed 2 - Once a year automaticlly 1 - Unpon consumers request 0 - Only if its request for credit denies

Table 3: Data Use Regime: criteria and indicators

		Criteria	Description	Value range
1	Business restrictions	Access to the data	How is access to data determined?	3 - According to regulatory standards (size and annual income) 2 - A business license 1 - Membership in industry association 0 - Unregulated
2		Score use restrictions	In which economic spheres can the score be used?	3 - Consumer credit 2 - The above & companies that advance goods or services to consumers that will be paid at a later stage 1 - The above & residence shopping 0 - Unregulated
3		Data use restrictions	For what purpose can data be used?	3 - Credit decisions & supervision over the financial market 2 - The above & specified financial decisions 1 - The above & marketing 0 - Unregulated
4		Prerequisites for data use	What prerequisites are required to use the data & score?	3 - Authorization from the consumers 2 - Citizens' bank or credit card account numbers 1 - Citizens' ID\national security number 0 - Unregulated
5		Time limitation on data use	When can data on defaults no longer be used?	3 - Immediately after the debt is paid 2 - One to three years after the debt is paid 1 - More than three years after the debt is paid 0 - Unregulated
1	Consumer empowerment	Informing an individual about data use	Under what circumstance is an individual informed about his data being used?	3 - Every time his data is used 2 - If there is a risk of data breach 1 - If the use of their data has prevented their access to credit or worsened their credit terms 0 - The individual has no right to be informed
2		Consent mechanism	By which mechanism does the consumer give consent to the use of his data?	3 - A consumer's consent is needed before data can be used (except for high-risk consumers) 2 - Data is used automatically without a consumer's consent unless he requests that the use of his data be stopped (and on condition that he is not a high-risk consumer) 1 - Data is used automatically without a consumer's consent but only on high-risk consumers 0 - Data is used automatically without a consumer's consent
3		Transparency about the data users	What are the transparency rights of consumer regarding the use of their data	3 - Consumers have access to the identity of data users and the dates on which they used the data and purposes for which data was used 2 - Consumers have access to the list of data users and the dates on which they used the data 1 - Consumers have access to the list of data users 0 - Consumers do not have access to the list of data users

Appendix 2: (Updated 2021)

Table 1: Consumer Protection Score on three levels: National, Sectoral and the regulatory strategy (2018)

	Data Collection			Profiling			Data Use			National Score			National range		
	BR	CE	TS	BR	CE	TS	BR	CE	TS	BR	CE	TS	BR	CE	TS
Restrictions [BR] Empowerment [CE] Total Score [TS]															
US	7	33	20	11	50	31	13	11	12	10	33	22	7	39	18
Sweden	33	56	44	56	83	69	40	67	53	41	70	56	22	28	25
France	87	67	77	100	0	50	80	22	51	87	27	57	20	67	27
Israel	80	67	73	56	58	57	93	78	86	79	67	73	38	19	29
Sub-regime avg	52	56	54	56	48	52	57	44	51	54	49	52	5	11	3

Appendix 3: (Updated 2021)

Table A1: Detailed scores for the four countries and sub-regimes

		Consumer protection Measures	U.S.	Sweden	France	Israel
Data Collection	Market restrictions	Data collection	0	1	2	2
		Data providers	0	1	2	2
		Collection of financial data	0	1	3	2
		Collection of complementary data	0	2	3	3
		Restriction on reporting data about defaults	1	0	3	3
	Consumer empowerment	Investigation of disputes	1	2	2	1
		Access to the data collected	2	3	3	3
		Consent mechanism	0	0	1	2
	Total Collection Regime			4	10	19
Profiling	Market restrictions	Scoring producers	1	2	3	2
		Supervision of the scoring producers	0	2	3	1
		Data used for scoring	0	1	3	2
	Consumer empowerment	Consumers rights in case of a dispute	2	3	0	2
		Access to scores by individuals	2	3	0	3
		Consent mechanism	1	1	0	1
		Informing an individual about their score	1	3	0	1
Total Scoring Regime			7	15	9	12
Data Use	Market restrictions	Access to the data	0	1	3	3
		Score use restrictions	0	1	3	3
		Data use restrictions	0	1	3	3
		Prerequisites for data use	1	1	2	3
		Time limitation on data use	1	2	1	2
	Consumer empowerment	Informing an individual about data use	1	3	1	1
		Consent mechanism	0	0	1	3
		Transparency about the data users	0	3	0	3
Total Use Regime			3	12	14	21