

RECOMBINANT ECONOMICS:
Exploring Distributed Agency in Consumer Finance

by

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DALHOUSIE UNIVERSITY
DEPARTMENT OF SOCIOLOGY AND SOCIAL ANTHROPOLOGY

The undersigned hereby certify that they have read and recommend to the Faculty of Graduate Studies for acceptance a thesis entitled “Recombinant Economics: Exploring Distributed Agency in Consumer Finance” by Thomas J. Robbins in partial fulfilment of the requirements for the degree of Master of Arts.

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Abstract

This work traces the relationship of individual persons to national economic phenomena associated with consumer finance. The work follows the assemblage of individual consumer credit/debt agents through credit reporting and credit scoring, through to the aggregation of these agents in student loan-backed securitization and credit ratings. The work focuses on the unique technico-cultural constructions produced when human subjects are operatively conjoined to other related discursive and material objects, including related legislation, private corporations, and governmental bodies. The work explores how these unique constructions form stable networks connecting individuals to larger socio-economic settings: networks at once revealing the profoundly distributed nature of both ‘agents’ and their ‘agency,’ and at the same time intimating alternative approaches to questions of individual and collective agency outside the agent/structure dichotomy. The work concludes by addressing the place of this research in consumer finance generally, and the role of consumer finance in contemporary US economics broadly.

List of Abbreviations Used

ABS	Asset-Backed Security
ANT	Actor-Network Theory
BI	Business Intelligence
CDO	Collateralized Debt Obligation
CMO	Collateralized Mortgage Obligation
CRA	Credit Reporting Agency
CRA	Credit Ratings Agency
CRB	Credit Reporting Bureau
D+I	Debt-to-Income Ratio
DTC	Direct-to-Consumer Loan
FCRA	Fair Credit Reporting Act
FFELP	Federal Family Education and Loan Program
GDP	Gross Domestic Product
GSE	Government-Sponsored Entity
LIBOR	London Inter-Bank Offered Rate
LLC	Limited Liability Company
PS	Prospectus Supplement
SEC	Securities and Exchange Commission
SNA	Social Network Analysis
SPE	Special Purpose Entity
SPV	Special Purpose Vehicle
SSF	Social Studies of Finance
USCIS	United States Consumer Information Services
WOTC	Work Opportunity Tax Credit

Chapter 1: Introduction

I became an agent of consumer credit/debt in July of 2000. The event is recorded as a \$905 installment loan, taken out from a local credit union in South Dakota. For the next two years I was invisible until, in 2002, I took out another installment loan for \$2,042 from the same institution. My early years were quiet. Until September of 2002, when things picked up with an odd predictability. There were a couple of \$2,625 installment disbursements for each of the next two years, always in September and January; a couple from South Dakota, a couple from Colorado; a couple from Sallie Mae, a couple from Wells Fargo. By 2004, I was an agent extraordinaire. The same biannual pattern repeated, the balance amounts increased, the addresses changed. Loan amounts nearly doubled to \$4,250, then doubled again to \$8,500. There were a few more loans from Wells Fargo, a few from Alaska Commission on Postsecondary Education. The last of my largest loans, in fact, was borrowed from the latter lender in 2006...then things went quiet for a while again.

Between the end of 2006 to mid-2008, the loans – if they were not completely frozen – started moving (very) slowly in the other direction. That is, toward those loans that were not deferred – and there were several in deferment – repayments started to sadly trickle in like a Sisyphean stream flowing uphill. Things continue this way through 2007, until another address change in 2008 marks a halt to all activity, right before the repayment stream dried up and the loan balances began to swell yet again. The installment loans all froze in deferment. Next to them grew several additional, separate loans, different in kind from the first bunch. These were revolving loans, and their balances were all over the place. Loan limit of \$2000 or so reached one month, chiseled back down to \$0 a few months later. The pattern repeated, is repeating, all the way into 2013.

This thirteen-year chunk of my life marks the full extent of my existence as an agent of consumer credit/debt. It can be made to read in a number of ways, however, each narrating very different kinds of protagonists. If the number of loans above was taken as the number of my professional accomplishments, for instance, where the loan balance amounts were qualitative markers of my performance (the higher, the better), then the last

ten years were my golden years of productivity. Indeed, a case can be made – a case will be made – that in a national economy (e.g., the US economy) whose Gross Domestic Product (GDP) consists significantly of dollars and activity related to the consumer finance sector, consuming credit is producing debt, and debt is a fungible asset. Consumption is production, and I was a productive producer.

On the other hand, this twelve-year history to *me* is a completely different story. For me, each of these dates, addresses, and loan balances are incidental to the things I was *really* doing in life. There is the teenager who took out his first loan to buy a bicycle to get to work. He borrows \$2,042 a couple of years later for a vehicle to drive out-of-state to college – i.e., borrows \$2,042 to buy something that will drive him straight into debt. But that doesn't occur to him until after a few more years of loans piling up so easily and so routinely that it starts to just feel like what people do: 'I'm already \$16,000 in debt, what's another \$5,000...what's \$10,000?'

This kind of optimism is what one finds on the brighter, sunnier, 'credit' side of things, when the loan is taking you somewhere you can't wait to arrive, when it still feels like the loan is working for you. Everything grows a bit darker when the horizon rolls over into 'debt' and the night comes on. The history above that follows from 2006 reads like a history of decisions (if not principally, at least largely) driven by the repayment of debt. The loans start putting on weight as we travel together. They insist we stop to rest and take care of a few things before we continue on. All of 2007 spent working overseas finds steady repayments for a while. But a return to the US in 2008 finds a shortage of jobs and the entire country quaking from a 'Credit Crisis.' Luckily (absurdly), there were credit cards (revolving loans) to float me through. Buying debt to pay for debt: there were more than a few of us living that way in 2008. There were more than a few of us before that time (Sullivan, 2008), there are more than a few of us still today (US Department of Commerce, 2012).

Incidentally, in the thick of all this, I happened to pick up a text by Nicklas Luhmann, *The Differentiation of Society* (1982). Unemployment afforded me plenty of time for dense social scientific texts...I found them slightly less-depressing than my debts. So I'm reading Luhmann, and I'm thinking about what he's saying, about how all the complex parts of social existence fit together just so. Things tend to serve functions,

I'm learning from Luhmann, functions that typically contribute to the reproduction of both themselves and the larger systems in which they find themselves. And I'm thinking about my debts. I'm thinking, 'what possible structural function could these have?' I couldn't help but entertain the notion that debt is the effective mechanism through which accumulative socio-economic systems reproduce themselves – a notion fanned by scholars of Social Structures of Accumulation and critical economics more generally (e.g., McDonough, Reich, & Kotz, 2010; Silvers, 2008). At a personal level, one is chided, frightened, or otherwise duped into a higher education and all the debt it incurs; one works – or, during unemployment, one borrows – to repay those debts; whether consuming credit or producing goods and services to repay debts, therefore, one produces...an ensured and dependable cycle of production and re-production.

And this is finally where the present work finds its impetus: precariously situated amidst a very personal sense of anger, dangerously armed with thousands of dollars worth of critical social theory from a degree in social science, now peppered with a dilettante's interpretations of systems economics. That is, sorting out how all my personal subjective experiences of debt coincided with an objective analysis of an ostensibly debt-driven economy is really how and why the questions behind this thesis started forming: How should we think about consumer credit/debt? How *do* we think about it? More specifically, *how and of what is consumer credit/debt assembled, and how am I implicated in that assemblage?* And finally, *what can any of this tell us about larger trends of socio-economic organization in the United States in the 21st century?* What can it tell us about *human* organization in an anthropological sense?

The work that follows takes place in this gap, separating subjective persons, individual consumers and producers on the one side, from 'the consumer finance sector,' 'a credit-driven economy,' 'finance capitalism' on the other. All of what follows is an investigation of what occurs in that gap, an attempt to bridge the space between. On the nearer side of things, we will start with the assemblage of an agent of consumer credit/debt through the credit report and credit score. The goal will be to try to understand what kind of subjects and objects we're dealing with there: how are they assembled, what is expected of them, how do they relate to one another, etc.? We will find that the subject-objects created there are uniquely articulated though the market devices of the credit

report and credit score as an ‘agents’ of consumer credit/debt. We can then follow the aggregation of these agents into securitization and credit ratings. There, we’ll find the assemblage of a new type of entity, an asset-backed security – a ‘Trust,’ more specifically – viewed from the Social Studies of Finance perspective of *agencement*. We’ll find that this entity is assembled similarly to the individual agent through market devices, in this case through those of the Prospectus and Prospectus Supplement and through credit ratings. These two entities, the agent and the agencement, have come to define the positive objects of this research, and in so doing have also cut the boundaries at its outer edges.

Among agents, we’ll start (conveniently) right where it’s possible to avoid dealing with all the unicity and complexity of *human persons*. We’ll begin, instead, with the constitution of agents of a very particular kind: human persons *agenced* into agents of consumer credit/debt through the credit report and credit score, until they form a kind of agential nexus connecting various consumer credit/debt actors together for various reasons. The decision to proceed this way places a bottom boundary on the work, such that the subjective, *personal* experience of consumer credit/debt is only implicated by the present work, never dealt with directly. Similarly, we’ll continue the descriptive analysis into chapter three right where consumer credit/debt assemblage opens out onto ties with national, even global, socio-economic phenomena. As Wells Fargo Student Loan Trust 2001-1(our object of interest in chapter three) opens up to international markets, as the specific forms of securitized installment (i.e., student) debt link together with other securitized mortgage and revolving debts to form the consumer finance industry, as the number of actors involved increases, the analysis stands always ready to explode into something much larger and probably intractable in total. Which is where we reach the upper boundary of this work: the consumer finance industry, writ large, and global flows of capital are, likewise, only implicated by the present work.

The empirical focus shifts therefore to the enormous, fractal-like (somehow-invisible, or at least commonly-overlooked) space that separates the two entities we’re most familiar with in this context. In what follows, we will deal with neither 1) ‘individuals’ nor 2) ‘society’ or ‘the economy’ in such general terms. Which is not to say we’ve done with agents and structures, with micro- and macroeconomics, but only that

direct access to either of these entities is, in effect, closed off to us in light of our boundaries. We are confined within these boundaries, stuck in the space that *binds* – and this verb is not used lightly – the agent to her structure, the thoughts and behaviors of the micro-economic agent to his macroeconomy. We’re stuck deconstructing and reconstructing the discourse that carries us from subjective persons cast in cultural narratives to ‘commensurable and exchangeable’ economic agents. We’re stuck disassembling and reassembling the machinery that carries us from consumers of domestic credit to producers of debt for export.

In the end, the findings here are probably not surprising for anyone who has ever felt her subjective economic experience existentially shaped by broader trends in her socio-economic environment. And yet, the same findings may be just as equally surprising to anyone who supposes his own inefficacy in the face of the same, broader socio-economic environment. In either case, the work here suggests that the ground thought to *separate* an agent from his/her economy does not separate the one from the other at all. At least in the context of the work at hand, we might even say that there is complete continuity between the agent and his/her economy. *The process of consumer credit/debt assemblage connects individuals to wider socio-economic settings by assembling an unbroken chain of agential nexuses, conjoining and aggregating market devices, agents, and agencements in increasingly complex forms.*

Methods

No doubt it’s clear from the above that this work began as Analytic Autoethnography (Anderson, 2006). Taking seriously Deleuze & Guattari’s notion – from what would come to be called Assemblage Theory (1987) – that the author, the text, and the object of research are always inextricable, I began my research into consumer credit/debt by first locating myself as both a subject engaged with, and an object of, consumer finance. From a practical standpoint, that meant first understanding how it is that one enters into the world of credit/debt: i.e., understanding how one is represented, translated into, or otherwise granted access to the world of consumer finance. From the start, however, the task of locating subjects within consumer credit/debt meant

understanding how financial markets and all of their attachments are meticulously constructed before they can become anything like ‘economic objects’ (Callon, 1998). We’ll see in all of what follows just how involved and extensive the process of assembling of economic objects can be, with a special eye toward how this process unfolds specifically in consumer finance. We’ll see that this process is anything but localizable or delimit-able to within the confines of a single institution, a single geographic site, a single set of intentions, or even a single economic sector. Economic objects, no matter their scale, are sprawling objects, and accounting for one turns out to mean accounting for whole suite of additional, unforeseen economic objects that seemed, from the start, completely unrelated. Which is how this research turned from an Autoethnography into a social study of finance, or the tracing of an ‘actor-network,’ spiraling off into all sorts of extemporaneous directions.

The research that follows draws both methodologically and theoretically on approaches worked out in Actor-Network Theory (ANT) (e.g., Latour, 2007; Law, 2004) and Social Studies of Finance (SSF) (e.g., Callon, Millo, & Muniesa, 2007; MacKenzie, 2009; Poon, 2009; Poon, 2012). Not too dissimilarly from Grounded Theory (c.f., Glaser & Strauss, 1967) or Ethnomethodology (c.f., Garfinkel, 1984), this work attempted to begin with a definite point of reference (in this case, me), and trace a network of associated phenomena outward by following ‘accounts’ within the data. That is, each successive step of this research depended intimately on ‘traces,’ ‘indications,’ or ‘accounts’ being made from one bit of datum, and then following it out toward other closely related phenomena. Where this sort of ANT/SSF approach differed, however, from the more familiar methods noted above was in its willingness to include within the research horizon *objects*, as well as persons. Which is why the actual research labor entailed an equally serious look at semi-structured, qualitative interviews with informants on the one hand, and a deep discursive read of documents and associated technologies on the other.

Where the interviews were concerned, I attempted to contact employees from across the consumer finance industry over a period of about two years. These included loan officers, credit councilors, employees of credit reporting bureaus and investment banks. In the end, I was able to interview seven people, led in many cases by one

informant to the next. These included four employees from one of the largest banking institutions in the US (Wells Fargo); one portfolio manager from a local investment bank in South Dakota; one loan officer from a credit union in South Dakota; and two university professors who were both also former employees of large financial institutions in the US. Most interviews consisted of one or two interviews with each person, ranging in duration from around one to three hours each. During this time, I was also in regular contact with a couple of other scholars working with consumer credit/debt.

In addition to these interviews, I spent a great deal of time – months in some cases – analyzing a number of key financial documents and websites. Among these were my own personal credit reports produced by all three credit reporting bureaus; loan application documents from my own student loans; explanatory marketing materials published by FICO and the three credit reporting bureaus on their websites; the latest annual reports (10-K forms) released by all three credit reporting bureaus and by Wells Fargo to the Securities and Exchange Commission's (SEC) online database; a publicly-filed prospectus and prospectus supplement (form 424 (b) (2)) outlining the contents and terms of a student-loan backed security for offer in secondary markets (also filed with the SEC); and published ratings methodologies of credit ratings agency, Moody's, delineating their methods of evaluating both private and public student-loan backed securities. The methodology dealing with private securities was given to me by the portfolio manager, and its counterpart dealing with public securities was retrieved from Moody's website.

Given these two primary research methods, this work sought to understand both the interviews and the documents as indices of consumer credit/debt activity, vis-à-vis the economic subjects and larger economic objects they help to assemble. In this regard, the notion of *agencement* is crucial from the start, which will immediately confuse and replace any notions of neatly bounded ‘economic objects,’ on the one hand, wielded by fully intentional ‘economic subjects’ on the other. In describing the concept of ‘agencement,’ for example, Muniesa, Millo, and Callon, explain how it is “an idea that emphasizes the distribution of agency and with which materiality comes to the forefront” (2007, p.3). This definition sums up the method in all of what follows. In accounting for the distribution of agency, I tried to account for as many acting agents as are *accounted*

for (as ANT understands the phrase) in the data. Some objects of inquiry here were accounted for in the actual, material objects indexing these agents and the relations among them, some were accounted for in interviews.

I'm very much following Cochoy in this respect when he explains that, "rather than looking for hidden backstage mechanisms behind the observed phenomena, rather than calling for some external knowledge in order to increase the understanding of the field, I will try to begin simply from the surface of behaviours and things" (2007, p. 107). In other words, he reiterates, "instead of looking for the explanation of market choices in classical or innovative 'backstage' mechanisms, such as cultural-political-social constructs or theoretical frameworks, I intend to show that markets may also be traced at the immediate ground level of ordinary transactions" (2007, p.110). In this sense, it can be thought of as an 'Etic' approach to an ethnography of finance.

The goal here is to understand how the implicated material objects (or 'market devices,' including documents, algorithms, and associated technologies) serve as intersections which draw participating market actors together. Understanding objects of research from this vantage point accomplishes two things. First, it attempts to navigate between a false dilemma: that of treating market devices either as unproblematic indicators of objective conditions, or as meaningless social constructions. In some cases, in fact, it's precisely because market devices are so meticulously, 'socially' constructed that they take on the quality of being objective. And this point is closely related to the second, which is that this perspective allows us to see how market devices actually operate to bring seemingly disparate actors and elements together.

Regarding the first point, it's easy to get the impression flipping through the pages of, say, Moody's Approach to Rating Private Student Loan-Backed Securities, that the process of securitization rests on objective relations between objective indicators, worked out objectively. It almost seems automatic: take the numbers derived from the credit report and other consumer data sources, plug them into a stress-testing algorithm, and credit scores for securitized loan portfolios are derived as easily as a temperature reading is drawn from a thermometer. Of course, Poon's work (2012) on how the credit rating agencies have evolved in consumer lending alongside the credit score shows that there is an enormous amount of labor and subjective decision making built into the process of

credit rating at different historical junctures. She shows how, in fact, ‘socially’-driven, decisions to commensurate credit scores with credit ratings within mortgage-backed securities became problematic in the credit crisis of 2008. The backlash from investment banks and hedge funds in the midst of that crisis, as they tried to shift the blame onto the credit rating agencies for their faulty calculations, suggests the ratings were indeed recognized as faulty social constructions. But for all that, credit rating agencies still have legitimacy to this day. They did not evaporate from economic consciousness upon their being found to be faulty (social) constructions, and they are still very much an integral part of credit/debt agencements today – the obsession with the sliding credit ratings of sovereign debt around the world at present is evidence of this fact exactly.

The point is that if we consider credit ratings, or credit scores, or credit reports to be neither hard objective measures nor flimsy social constructions, but rather nexuses of socio-economic interaction, it’s understandable that they would not vanish when found to be fallible after all. Credit ratings, and other market devices like them, are not immutable cogs in a rational, deterministic economic machine. They are complex, dynamic arrangements of discursive assumptions and material technologies that connect diverse market actors in any number of ways for different reasons. The objects we’ll be analyzing here, credit rating methodologies among them, can be considered in a similar light.

Additionally, since all of our objects of research here do not rest *solely* on relations between statistical aggregates and capital flows, the tools of conventional macroeconomics may not be the best suited for this study. Surely, something must be said about the experiential, surface relations of individual agents and the *meaning* of those relations, since it is these very relations that make up consumer credit/debt to begin with. That is to say, we should probably account for the existence of *subjects*, how they are represented or *agenced*, and how they relate to one another. To that end, we will spend some time discursively, meaningfully analyzing the process by which a person is turned into an agent of consumer finance.

Still, it may not be totally accurate to say that the Trust is predicated solely on (what might, before ANT, have been called) ‘the social relation’ – i.e., subjective relations between human subjects whose material settings and wider socio-economic environments have no bearing on how interaction unfolds. In my experience,

interviewees even within a single company had very little to do with persons in other departments of the same company, and even less to do with the persons whose loans they were trafficking or modifying. As one interviewee from Wells Fargo put it, “the underwriting guys know nothing about ABS.” That sentiment that was echoed in my interview with the woman (from the same institution) who worked exclusively with collecting and correcting data for the credit report. She admitted she knew very little about what happened to the final products once they left her hands, or even how many more departments or employees those products would interact with in the course of their circulation. Which is to say, at least in this case, relations between actors were ostensibly more bureaucratic and impersonal than they were socially embedded – if they are inflected by old ethnic and cultural biases, these influences are hidden well behind the calculative edifices of contemporary business and management practices.

Then again, none of this is to say that personal relationships between market participants are ineffectual. We are not dealing with what Boulding (1985) called ‘ergodic systems,’ where actual, human participants within the organization can come and go so long as the transcendent function of their roles remains intact. We are dealing with actual people here, after all. Among whom, I was reminded, we must also account for “flows of paper, electrons, people, emotions, social relations, taxicabs, fear, identities, favours, unwritten codes, winks, drinks” (Hetherington, personal communication, June 2012). Indeed, the recent scandal of London Inter-Bank Offered Rate (LIBOR) rate-fixing – a rate that is instrumental in this analysis – unearthed in the personal correspondence between affiliates in the banking industry, emphasizes the significance of personal or ‘social’ relations in what would seem to be otherwise impersonal market forces (Smith, 2012). Which is to say, the materialist, technical leanings of Social Studies of Finance are not meant to undo the difficult ties discovered by economic sociologists and anthropologists with their notions of ‘socially embedded’ economics.

Rather, the significance of relations between *objects* or market devices has to do with an awareness that there is also something in the technological infrastructure itself, in the material arrangements of things that comes to bear on human subjects and socio-economic phenomena more generally. As such, the conventional tools of sociology and anthropology – participant observation, interviews, surveys, etc., tools that unearth social

networks and subjective constructions – though integral, are not the only way to approach the analysis. The case becomes one in which describing either the objective economic conditions or the subjective social relations making up an economic object still fall short of actually locating our analytical object within the realm of human meaning, on the one hand, and paying due diligence to the efficacy and reality of objective market devices on the other. What is needed is a way to describe things subjectively – i.e., in terms a subject can understand – while at the same time appreciating the hard, objective truth of social constructs like the credit report, the credit score, or credit ratings. The notion of agencement does this by taking a human look at, among other things, market devices themselves, paying special attention to how these devices link up with human actors to form more complex socio-economic arrangements. Which is to say, it locates subjects within the object of research by drawing material connections between different sites, actors, and technologies.

Toward that end it seems prudent to include in this analysis not just my interpretations drawn from interviews with human subjects, but also an analysis of these devices themselves, in as close a language to that of these devices as possible. I have, therefore, mostly applied the insights gained through interviews with human subjects toward better understanding how these market devices operate with each other in the assemblage of consumer credit/debt. This is why we will spend so much time with the credit report *as itself*, and why we will spend so much time on the ‘Prospectus and Prospectus Supplement’ – documents that disclose the constitution and contents of our particular Asset-Backed Securities (ABS) – *as themselves*. It is a method that Branneis and Riles (Riles, 2006) have applied to studying documents that circulate in legal and governmental agencements, and one that Cochoy (2007) specifically has applied to SSF. That method is one of investigating what objects, *as technical artifacts*, are capable of saying about the socio-economic ensembles they help to construct. It seems to me that an enormous amount of significance rests on understanding these artifacts – these objects – as indices of very real, very concrete social relations. As Graeber (2001) has said about objects in social contexts more generally, they are often the material intersections – signposts, of a sort – at which social meaning and objective economic or political processes converge. Marx said as much long ago in his seminal statement that wages and

costs, far from being an objective measure of value, turn out to be relative and shifting according to social context, and are as such capable of revealing the workings of the social arrangements through which they circulate (Marx, 1965).

To bring this argument back to the current research, consider a bit of text drawn from recent legislation – which we will return to in the last chapter – covering the regulation of ABSs specifically (Regulation AB, 2004, p.11):

Asset-backed securities and ABS issuers differ from corporate securities and operating companies. In offering ABS, there is generally no business or management to describe. Instead, **information about the transaction structure and the characteristics and quality of the asset pool and servicing is often what is most important to investors**[my emphasis].

Here we find documents being discussed as quite central to the formation and maintenance of markets. Just prior to this statement, the document explains how, in soliciting comments and advice from market participants in the drafting of this legislation, respondents – and these respondents were/are key market players – were overwhelmingly supportive of the initiative to standardize how offerings of asset-backed securities should be disclosed and reported with the SEC. Because of the exigencies of ABS specifically – and, I would add, because of the centrality of these filings, *as market devices*, in affording a stable, mutually-recognizable object of reference – we see the importance of addressing their filing requirements with the needs of participating actors distinctly in mind. In other words, we catch a glimpse of how fundamental these documents are to the entire undertaking.

As a final disclaimer, I should fully disclose the fact that the Network/Assemblage I'm about to represent here is admittedly incomplete. It's missshapen, round in the middle, crude and unfinished. The object I'm going to be describing here is no less dependent on the questions I'm asking of it or the technologies through which it was accessed than are the agents agenced by the credit report or the security disclosed in the Prospectus. I'm not purporting here to be able to describe this object in full, I'm only assembling an object (this thesis) in much the same way that I myself am assembled as an agent of consumer credit/debt: in piecemeal, taking what's

available, retaining what is useful for very specific purposes. But for all that, what follows *is* based on direct evidence as encountered in the research: be it through personal interviews or document analysis. I have assembled what follows as nearly as possible from my own direct relationships to consumer credit/debt, and I've consistently tried not to leap out toward any kind of generalization or disconnected conclusion. Which is to say, the work here may not be completely comprehensive, but – as far I can tell, having never been trained as a financial analyst and basing my conclusions on the descriptions that were given to me – it *is* accurate. Maybe more importantly, it's based on my *actual, experiential* relationship to this object of research. Consumer credit/debt reassembles me, and I am assembling *it* here.

Chapter 2: Credit Reporting and Credit Scoring

How to Assemble an Agent with Character-as-Capacity

The decision maker of most credit grantors never sees the applications and knows only what is available on the application and on any credit bureau report that is obtained...There is, therefore, no way to estimate Character, unless that term is redefined to mean that the applicant has a reasonable record regarding other known debts..."

- Lewis, 1992, p. 5



TransUnion®

Credit Report for Thomas J. Robbins

Report #: 8722109234

Report date: 03/14/2010

PERSONAL INFORMATION

The following information is reported to us by you, your creditors and other sources. Each source may report your personal info differently, which may result in variations of your name, address, Social Security number, etc. The names are listed in no particular order and may include variations of your legal name. These addresses are listed in no particular order and may include previous addresses where you received mail.

Birthday

MM/YYYY

Current AddressPrevious Addresses

Address: 1202 Street Number

Street Number

City name, State, Zip code

name, State, Zip code

Address: 1202

City

Date reported: 03/14/2011

03/14/2005

Date reported:

Address: 1202 Street Number

City

name, State, Zip code

Date reported:

03/14/2006

NEGATIVE ACCOUNTS

Accounts that contain a negative account status. Depending on your state of residence, accounts not paid as agreed generally remain on your credit file for 7 years from the date the account first became past due leading to the current not paid status. Chapters 7, 11 and 12 bankruptcies and unpaid tax liens may remain for up to 10 years. Tax liens that have been paid may remain for up to seven years.

Lender Name

Address:Account Number:

Street Address

38767840296100345672

State, Zip Code, 46037

PERFORMING ACCOUNTS

Installment Accounts

Installment accounts are credit accounts in which the amount of the payment and the number of payments are predetermined or fixed, such as a car loan.

Lender Name

Address:Account Number:

Street Address

38767840296100345672

State, Zip Code, 46037

(888) 123-4567

Status:Pays as agreed, in payment

Date Opened:

Type:

Account Owner:

10/2004

Installment

Individual

Reported Since:

Last Reported:

High

balance:

05/2008

12/2010

\$8,000

Current

balance:

\$8,250

Account History:

Balance History - The following data will appear in the following format:
account balance / date payment received / scheduled payment amount / actual amount paid

Dec 2010: \$8,102 / August 5, 2010 / \$103 / no data
Nov 2010: \$8,102 / August 5, 2010 / \$103 / no data
Oct 2010: \$8,102 / August 5, 2010 / \$103 / no data
Oct 2010: \$8,102 / August 5, 2010 / \$103 / no data
Sep 2010: \$8,102 / August 5, 2010 / \$103 / no data
Aug 2010: \$8,102 / August 5, 2010 / \$103 / \$103
Jul 2010: \$8,153 / May 18, 2010 / \$103 / no data
Jun 2010: \$8,153 / May 18, 2010 / \$103 / no data
May 2010: \$8,153 / no data / no data / no data
Apr 2010: \$8,261 / no data / no data / no data
Mar 2010: \$8,302 / no data / no data / no data
Feb 2010: \$8,333 / no data / no data / no data
Jan 2010: \$8,352 / no data / no data / no data
Dec 2009: \$8,372 / no data / no data / no data
Nov 2009: \$8,382 / no data / no data / no data
Oct 2009: \$8,401 / no data / no data / no data

Revolving Accounts

Revolving accounts are charge accounts that have a credit limit and require a minimum payment each month, such as most credit cards.

Lender Name**Address:Account Number:**

Street Address
38767840296100345672
State, Zip Code, 46037
(888) 123-4567

Address Identification Number:

0123647448

Status:Open, never late

Date Opened:**Type:****Account Owner:**

10/2009	Revolving	Individual
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Reported Since:**Last Reported:****High****balance:**

11/2009	03/2010	\$1,464
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Current**balance:**

\$0

Account History:

Balance History - The following data will appear in the following format:
account balance / date payment received / scheduled payment amount / actual amount paid

Jan 2011: \$0 / no data / \$20 / no data

Dec 2010: \$0 / no data / \$20 / no data

Nov 2010: \$0 / no data / \$20 / no data
Oct 2010: \$32 / no data / \$20 / no data
Sep 2010: \$20 / no data / \$20 / no data
Aug 2010: \$0 / no data / \$41 / no data
Jul 2010: \$1,371 / no data / \$41 / no data
Jun 2010: \$1,395 / no data / no data / no data
May 2010: \$1,365 / no data / no data / no data
Apr 2010: \$1,434 / no data / no data / no data
Mar 2010: \$0 / no data / no data / no data
Feb 2010: \$0 / no data / no data / no data

Between Aug 2010 and Jan 2011, your credit limit/high balance was \$1,464
Between May 2010 and Jul 2010, your credit limit/high balance was \$1,454
Between Apr 2010 and Apr 2010, your credit limit/high balance was \$1,451
Between Feb 2010 and Mar 2010, your credit limit/high balance was \$0

INQUIRIES

A request for your credit history is called an inquiry. Inquiries remain on your credit report for two years. There are two types of inquiries those that may impact your credit rating and those that do not.

Inquiries that do not impact your credit rating

These inquiries include requests from employers, companies making promotional offers and your own requests to check your credit. These inquiries are only viewable by you.

CRC ELECTRIC CO.

Address:	Date of Request:
Street address	01/15/2010,
01/15/2010	
City, State, Zip code	
No phone number available	

Inquiries that may impact your credit rating

These inquiries are made by companies with whom you have applied for a loan or credit.

CONSUMER BANK

Address:	Date of Request:
Street address	08/17/2010
City, State, Zip code	
No phone number available	

SUMMARY OF RIGHTS UNDER FAIR CREDIT REPORTING ACT (FCRA)

The federal Fair Credit Reporting Act (FCRA) promotes the accuracy, fairness, and privacy of information in the files of consumer reporting agencies. There are many types of consumer reporting agencies, including credit bureaus and

specialty agencies (such as agencies that sell information about check writing histories, medical records, and rental history records). Here is a summary of your major rights under the FCRA. For more information, including information about additional rights, go to www.ftc.gov/credit, or write to Consumer Response Center, Room 130-A, Federal Trade Commission, 600 Pennsylvania Ave., N.W., Washington. D.C. 20580.

You must be told if information in your file has been used against you.

Anyone who uses a credit report or another type of consumer report to deny your application for credit, insurance, or employment -- or to take another adverse action against you -- must tell you, and must give you the name, address, and phone number of the agency that provided the information.

You have the right to know what is in your file.

You may request and obtain all the information about you in the files of a consumer reporting agency (your "file disclosure"). You will be required to provide proper identification, which may include your Social Security Number. In many cases, the disclosure will be free. You are entitled to a free file disclosure if:

- a person has taken adverse action against you because of information in your credit report;
- you are the victim of identity theft and place a fraud alert in your file;
- your file contains inaccurate information as a result of fraud;
- you are on public assistance;
- you are unemployed but expect to apply for employment within 60 days.

In addition, by September 2005 all consumers will be entitled to one free disclosure every 12 months upon request from each nationwide credit bureau and from nationwide specialty consumer reporting agencies. See www.ftc.gov/credit for more information.

You have the right to ask for a credit score.

Credit scores are numerical summaries of your credit-worthiness based on information from credit bureaus. You may request a credit score from consumer reporting agencies that create scores or distribute scores used in residential real property loans, but you will have to pay for it. In some mortgage transactions, you will receive credit score information for free from the mortgage lender.

You have the right to dispute incomplete or inaccurate information.

If you identify information in your file that is incomplete or inaccurate, and report it to the consumer reporting agency, the agency must investigate unless your dispute is frivolous. See www.ftc.gov/credit for an explanation of dispute procedures.

Consumer reporting agencies must correct or delete inaccurate, incomplete, or unverifiable information.

Inaccurate, incomplete, or unverifiable information must be removed or corrected, usually within 30 days. However, the consumer reporting agency is not required to remove accurate derogatory information from your file unless it is outdated (as described below) or cannot be verified. A consumer reporting agency may continue to report information it has verified as accurate.

Consumer reporting agencies may not report outdated negative information.

In most cases, a consumer reporting agency may not report negative information that is more than seven years old, or bankruptcies that are more than 10 years old.

Access to your file is limited.

A consumer reporting agency may provide information about you only to people with a valid need -- usually to consider an application with a creditor, insurer, employer, landlord, or other business. The FCRA specifies those with a valid need for access.

You must give your consent for reports to be provided to employers.

A consumer reporting agency may not give out information about you to your employer, or a potential employer, without your written consent given to the employer. Written consent generally is not required in the trucking industry. For more information, go to www.ftc.gov/credit.

You may limit "prescreened" offers of credit and insurance you get based on information in your credit report.

Unsolicited "prescreened" offers for credit and insurance must include a toll-free phone number you can call if you choose to remove your name and address from the lists these offers are based on. You may opt-out with the nationwide credit bureaus at 1-888-567-8688 (888-5OPTOUT).

You may seek damages from violators.

If a consumer reporting agency, or, in some cases, a user of consumer reports or a furnisher of information to a consumer reporting agency violates the FCRA, you may be able to sue in state or federal court.

Contents of the Credit Report

Here finally, and in a bit more detail, is the thirteen-year history we breezed over in the introduction. It entails thirteen years of an agent's existence condensed, by some reports, into half as many pages. It is the primary passageway through which an agent of consumer credit/debt is born into this particular world, operating at a kind of Planck

Scale of one's existence in the world of consumer finance: there is no more basic, and at the same time coherent, indicator of me in that world. I'm referring here to the 'Credit Report.'

I should start by explaining, however, that this credit report is not *exactly* what you receive when you order your own credit report. This is partly because I've omitted a lot of personal information; it's partly because my credit history entails more or less of certain types of credit than others' credit reports; but it's mostly because there is not a single credit report for each individual consumer, there are three. And that's because there is not one credit reporter, but three¹: Equifax, Transunion, and Experian. In industry-speak, these three companies are called Credit Reporting Bureaus (CRBs) or Credit Reporting Agencies (CRAs), interchangeably – we'll stick to calling them CRBs, to distinguish them from the Credit Rating Agencies (CRAs) we'll encounter later.

Though the history of how these companies rose to dominance is incredibly thin, we know that out of the froth and chaos of early credit reporting in the United States, these three eventually came to be the principal firms maintaining national databases on almost every individual credit consumer in the US – and increasingly in other countries, as well. Though banks themselves, and a number of related consumer lenders and/or 'data-miners,' also maintain significant databases on a spectrum of lending and borrowing activity in the US, these three firms have the market pretty well sewn up at the moment (FICO, 2000; Poon, 2007). Hence, most US consumers have three distinct credit reports and are entitled to all three of those reports once a year. So depending on where one lives, or which CRB your bank, employer, etc. prefers to work with, your individual credit history is either clearly defined by one CRB, or strangely triangulated in the accounts of these three, enormous market actors. The report I have assembled above, then, functions like a Venn Diagram of all three of my credit reports, showing only the information that is available from *all three* CRBs.

That said, the contents of each of the three reports are actually pretty uniform. To begin with, each report is divided into at least four main categories of reported information. These include information on 1) **Current/Closed Accounts**, 2) **Personal**

¹ Additionally, the CRB, Innovis, is beginning to appear here and there; though none of the participants I interviewed had even heard of this company.

Information, 3) the history of **Inquiries** made about you, and 4) a **Summary of Rights** Under the Fair Credit Reporting Act. The latter of these two items are a little easier to describe than the former, so it's probably easier to start with these.

The Summary of Rights Under the Fair Credit Reporting Act (FCRA) section, for starters, is pretty self-explanatory. It is a list of eleven consumer rights, established by the FCRA and summarized in your report:

- You must be told if information in your file has been used against you.
- You have the right to know what is in your file.
- You have the right to ask for a credit score.
- You have the right to dispute incomplete or inaccurate information.
- Consumer reporting agencies must correct or delete inaccurate, incomplete, or unverifiable
- Consumer reporting agencies may not report outdated negative information.
- Access to your file is limited.
- You must give your consent for reports to be provided to employers.
- You may limit "prescreened" offers of credit and insurance you get based on information in your credit report.
- You may seek damages from violators.

Identity theft victims and active duty military personnel have additional rights.

We'll come back to this section periodically, considering the implications of government regulation more broadly. But for now, it should suffice simply to point out the obvious: credit reporting is significant and pervasive enough of an activity to have an entire legislative Act devoted to its functioning. And, in the first of many crossovers – some more hostile than others – between ‘the market’ and ‘the government,’ the main points of that act are legally-required to be listed on the credit reports themselves. It is in this sense, a co-assemblage of *at least* legislation and private data on consumer behavior.

In any case, the Summary of Rights section is typically preceded by the Inquiries section, which is likewise relatively straightforward. It simply lists all the businesses that have paid to obtain your credit report in the last two years. As the Equifax report explains, “there are two types of inquiries those that may impact your credit rating and those that do not. Inquiries that may impact your credit rating...are made by companies

with whom you have applied for a loan or credit.” Conversely, “Inquiries that do not impact your credit rating… include requests from employers, companies making promotional offers and your own requests to check your credit” (Equifax Inc., 2011). The basic idea behind this division – as explained on credit reporters’, credit scorers’, and financial institutions’ websites that offer free ‘credit education’(up to a point) – is that applying for too many loans makes the borrower look unstable and desperate. Which is why, in a bizarre enactment of the philosophical problem of the infinity of reflection, inquiries of one’s report are also included on the report.

Unlike either the Inquiries and Summary of Rights sections, however, the first and second of the categories listed above (Current Accounts and Personal Information) can get a bit more complicated. The Current Accounts section is the section that actually lists the dates and figures tracking your performance as a borrower. This section likewise consists of four principal divisions, which cover what are commonly considered the four main branches of consumer lending: 1) Mortgage, 2) Installment, 3) Revolving, and 4) Other. Mortgage credit consists solely (eponymously) of mortgage loans, both past and present. Installment credit covers all manner of personal loans, fixed in amount and duration, such as a car or student loan. Additionally, Revolving credit is described by the Equifax as “charge accounts that have a credit limit and require a minimum payment each month, such as most credit cards”(Equifax Inc., 2011, p. 12). Lastly, by Other credit, the CRBs are referring to “all accounts that do not fall into the other categories and can include 30-day accounts such as American Express” (Equifax Inc., 2011, p. 13).

Consequent to these four, primary distinctions, the CRBs further subdivide each current account into two categories: 1) Negative Accounts, and 2) Performing accounts. Quite simply, a performing account is one in which the obligor – this is the preferred term to ‘borrower,’ and especially ‘debtor,’ in this context – has paid on time and in full, either the entire amount, or the amount due each period. Conversely, a negative account is one in which the obligor has failed to meet his obligations as defined in the Loan Agreement – an equally crucial artifact in the functioning of consumer credit/debt, and one which ties this industry quite intimately to the world of litigation, also.

A list of the remaining items considered significant by CRBs with respect to both negative and performing accounts – and which will be encountered in all four types of consumer credit – is as follows:

- Date account was opened
- Date account was closed (if applicable)
- Date account was first reported
- Date account was last reported
- High balance of the account (in \$)
- Current balance of account (in \$)
- Owner of account (e.g., individual, co-signer, etc.)
- Account history (dates paid, dates deferred, amounts paid or not paid by dates, etc.)

Lastly, the Personal Information section (paraphrased above, and which we'll return to presently) is described at length by Experian on their report:

The following information is reported to us by you, your creditors and other sources. Each source may report your personal info differently, which may result in variations of your name, address, Social Security number, etc....The names are listed in no particular order and may include variations of your legal name. The Name identification number is how our system identifies the names associated with respective accounts on your credit report. These addresses are listed in no particular order and may include previous addresses where you received mail. The Address identification number is how our system identifies the address. The Geographical Code shown with each address identifies the state, county, census tract, block group and Metropolitan Statistical Area associated with each address(Experian, 2011a).

The Methods of Credit Reporting

So how does a CRB compile all of the items listed above? Each of the three CRBs explains its individual processes of gathering and reporting consumer credit/debt data slightly differently. None of them, however, explains this process too thoroughly on the actual credit report. For that kind of information, we'll have to turn to each of these companies' most recent annual reports, where Equifax, for one, describes its methods as follows:

We develop, maintain and enhance secured proprietary information databases through the compilation of actual consumer data, including credit, employment, asset, liquidity, net worth and spending activity, and business data, including credit and business demographics, that we obtain from a variety of sources, such as credit granting institutions, public record information (including bankruptcies, liens and judgments), income and tax information primarily from large to mid-sized companies in the U.S., and survey-based marketing information (Equifax Inc., 2012, p. 62).

Similarly, Transunion explains

We obtain financial, credit, identity, bankruptcy, lien, judgment, insurance claims, automotive and other relevant information from thousands of sources, including credit-granting institutions, private databases and public records depositories, much of which is provided to us at little or no cost (Transunion Corp., 2012, p. 3).

This database contains the name and address of most U.S. adults, a listing of their existing credit relationships and their timeliness in repaying debt obligations. The information in our database is voluntarily provided by thousands of credit-granting institutions and other data furnishers, such as public utilities. We also actively collect, directly and through vendors, information from courts, government agencies and other public records. This data is updated, audited and monitored on a regular basis. Information such as credit reports, credit characteristics and predictive scores are created from the primary underlying data" (Transunion Corp., 2012, p. 12).

Lastly, and a bit more opaquely, Experian describes if not its methods exactly, at least the general scheme of credit reporting, more abstractly:

A credit bureau is a database of information supplied by lenders and public record data sourced from third parties. Lenders and other subscribing members submit credit application and repayment data on consumers and businesses. Experian augments that data with publicly available information. It is then aggregated, cleansed and sorted to form a credit report which comprehensively shows how consumer and business credit obligations have been fulfilled in the past, forming a complete picture of indebtedness and credit payment behavior (Experian, 2011, p. 6).

Data [in this database] includes account level payment history, consumer credit accounts, property records, public records, telephone data, credit card payment history and mortgage loan data. Experian is adding new data to its consumer file, such as rental information and current account information (Experian, 2011,, p. 16).

It may be helpful to pause for a moment here, to really think about the volume of data these companies are talking about. They're talking about "credit, employment, asset, liquidity, net worth and spending activity, and business data, including credit and business demographics." They're talking about "identity, bankruptcy, lien, judgment, insurance claims, automotive and other relevant information from thousands of sources, including credit-granting institutions, private databases and public records depositories." They're talking about "property records, public records, telephone data...Experian is [also] adding new data to its consumer file, such as rental information and current account information." They're talking about collecting all this data – through "a variety of sources, such as credit granting institutions, public record information (including bankruptcies, liens and judgments), income and tax information primarily from large to mid-sized companies in the U.S., and survey-based marketing information." Transunion, relatively modestly in this case, claims to possess information *merely* on "most US adults." In other cases, Transunion and the rest of the CRBs boast worldwide databases covering between 300 and 600 million consumers (Equifax Inc., 2012; Experian, 2011b;

Transunion Corp., 2012). In other words, on the conservative side of things, we're talking about multiple and diverse streams of data streaming into databases at least as large as the entire United States.

So when you finally stop to think about the enormous mass of information these firms must be netting in with each pass – which is really kind of unthinkable – the questions cannot help but arise: what comprises the catch exactly, and what just slips away? How do they distinguish between what is useful and what is not? That is, what is the domain of consumer credit/debt; what does it care about, how does it value or evaluate the things it cares about? Why are these particular data significant over and above others? And, maybe most importantly, what kind of reported subject results from these interests.

It turns out, at least in part, the answers to these questions depend on who is paying for the contents of credit reports. The CRBs find in their clientele a plurality of incentives. And so the report, so far as it is able within the bounds of the law, gradually tacks on bits of new information here and there, collecting them like iron filings as it rolls across the shop floor, aggregating and repackaging them into new products for insurance companies, auto dealers, landlords, governments, employers, utilities providers, etc.

Consumers of the Credit Report

Understanding why credit reports are assembled the way they are starts when we ask some really basic questions about what's in one's own reports: for instance, "what does my internet connection from three years ago have to do with my credit today?" Even more fundamentally, "why do I have a credit report, at all?" Unlike a resume or web profile, the credit report is not a self-representation of how we choose to be perceived in the world. And though consumers can choose to 'opt-out' of having credit providers and other marketing firms contact them automatically based on demographic segmentation, the credit report is much like a criminal record in that there is no 'opting out' of having a report to begin. Neither is there a way to opt-out of having others obtain the report without your consent. So if the reported subject him or herself is not choosing what goes

onto these reports, if s/he can't even control who buys them: who *is* seeing these reports, and what kinds of information are they looking for?

Recall that these CRBs maintain databases with an enormous volume of data. They carry accounts with governmental bodies, they sell their products around the world and, since they are all publicly traded, they all have to worry about garnering a return for their investors on top of all that. Which is to say, they don't have time to put things on the report that don't pay off. The credit report is not a stage, set with whatever props happen to be laying around; there is nothing on the report that is not intentionally put there, and things are put there because they are paid for. So if we're trying to understand *how* and *why* the contents of the credit report are useful, we have to first understand *who* is paying for this information. Equifax and Experian answer this question as follows:

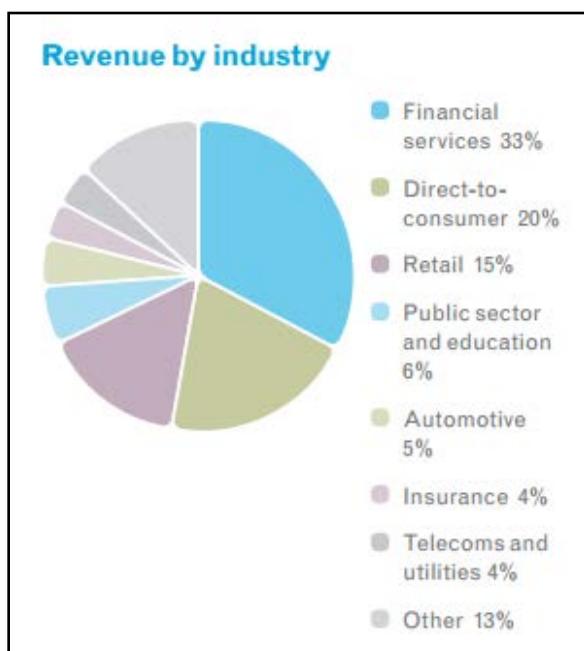


Figure 1, Distribution of Equifax' revenue by industry (Equifax Inc., 2011, p. 2).

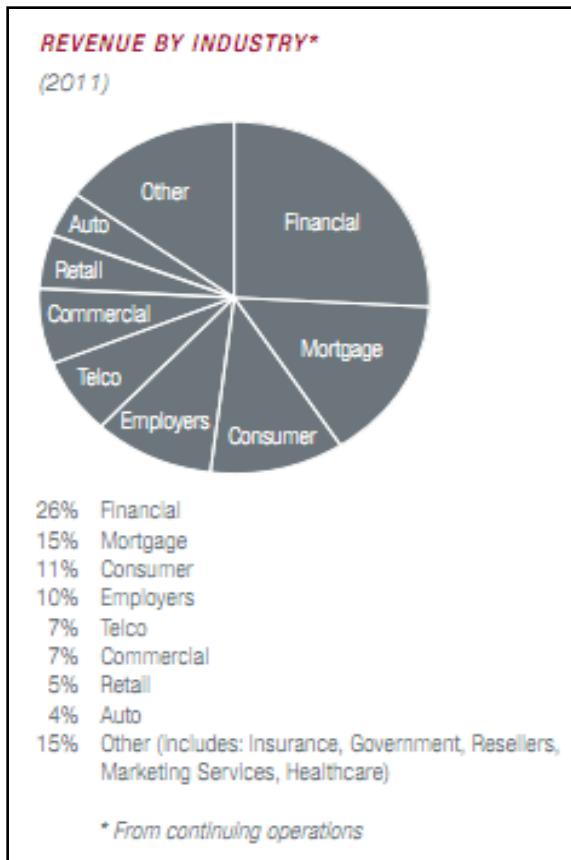


Figure 2, Distribution of Experian's revenue by industry (Experian, 2011, p. 5).

Surprisingly, the financial industry comprises the smallest share of the total market when compared with all the other industries combined. It turns out governmental bodies, insurance companies, the telecommunications industry, marketing services and health care practitioners, employers, auto-dealers, mortgage lenders...nearly everyone has a use for credit reporting. And all of these industries, we now understand, correspond neatly with “consumer data, including credit, employment, asset, liquidity, net worth and spending activity, and business data,” not to mention information on “identity, bankruptcy, lien, judgment, insurance claims, automotive and other relevant information.” What once seemed supplemental seems suddenly full of purpose. To be sure, I’m wondering now why ‘personal information’ doesn’t make up half of the report.

In this sense, too, differences *between* the three reports can say just as much about the various uses of the reports as do the commonalities *among* them. On my report, for

example, Transunion reported in seven pages what it took Experian fourteen pages to report, and Equifax twenty-two. Transunion was easily the most laconic of the three, but was also the one most preferred by several of the banking employees I spoke to. As a matter of fact, it was an even more stripped-down version of Transunion's report that I encountered when, in opening a new account and taking out a personal revolving loan (solely for the purposes of research, naturally), the personal banking officer spun his screen around and let me take a peek at the product. Very Spartan indeed: a credit score on top, followed simply by a list of negative and performing accounts with all of the associated dollar amounts and payment dates. And that makes sense. Most banking personnel I spoke with told me that the process of loan underwriting (i.e., deciding whether to approve or deny a loan) was pretty automated these days: you punch in the credit score, you punch in a few other numbers like the 'Debt-to-Credit' and 'Debt-to-Income' ratios, and you're off and running. At least one credit reporter (Equifax) even offers the Debt-to-Credit ratio by credit type right at the top of their report.

On the other hand, Equifax's report was, overall, probably the most user-friendly *for the consumer*. It consisted of twenty-two pages largely because of all the time it took to explain each item. It explained why items were being reported and what the effects of the item might be on the consumer vis-à-vis those who buy his/her report. The fact that the second largest share of Equifax's revenue is generated by 'direct-to-consumer' products – meaning products of all kinds that consumers use to 'manage their own credit' and so forth – reflects this pairing of incentives well.

Experian's report, meanwhile, listed more personal information than any of the other reports, also taking the time to explain what it was reporting (as we saw above). The actual contents of Experian's Personal Information section are listed as follows (some of the more sensitive data obviously omitted):

Names:	Address: 910 SOUTH ST
THOMAS J ROBBINS	
Name identification number:	Address identification number:
TOM ROBBINS	Type of Residence: Single family
Name identification number:	Geographical Code:
	Address:
	ANCHORAGE, AK 99517-2576
Year of birth:	Address identification number:
	Type of Residence: Single family
Telephone numbers:	Geographical Code:
(605) Residential	
(605) Residential	Address:
(719) Residential	PUEBLO, CO 81001-4901
	Address identification number:
	Type of Residence: Single family
	Geographical Code:
	Address:
	ANCHORAGE, AK 99517-2576
	Address identification number:
	Type of Residence: Single family
	Geographical Code:

Figure 3, 'Personal Information' section, excerpted from my own Experian credit report.

Incidentally, the additional time and space devoted by Experian to personal information within the credit report helps to explain why ‘employers,’ ‘telco’ (i.e., the telecommunications industry), ‘retail,’ and ‘other’ industries together contribute to so large a percentage of their overall revenues. This is a stunning example of the reporting process itself, adapting to the incentives of other market actors as needed, exhibiting the entrepreneurial parasitism that sort of fundamentally characterizes credit reporting: a kind of fungal growth of opportunism in the armpit of someone else’s product, which occurs all over the place relating various actors to the credit report for various reasons.

Experian has become the first and only major credit reporting agency in North America to include residential rental payment information in credit reports. It follows the

acquisition in June 2010 of Rent Bureau, an aggregator of rental payment history data for the property management industry (Experian, 2011, p. 17).

To be fair, all of the CRBs were quick to note on their most recent annual reports how they were all adapting quickly to the increasingly specialized and diverse demands for ‘data-mining’ and ‘market segmentation’ services, which CRBs find themselves uniquely-poised to provide. Equifax, as an example, noted its productive inroads applying its data and technologies to the problem of “Workforce Solutions,” which range from validating credit applicants’ incomes to assisting with human resources services, “including employment verifications, tax management services and employee-facing services” (Equifax, 2012, p. 6). They’ve even gone so far as to use their databases to assist business in claiming tax credits from the US Government, when they “leveraged USCIS’s [United States Consumer Information Services] primary data engine to help its clients find more than \$30 million in new tax credits available through the federal government’s Work Opportunity Tax Credit (WOTC) program” (Equifax, 2012, p. 6). Transunion, meanwhile, explains on its annual report how exactly their services are at work all around us: “Healthcare companies use these tools to manage their revenue cycle, capital markets participants use them to develop better valuations of securitized loan portfolios and residential property managers use them to assess tenant qualifications and assist in leasing decisions.” (Transunion, 2012, p. 5).

The Character of Consumer Credit/Debt Agents

Credit reporting is akin to gossip in that it gathers, interprets, formats, stores, retrieves, and transmits information. It generates reputations of individuals and provides the assurance necessary to induce strangers to cooperate.

- Klein, 2001, p. 342.

Up to this point, I’ve been describing credit reports as relatively unproblematic objects. I’ve treated them like the kind of objective, impartial, risk-mitigating instruments Klein extols in the quote above: responsible only for ‘gathering, interpreting, formatting, storing, retrieving, and transmitting information.’ We looked at the kinds of information on which they report, how they gather that information, and to whom the information is

sold once gathered. What we haven't really looked at are the practical roles the credit report plays in assembling its agents: what kind of agent emerges in and through that assemblage and how, in so doing, the report actually conjoins market actors together where that assemblage occurs.

In the first place, the credit report can be thought of as a device which heralds and delivers persons into the process of consumer credit/debt assemblage. Here I'm following some of the ideas worked out by Muniesa, Millo, and Callon in their "Introduction to Market Devices" (2007). Specifically, the credit report is a perfect example of what these authors call a 'market device,' which refers "to the material and discursive assemblages that intervene in the construction of markets" (2007, p.2). The credit report, like all of the market devices implicated in consumer finance, enters into relations with other such devices, with other actors and sites to form what they call economic *agencements*².

As noted above, the concepts of both 'market device' and 'agencement' are very similar to, and dependent upon, the concept of 'assemblage' introduced by Deleuze & Guattari (1987), forming the bedrock of what others have come to call "Assemblage Theory" (see for example 'Assemblage Theory' in DeLanda, 2006 or in Russell, Pusey, & Chatterton, 2011). Latour (2007) and Law (2004), too, make use of the 'assemblage' conceit in Actor-Network Theory (ANT). In the latter case especially, an assemblage (in its noun form) is taken to be a complex mix of subjects and objects, comprised of both material and discursive elements, usually entailing some entanglement of what are usually taken as distinct organic and technological, human and non-human entities. The *act* of assemblage (in its verb form) simply refers to the means by which assemblages *assemble themselves or are assembled*.

Drawing explicitly on these notions, Muniesa, Millo, and Callon discuss economic agencements as follows: "Market agencements detach things from other things and attach them to other things. The same is done to persons (physical or moral), to their reciprocal duties and to their relations to things...they [agencements] 'disembed,' i.e.,

² Though the terms 'market device' and 'economic agencement' become conflated somewhat in their text, I'd like to keep the two separate for the moment by using the term 'market device' to refer to objects like the credit report or the credit score, which are semi-discrete, well-established, *operational* objects – at least insofar as they are treated as such in other realms of consumer finance.

they ‘abstract.’ Not exactly ‘from society’ – because abstraction is in itself a social operation – but from other agencements which were probably less economic” (2007, p. 4). In other words, agencements – and the market devices they are composed of – *abstract* things or persons from other contexts, and “transport [them] into a formal, calculative space” (Muniesa, Millo, & Callon, 2007, p. 4). In our case, that formal calculative space is the space of consumer credit/debt.

The credit report does this, as Klein explains, by gathering, interpreting, formatting, storing, retrieving, and transmitting information. But it’s also doing a little more than that. When viewed as a market device, the credit report does not simply ‘generate reputations *about*’ the persons on which it reports, but actually assembles very distinct economic agents, based on distinct kinds of information – information itself related very distinctly to the diverse needs of myriad market participants. In other words, the credit report intervenes in the construction of markets by detaching financial histories from subjective persons, transporting them into the space of consumer finance where they are conjoined to other actors within the assemblage (‘network,’ ‘market’). The credit report accomplishes this feat by assembling agents from the ground up, based on what is ready to hand.

The province of the credit report is restricted, as we have seen, mostly to information about persons’ financial histories. The report distills those histories into quantitative narratives about dollar volumes, debt and income ratios, repayment schedules, and the like. It also occasionally adds notes on persons’ geographical lines of flight: where they have lived and where they are now. It tells of liens made against persons’ property and of court disputes persons may have been involved in that are deemed to effect their credit. Sometimes the report even describes where a person has worked and for how long; what kind of dwellings s/he has dwelled within, and how or if s/he has paid their rents or mortgages while doing so. All of this, together with how the report is actually used by other actors within consumer finance, is part of the process by which the *agent* of consumer finance is *agenced* into existence, or existence within the world of consumer credit/debt anyway.

All of the valences rolled into the many forms of ‘agent’ and ‘agency’ are worth considering closely here. The etymology of this root ‘*agen-*’ is telling (“Oxford English Dictionary,” 2013):

- Classical Latin *agent-* , *agens* , present participle of *agere* [verb] to do, act
- Middle French *agent* (French *agent*) (noun) person acting on behalf of another, representative, emissary... person who or thing which acts upon someone or something ...person who intrigues, (adjective) that acts, that exerts power... in *cause agent*

There’s a lot going on in this word. There are verbs and nouns. The verb *acts upon someone or something*; the noun is a *person or thing which acts*. Noun agents often “produce a specified effect,” becoming the “cause of some process or change”; verb-agents “act as agents,” they “conduct or carry out as agents” (“Oxford English Dictionary,” 2013). Additionally, there is an obsolete usage of the root in English, *agence*, which at one time meant “to fit, adapt, or adjust” (“Oxford English Dictionary,” 2013).

Social Studies of Finance attempt to retain as many of these valences as possible: “*Agencer* is to arrange or to fit together: in one sense, *un agencement* is thus an assemblage, and arrangement, configuration, or layout. The referent in everyday French is often physical, such as the parts of a machine; indeed, in ordinary parlance, *les agencements* are fixtures and fittings and to be *bien agencé* is to be well equipped” (MacKenzie, 2009, p. 20). MacKenzie also stresses the ‘agency’ aspect of the term agencement, however, quoting from Callon and Caliskan an agent’s “capacity to act and to give meaning to action” (Callon and Caliskan, 2005, pp. 24-25, quoted in Mackenzie, 2009).

In our context, the ‘agent’ of consumer finance assembled by the report can be thought of as *an arrangement of financial records, fit together with and by the materials and technological infrastructure necessary to produce and circulate the credit report*. The reported agent is a kind of subject-object *equipped* with these things. The behaviors of the reported person are only the partial equipment of the reported agent, possessed by the agent alongside other types of equipment. To be ‘agenced’ from a person into an agent of consumer finance entails the process of equipping and arranging, assembling and circulating agents.

This agent is neither a ‘subject’ nor an ‘object’ as these terms are commonly understood. The credit report does not introduce into the world a ‘subject’ that is possessed of a diverse repertoire of emotional or psychological qualities, for instance. Neither is the thing reported by the report a fully autonomous and self-creating entity. The latter entities are ‘subjects’ or ‘persons.’ They are what we think of when we think of ourselves, our friends, our families, other persons in the world we are somehow capable of grasping as full, conscious, human beings. The ‘agent,’ in contrast to this sense of a subject, is closer to what we think of as an ‘object.’ It can be isolated in economic experiments, reduced by scrutiny to an easily tractable entity. The agent is bounded, its edges are cut by the parameters of the questions being asked, and everything else remains extraneous. But for all that, the agent still possesses some of the characteristics we usually associate with subjects: it has a certain agency, for instance, as it circulates among actors, effecting action and making that action meaningful independently from the human person it ‘acts on the behalf of’ or ‘represents’. In some cases, as we’ll see in the next chapter, the agent’s agency can even appear to be – if not autonomous exactly, then at least – beyond the control of any one person or group of persons in particular, including the person from whose behaviors it is assembled. Rather, the agent’s agency emerges in/from the interactions of many persons or groups simultaneously, it is distributed among them.

It is important to understand why the agent occurs as such. The report does not agence agents because it has nothing better to do with itself. It does not agence out of a pure structural-functional obligation to the persons on which, or the societies in which, it reports. The credit report agences agents as it does because *it is depended upon to do so*. ‘It generates reputations of individuals and provides the assurance necessary to induce strangers to cooperate’ – as though there is no other cause! All the actors we saw listed in the clientele graphs of the CRBs – i.e., governmental bodies, insurance companies, the telecommunications industry, marketing services and health care practitioners, employers, auto-dealers, mortgage lenders, etc. – all these actors depend on the report for various reasons, to connect with and meet other actors in a very specific way. They have specific uses in mind when purchasing the credit report. The credit report, in turn, reflects and embodies those uses: partially in its contents, partially in the networks through which

it circulates. The agent of consumer credit/debt is a social, material, technological assemblage born of all of these elements.

Various actors depend on the credit report to announce the kinds of agents they are interested in, or more specifically, agents' *capacities*. Capacities to repay their debts, or pay their rents, or keep employed for a definite amount of time. Transunion is pretty clear on this point: “[our] database contains the name and address of most U.S. adults, a listing of their existing credit relationships and their timeliness in repaying debt obligations. ... Information such as credit reports, credit characteristics and predictive scores are created from the primary underlying data” (Transunion Corp., 2012, p.12). Experian is even more explicit, explaining how its data are “aggregated, cleansed and sorted to form a credit report which comprehensively shows how consumer and business credit obligations have been fulfilled in the past, forming a complete picture of indebtedness and credit payment behavior” (Experian, 2011, p. 6).

In actuality, the report does not announce the agent and then announce its capacities, as two separate statements. *The agent is enunciated as a capacity or set of capacities, traditionally as the capacity to repay debts.* This is what is meant by the phrase, ‘character-as-capacity.’ To be sure, the report *does* report on a person’s character. It’s just that (in most cases) the only part of a person’s character that is of interest is his/her willingness and ability to repay what s/he has borrowed. It does not report one’s character in ‘human’ terms because that isn’t the kind of character that matters in consumer credit/debt assemblage. It is essential that the reader rids him-/herself of the image of a subject reported by the credit bureaus as a person: that is, as a person first, a person who just happens to be adorned with the attachments of credit balances, loan limits, etc. The report does not report such a person, it reports an agent. The agent of consumer credit/debt is only possessed of a set of capacities as they relate to (usually) borrowing and repaying debt: ‘There is, therefore, no way to estimate Character, unless that term is redefined to mean that the applicant has a reasonable record regarding other known debts.’

In this sense, the agent is the report. Of course, the person it is assembled from is much more than just his or her report; but there is a whole host of other agents out there in the thick of consumer credit/debt assemblage that do not encounter persons as the kind

of people we like to think of ourselves as being. They encounter persons as agents, *through their credit reports* – or, more accurately, as a handful of figures pulled from credit reports at some definite moment in time. There is no picture of the person tagged onto the bottom of the report: smiling and eager-looking, pleading to its viewer, “Please, I swear I’m good for it!” It is not the person but the agent circulating out there among the other agents of consumer credit/debt, not too dissimilarly from the way things I’ve said and done are out there swirling around the heads of other persons I’ve interacted with otherwise.

And this is where the relationship between agents and persons gets really interesting. Other persons I encounter in the world will make of me a person endowed with a character of a particular sort. Their interaction with me will tend to hinge on the character they assume they are interacting with. Mead (1967), Goffman (1982), Berger & Luckmann (1967), and a number of others wrote about this state affairs long ago. Symbolic Interactionism and a theory of social *dramatis* go a long way in explaining how persons interact, how those interactions are often based on assumptions of what we take one another to be capable of. Encounters among agents are not so very different. It’s just that those assumptions are codified by a mutually recognizable document, a document disclosing the character not of a person, but of an agent. In consumer credit/debt assemblage, I am encountered as the agent agenced through my credit report. The character that is agenced there is that of a agent who is able or unable – i.e., a agent who has the *capacity* – to repay his debts. Other agents of consumer credit/debt, including lenders and other far-flung interlocutors, will base their interactions with me and each other on the character they encounter in the credit report.

Credit Scoring: How Subjects of Consumer Credit/Debt Relate to One Another

So it is that the credit report performs the crucial event of *agence-ing* and admitting agents of a very particular sort into the world of consumer credit/debt. As such, the report *populates* consumer credit/debt assemblages with agents. But for all that the report does very little to actually determine how these agents, once admitted, will come to

relate to one another. Which is to say, the report does not so much *evaluate* and *distribute* agents throughout consumer credit/debt assemblages, but more or less simply adds them into the mix.

Of course, agents of consumer credit/debt *are* evaluated and distributed thereafter, and it happens automatically almost immediately upon their admittance. But that process, the process of shuffling agents about and rearranging them, occurs elsewhere. Like eggs tumbling through a sorting device on their way to being packaged and sold according to size, agents of consumer credit/debt are distributed throughout their assemblages according to the quality of their ‘character’ – understood in the sense of the term used above. And just as the egg-sorting device has been tooled in advance with specific intentions in mind – just its engineer designs and constructs her device according partially to the demands of her market and partially to the constraints within which she is working – so too has the device by which agents of consumer credit/debt come to be distributed within their assemblages been engineered to measure very distinct characteristics within the credit report according to very distinct purposes. In the case of consumer credit/debt, that sorting device is the FICO® credit score.

In referring to the credit score as a market device, I’m directly referencing the work of Martha Poon, whose excellent analysis of the FICO® score is also included in the text referenced above, *Market Devices* (2007). There, Poon describes the evolution of the FICO® score as it changed from a system of physical, paper, score cards implemented in very localized situations – e.g., as applied to the customer base of retail stores in order to gauge the riskiness of issuing lines of in-store credit. This she compares to today’s credit score: a digital notation, statistically calculated based on an evaluation of borrowers according to data drawn from all three credit reporting bureaus (among other sources). And before delving too deeply into an analysis of the score as a device that distributes agents of consumer credit/debt according to creditworthiness, it’s wise to keep Poon’s argument in mind: namely, that the score became ubiquitous only gradually in “the movement from an emergent to a consolidated techno-economic network” (Martha Poon, 2007, p. 301).

That movement was dependent all along on the customers who paid for the scoring devices (with their diverse intentions), on the availability of consumer data from

which to create credit scoring criteria, and on the technological capabilities of the scorecard creators. In other words, the development and eventual ubiquity of the score was/is reliant on both the social and material relations and constraints in which it was and is embedded. It is finally in this context that “the robustness of scores as objectified/objectifying measures...is ‘performed’ by a specific assembly of scorecard algorithms acting as consumer credit market devices” (Poon, 2007, p. 302).³ From Poon, we thus gain the two crucial insights 1) that the score is an ‘objectified/objectifying measure,’ which locates agents of consumer credit/debt in a very particular way, and 2) that the score is performed and assembled as such, rather than being a purely objective indicator of some already extant, immutable fact of social existence. Both of these facts are worth remembering in the description that follows of how the score is actually assembled.

Scoring Character Capacity

The first step in any analytical approach to credit evaluation is to see precisely what the information on the application and the credit report tells us. The way to do this is to identify what information exists and then to count. This is done by assembling the applications of a body of accounts that we know have turned out to perform satisfactorily and another set of application documents of a body of accounts that we know have turned out to perform unsatisfactorily (p. 27).

A prospective scoring system user must [then] be able to identify the sample of 1500 Good and 1500 Bad accounts that are to be examined, and must be able to locate and assemble the original applications for all those accounts along with the credit bureau reports in every case where one was obtained (p. 33).

³ Although Poon refers to the score as a market device here, the credit score is an entangled, performative, historical mess of discursive and material elements. As her analysis showed, the score is the result of the labor of assemblage and historical contingency, and is therefore an agencement onto itself. The fact that most market devices can be treated as such is probably part of the reason Muniesa, Millo, and Callon seem to conflate the terms ‘market device’ and ‘economic agencement’ throughout their introduction.

The duplicity of the verb, ‘assemble,’ accomplishes all that is asked of it in Lewis’ instructions above. It is an oscillating verb, spreading out over the objects it gathers or amasses together on the one hand, while at the same time pointing always at its subject, at that which *puts together* or builds up those objects on the other. Applications, applicants’ performance data, their respective credit bureau reports, these are all the objects to be assembled. ‘But it is you, prospective scoring system user,’ Lewis implies, ‘that must locate and assemble these things.’ The need to understand this duplicitous verb, ‘assemble,’ really does in this case grow straight out of the process and product of credit scoring.

Risk evaluation in consumer lending truly is, and has ever been, an act of assemblage in a privileged sense. As Lewis notes above, a credit score is, *at the very least*, always an assemblage of ‘good’ and ‘bad’ applicants’ original applications, together with the accumulated performance statistics of each account. And though he will try, sporadically throughout his text, to convince his readers that the addition of a credit report isn’t strictly necessary for the effective implementation of credit scoring, it seems today that FICO has resigned itself to the necessity of the credit report to properly function: “The FICO® score delivers highly predictive and consistent risk assessment wherever it is implemented by intelligently interpreting the differing levels of data available from credit bureaux around the world” (FICO, 2009, p.1).

Here, even from the few statements we’ve seen already, a list of building materials is beginning to take shape: the best kind of ‘credit scoring system’ (and this is the term Lewis prefers over ‘the credit score’ simply) requires applications, customer performance data, *and* credit bureau reports. But FICO is hinting at something else here, as well. For a proper credit scoring system, we are told, a body of applicants’ original

⁴ Most of the discussion that follows concerning how and of what exactly a credit score is assembled makes reference to various materials found on FICO’s website and Lewis’ 1992 text, *An Introduction to Credit Scoring*. The latter text is unique in that it was written by a former employee of FICO – claiming to have been there since the 1960s, when the procedures were first being worked out – and also in that the text was published by FICO itself.

applications are not enough; nor are the aggregated data accompanying each applicants' account. In fact, it's not even enough to have both of these in conjunction with credit reports on each of those applicants. To properly assemble a credit score in the last analysis, one also has need of *intelligent interpretation*. What's more, one must intelligently interpret not just data, but intelligently interpret *differing levels of data*. The latter kind of interpretation, we are beginning to understand, requires not just data, papers, 'stuff'...but models, intellectual tools, and a rationale with which to assemble 'highly predictive and consistently effective risk management.'

The credit scoring system is assembled of two distinct (if inseparable and not easily distinguished) kinds of building materials. The credit scoring system is an object *and* a set of beliefs: a system made of things, arranged through a particular organizational logic. Indeed, neither the FICO informative pamphlets nor Lewis himself can help but equivocate when trying to describe plainly what the credit score is. In describing the *object* aspect of the score – that is, the final product, the numbers themselves, typically ranging between 300 to 850, tacked on to credit users as befitting their rank in the general scheme of overall creditworthiness – Lewis describes the score itself as “the sum of the points awarded to an applicant for the appropriate attribute of each of the characteristics in a scoring table” (1992, p. 153). As to the other aspect of the score, its teleological side, FICO describes it as being “calculated by a mathematical equation that evaluates many types of information from your credit report...By comparing this information to the patterns in hundreds of thousands of past credit reports, the FICO® score [continually] estimates your level of future credit risk” (FICO, 2007, p. 1).

It is finally the interplay of the gathered objects and the logical structures that govern their gathering I'd like to address here by examining them each in turn. Rather than listing these items one by one, though, I'd like to paraphrase the overall process of developing a scoring system as described by Lewis in his *Introduction to Credit Scoring* (Lewis, 1992).

Step 1: Develop a liaison team

The liaison team will "act as an interface between the user organization [e.g., a bank or retailer] and the scoring system manufacturer [in most cases, FICO]" (pp. 34-35). This team will prepare the organization's management for necessary decisions, help define good and bad accounts, be given access to data processing and billing, and contain a legal representative to understand how the Equal Credit Opportunity and Fair Credit Reporting Acts come to bear, etc.

Step 2: Select population

The ideal population when developing a scoring system "uses only one credit product and has not undergone any large scale shifts in membership, and...has sufficient history to provide the necessary documents regarding 1,500 good and 1,500 bad accounts" (p. 35).

Step 3: Define Good and Bad accounts.

This step is always up for interpretation, but Lewis recommends the following baseline examples:

Good accounts are/have

- Been on the books for 10 months minimum
- Been active for six of the last most recent months
- Made purchases of more than \$50 in the past 24 months
- Not more than once 30 days delinquent in past 24 months

Bad accounts have been

- Delinquent for 90 days or more at any time with an outstanding undisputed balance of \$50 or more.
- Delinquent 3 times for 60 days in past 12 months with an outstanding undisputed balance of \$50 or more on each occasion
- Bankrupt while account was open

Step 4: Determine acceptance and rejection rates.

Determine what rate of applicants over the past 2 or 3 years has been accepted under the current policies, and what rate has been rejected. These figures will be used simultaneously to introduce a kind of control to the statistical analyses, as well as create a simulated body of rejected accounts from which to infer the likely future behavior of more inclusive policies down the road (more on this later).

Step 5: Acquire sample data.

First, go through the master billing file and identify all Good and Bad accounts (however defined); count the total of each. Then "assemble, based on the list of desired accounts, the application form and any credit bureau report for each name on the list" (p. 39). "[T]he only thing that remains is to assemble from 750 to 1000 rejected applications, with their bureau reports, if acquired" (p. 41).

Step 6: Code data for use in computer processing software.

Reduce 'characteristics' (classes of borrower information "usually in the form of questions on the application and of entries on credit bureau reports") down to manageable data categories. Reduce "attributes" ("answers given to questions on the application, and entries on the credit report") down to manageable data inputs corresponding to each characteristic (p. 43).

Step 7: Initial Enumeration.

Display the information by characteristics and attributes, correlated by number of good and bad accounts in each case. In other words, list all of the accounts available, and include along with them as many coded borrower characteristics and attributes as may be available (address, employer, account history, etc.).

Step 8: Class attributes⁵

⁵This is where the description gets really vague. And understandably so. As we'll see in FICO's description of itself, this is the task that requires their expertise, their own secret recipe of 'intelligent interpretation' that is their stock in trade.

Using, for example, the ‘calculation of odds’ and ‘Weight of Evidence’ – these are the terms Lewis recommends as helpful conceptual apparatuses – group or ‘class’ attributes together into classes with a statistically significant count.

Step 9: Calculate score points

Using multivariate analyses governed by an overall Baysean statistical philosophy, calculate score points from classed data. Scores are determined by counting the number of good and bad accounts associated with each attribute, within each characteristic. Those attributes that most consistently occur as good are given higher scores (‘weighted’ positively).

Step 10: Apply new scoring system to entire body of sample data

Calculate the number of goods and bads associated with each individual score, see how that score compares with the actual history of the borrower. Tweak the system as needed, and determine a cut-off point therefrom – a cut-off point being the score below which an application is not to be accepted.

After all that, we can probably break a few of the more significant building materials of credit scoring systems into the following six, more manageable clusters⁶:

- 1.** Personnel
- 2.** Applications for credit
- 3.** External Constraints
- 4.** Master file information
- 5.** Credit reports
- 6.** Processing apparatuses (computer + software, what used to be punch cards)

⁶ The obvious element lacking here is, of course, the bodies that consume credit in the first place. But since neither Lewis nor FICO notes this element as an explicit part of the assemblage, it is disregarded here.

Beginning with the personnel, Lewis notes that there are basically two sets of bodies involved, together with a mediating body that is mutually composed of, and that is meant to translate between, each group. One group includes the personnel at the lending organization that happens to be developing the scoring system. In the case of a bank, this group is made up of bank managers (someone with enough authority to change things as necessary), accountants and/or tellers familiar with the bank's records, and possibly someone from the legal department to make sure no laws are being violated. On the other side is the personnel from the credit system developer, who will actually crunch the data once it is obtained. And finally, there is the mediating body, ideally comprised of personnel from both firms, which will effect the smooth transition from more "simplistic," "sophomoric," "superficial" methods of credit evaluation to one that is "demonstrably sound and empirically derived" (Lewis, 1992, p. 14).

Of course, on the ground, this particular element (i.e., the personnel) is not an unproblematic, unitary bunch. As we'll see in the next chapter, even at a single organization (in our case, a bank), the score is plugged into all kinds of operations by all kinds of employees. Some of them know quite intimately how the data provided by their organization plays into the score, others simply apply the score or enter it into various computerized fields as required by their daily routines. In some cases the score is used not unlike an applicants' name: entered into automated programs that will eventually influence automated acceptance or rejection notices. In any case, we can be certain that personnel are an absolutely necessary part of the score's assemblage.

Next, the scoring system will be composed of actual customer applications – the closest the individual credit-consumer will ever come to being involved. Lewis adds here that, although the information available through applications varies enormously from lender to lender, they are also "...astonishingly uniform. There are questions about the applicant's living arrangements, his job, his income, his assets, and his debts" (1992, p. 26). He also adds, however, that the range of responses given on applications can be just as wildly divergent. And although the use of applications is taken today as a given, Lewis sets aside a few paragraphs in his text distinguishing the more advanced from what he calls 'application scoring' (which gives way to contemporary scoring techniques) from an older – at best capricious, at worst quasi-nepotistic – mode of evaluating credit applicants

based on what was once thought of the applicant's 'character,' as gleaned through *personal* relationships.

In addition, slightly differing from the body of applications, information from a 'master file' will also be necessary, which contains the history of account relationships with the organization, including the length and character of the relationship (types and activity of accounts), and in the case of lenders, payment history of past loans, delinquency records, etc. Keep in mind, though, that the reason Lewis chooses to generically call this information, 'master file' information, is because the nature of these aggregated bodies of data will also vary dramatically, depending on whether the organization developing the scoring system is an international beverage manufacturer or a nefarious federal revenue collection agency. That is, the kinds of data collated together in this master file will largely, if not solely, determine how definitions of good and bad accounts are defined, how the 'statistically significant' is defined.

Then there are the external constraints to consider. No doubt there are a good number more of these than either Lewis or FICO cares to recount, but then the one kind of constraint they do account for (legislative restrictions) is kind of an enormous constraint all onto itself. Lewis notes all throughout his text that there are two acts of legislation in the US that are particularly imposing – The Fair Credit Reporting Act (FCRA) of 1970, and The Equal Credit Opportunity Act of 1974. However, these potential restrictions sound like just another of the assembled components when FICO explains that "regulatory and business considerations can be built into the scorecard – controversial or prohibited data can be excluded, for example" (FICO, 2009. p.13). Indeed, in what might otherwise be considered a restrictive element to build around, the FCRA actually becomes an integral part of the assemblage, declaring "that it shall not be considered discriminatory 'to use any empirically derived credit system...if such a system is demonstrably and statistically sound in accordance with the regulations of the [Federal Reserve] Board'" (Lewis, 1992, p. 69)

Of course, the inclusion of language like this in such Acts has leads Marron – in the spirit of Performativity Theory – to suggest that although "The Equal Credit Opportunity Act of 1974 (with subsequent amendments) was enacted to outlaw discrimination in credit sanctioning based on the characteristics of gender, marital status,

race, national origin, religion or income source... this novel form of intervention [credit scoring] was given official sanction by the state through legislation as a means of guaranteeing equality of opportunity to the market...The act effectively gave legislative recognition to scoring systems as being objective, scientific devices (Marron, 2007, pp. 104, 110). In Marron, then, we find federal legislation playing an essential role in the assemblage of the credit score. FICO concurs (FICO, 2009, p. 17):

The analyst could substitute or remove any predictive characteristics that may be contentious, in order to address regulatory requirements or customer concerns...Many countries and industries have legal restrictions on data use, sharing and privacy. Some also have restrictions on how to segment customers for marketing treatment to prevent preferential treatment or discrimination.

In the US, for example, lenders cannot use race or gender to make decisions on credit applications. Healthcare providers, pharmaceuticals and insurers face constantly changing regulations that vary state-by-state.

Setting aside for now the issue of private market-governmental co-assemblage, however, the credit score is assembled of a couple of additional materials alongside its external restraints. *Credit reports* need also be assembled into the scoring system. In this sense there is a very extant, irrefutable connection between the two which, despite Lewis' claims to the contrary, belies the credit report and credit score as pretty well indivisible in some cases. As we've seen already, at present the FICO website rarely advertises the virtue of its own scoring products independently from their being extensively co-constructed with data from credit reporting bureaux (FICO, 2000, 2009).

Lastly, the material processing apparatuses of credit scoring systems are – maybe no more or less so, but certainly – equally integral to the machinic assemblage of the credit score. This aspect of the score's assemblage was undoubtedly better served by Poon's (2007) inquiry into the roles of materiality and technological contingency in credit scoring, evident even in the title to her work, "Scorecards as devices for consumer credit." Effectively juxtaposing the mathematically- and IT-savvy sentiments of a contemporary credit scoring developer against the very physical, very material stories told by early employees of FICO, Poon vividly calls to attention how the score changes

every time the processing manifold changes. She notes how, in the history of the score's development, countless, dust-covered, often disorganized and always-irregular customer records once had to be shipped from the company looking to develop a scoring system (usually retail stores, seeking models pertinent to revolving credit lines) all the way to San Jose, California, where FICO was originally based. There, an individualized scoring rubric was developed for each organization, and customized cards went out to each of the latters' branches so that normalized records could be first collected and then applied to the population of credit consumers in question. Lewis, of course, reiterates all of this, urging all the while that the accuracy and applicability of this extremely localized process will always surpass the generic application of a scoring system to an anonymous population (Lewis, 1992).

All of this, of course, changes when massive information processing capabilities arrive in the 1990s, serendipitously coinciding with the merging of all three credit reporting agencies' data into a single algorithm for the FICO® score (Poon, 2007). Today, the score can be – and is, as we'll see in the next chapter – easily plucked out of its localized context: constructed without half of the 'on-the-ground' procedures listed by Lewis ever being necessary. Today, given the *tremendous* volumes of data available to FICO, constructing a credit score depends much more on the relationships between data points, and the logic necessary to infer the significance of those relationships (FICO, 2009). The distribution of weights for items on the credit report, for instance, is given by FICO on their website for those who are interested (FICO, 2000):

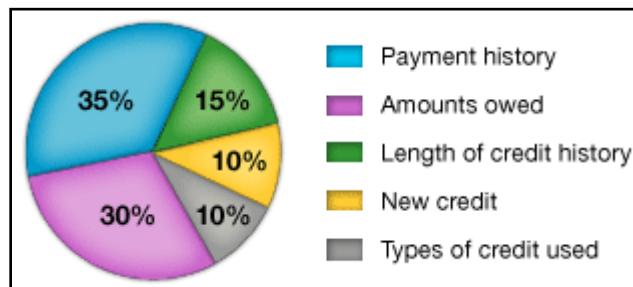


Figure 4, Distribution of weights by item on the credit report.

To finally return to Muniesa, Millo, and Callon's text, then, the FICO® score can quite directly be considered a market device “that renders things, behaviours and processes economic.” Their definition of the term ‘economic’ in this context is especially apt as it applies to credit scoring: “It seems undeniable that, in so-called advanced liberal societies, ‘economic’ often refers to the establishing of valuation networks, that is, to pricing and to the construction of circuits of commerce that render things economically commensurable and exchangeable...” (Callon et al., 2007, p. 3). Within this perspective, the FICO® score, as a consumer credit market device, is of interest here specifically for its capacity to order and rank agents of consumer credit/debt as they enter into particular consumer credit/debt configurations: e.g., when they enter into a personal line of credit with a bank, or when the bank bundles and sells their loans off to other, aggregated consumers of debt. Depending on what a lender intends to do with specific loans after they have been approved (that is, to keep or to sell them on), that lender must first identify what kinds of loans it is dealing with. In other words, it must render otherwise disparate loans and borrowers somehow commensurable and exchangeable.

Prior to their being scored, agents are to some extent already ‘rendered economic’ through the mechanism of the credit report. That is to say, they are reduced from their inestimable and complex subjectivities into a representation of their character based on a handful of indicators that locate and articulate them in the context of consumer credit/debt. Further, since each report reports roughly the same set of information on each agent, and since reports are bought and sold *en masse*, the report does to an extent render persons ‘commensurable and exchangeable.’ The credit score just takes this idea – i.e., the process of ‘rendering things economically commensurable and exchangeable’ – and runs with it.

The report does this by whittling persons-turned-agents’ otherwise inestimable human potentialities into a much smaller range of highly probable behaviors related mostly to consumer finance. It extracts from the highly extraneous and noisy lives of persons a statistical divination of agents’ capacities to borrow and repay capital. The credit report, and the credit score even more so, then makes a value judgment as to how creditworthy or un-creditworthy the agent has been and will be in the future based on

these capacities. That is, it makes a value judgment of the agent's character – whether or not one is sound enough to lend to – where character is defined in very specific terms.

As Lewis (1992) explained earlier, one of the essential tasks of credit scoring is not just to recognize which accounts perform the best, but also to identify among those accounts which of the agents' characteristics and attributes best *predict* positive or negative performance. The kind of agent we're dealing with in consumer credit/debt assemblage is a set of information, numbers mostly, recognizable and 'actionable' in the sense that decisions can be made on the basis of what her/his character signifies *for his/her future*. Character is capacity: capacity to *do* something a little further down the road. When a set of characteristics has been thus identified – say, how timely one has been about their repayments and the typical dollar volume of their debts – that set of characteristics will be taken as an archetypal character-composite of creditworthiness. And this is where the set of beliefs behind credit scoring comes into play: a foundational belief based on the Baysean premise that a class of characteristics associated with some event in the past will probably also correlate with similar events in the future.

Especially with the rise of risk-based lending (more on this later), the specific set of characteristics and the archetypal character-composite that emerges will vary according to context. For example, as one interviewee explained, if a lender is looking for borrowers whose loans it will almost immediately securitize or sell off, it may seek out a fraction of borrowers with low creditworthiness: borrowers who show a history of late or defaulted payments, and whose *character* is generally considered 'subprime'⁷. These borrowers can be charged higher interest rates, and so may gain higher returns for investors in some cases. Further, their troubled financial histories may result in higher profits through late fees and similar charges for the servicers of their loans. In such a case, the character-composite is very different from that preferred when lenders are seeking sound, reliable borrowers from whom to collect regular and dependable payments. Borrowers in the latter case will often be retained on the lender's books as an

⁷ As we'll see in the next chapter, credit rating agency, Moody's – here depending heavily on the FICO Score® as a market device – explains subprime borrowers as those "with FICO scores below 660 – the widely-used dividing line in consumer assets between prime and sub-prime credit quality" (Moody's, 2010, p. 6).

asset, and so must meet stricter lending criteria. In each case, though, there are the essential steps of gathering a bunch of performance data together, carving some notion of creditworthiness into relief out of those data, and extracting from them a character-composite against which all remaining and future loans will be compared. This task, which seems so natural to us today, is predicated on a very fundamental, foundational event: social aggregation.

Character-composites of various creditworthy archetypes are methodically produced, assembled, recombined out of data mined from banking records and credit reports. This is what Poon's analysis shows us. But this act of intentional assemblage is significant for reasons other than its purely being evidence of the performative nature of economics. MacKenzie (MacKenzie, Muniesa, & Siu, 2007), Callon (1998), and others have discussed at length how market devices like the credit score often 'create the objects they purport only to measure.' This is the characteristic of 'economic performativity' and it is an essential characteristic for understanding the assemblage of consumer credit/debt no doubt. In this case though, the performed assemblage of consumer credit/debt through the process of agencing agents additionally opens this analysis up to the event of massive *social aggregation*. As an underlying belief in an organizational form, social aggregation drives the practices of credit reporting and scoring. Alongside the performances of agencing and scoring agents – that is, articulating, admitting, and evaluating agents in consumer credit/debt – the credit score is also performing an aggregation.

There is no assembling a credit score without first aggregating performance data from a large body of consumer records – a minimum of 2000 accounts, Lewis recommends. This is just basic statistical (or more precisely, 'predictive analytical') creed: the individual must always be compared against the statistical and historical curve of the aggregate. Lewis said as much in 1992, and FICO is still saying it today:

"Fundamental to almost all human activity is the assumption that the near future will be something like the recent past...When it comes to credit, we expect people as a group to behave more or less as they did in the past...[but] since there are no absolute criteria that determine future satisfactory or unsatisfactory credit performance, all that remains is to try to associate a new case with the cases we have seen in the past. The same conditions surround credit scoring. Each new application is compared with the counted and

structured information available about previous applicants embodied in the score table" (Lewis, 1992, p. 26).

"Both [business intelligence (BI) and predictive analytics] are important to making better business decisions...BI analytics almost always aggregates past customer data in a collective sense...Predictive analytics guides *individual* customer decisions, based on calculations of future customer behavior...Predictive models analyze past performance to predict how likely a customer is to exhibit a specific behavior in the future...The models analyze historical and transactional data to isolate patterns" (FICO, 2009, pp.8,10).

Each in their own way, both Lewis and FICO are more or less explicit about the fundamental necessity of historical social aggregation. 'When it comes to credit, we expect people as a group to behave more or less as they did in the past' (Lewis). 'BI analytics almost always aggregates past customer data in a collective sense' (FICO). And in performing this act of aggregation, the credit score duly performs the hugely consequential act of bringing agents of consumer credit/debt together in a way they never had been before. They are all made into composite parts of an archetypal fictitious entity called, 'creditworthiness.' That entity is made up of correlations between agents' loan balance amounts and the average time it takes them to repay a debt (called the 'weighted average life' of the loan). It's made of correlations between debt-to-income ratios, the average amount a agent pays down on his/her debts each month, and dozen or so other factors. All of these facts and figures are collated together, and rolled up into a giant statistical reflection of how agents perform in the aggregate.

It's crucial to understand in this context that the aggregate thus produced is partially assembled from *actual persons*. The credit score is actually composed first and foremost of countless aggregated performance records – records, as we've seen, that *are* agents. The score does not run alongside agents of consumer credit/debt; it is made out of them. And each time an agent enters into a new credit/debt assemblage, it is this aggregate that the agent will face again: "Each new application is compared with the counted and structured information available about previous applicants embodied in the score table." That entity, the aggregated character-composite of an archetypal creditworthiness, thus *falls back on* – to borrow a phrase from Deleuze & Guattari – each

person every time their agent is scored against it. The person's past performance data enters into the aggregate, and then turns around to face that very same person in the future each time s/he tries to get a new loan.

From this perspective the process of agencing agents actually comes to inform persons' subjectivities. The person's potentialities are delimited by the opportunities and constraints made available to her, within the specific relations that make of her an agent of a particular kind. Having a passport, for example, enables a certain level of mobility in some cases, which in turn exposes the person to a range of materials and experiences with which to assemble his/her own subjectivity. But at the same time, a passport has very little to do with what kind of interest rates that person will receive if s/he travels to the United States and applies for a student loan. One's range of movement – and by extension, the ability to form one's own subjectivity – is often defined by what kind of agent one is taken to be within a specific set of relations.

Agents of consumer credit/debt are thus finally distributed throughout their various consumer credit/debt assemblages according to their character attributes, relative to this aggregated character-composite of an archetypal creditworthiness. The score distributes agents in credit/debt assemblages by assigning to them higher or lower scores, scores which in turn determine what kind of interest rates the person will receive, or whether a person will have to be attached to a 'co-signer' in order to receive a loan, for example: 'Market agencements detach things from other things and attach them to other things. The same is done to persons (physical or moral), to their reciprocal duties and to their relations to things.' The more closely one's character attributes align with the set of character attributes identified as denoting 'positive performance,' the higher one's credit score. Which is to say, the more closely one's *character* aligns with the character-composite of the aggregate, the more easily s/he will enter into future relationships of consumer credit/debt.

Unfortunately, though, we can only go so far toward explaining how agents are distributed in credit/debt assemblage using these sorts of vague generalizations. The fact is that it really only becomes clear how agents are distributed throughout their credit/debt assemblages by looking at an *actual assemblage*. In keeping with the tenets of Actor-Network Theory and sticking to the associations concretely articulated on my own report,

we might thus leave the credit report and credit score, and continue on to ‘securitization.’ There, in looking at the associations and relations of production present in an actual securitized portfolio of student loans, we’ll get a much clearer sense for how items from the credit report and the credit score are used in the further assemblage of consumer credit/debt and the aggregation of agents and devices. We’ll begin to understand more intuitively how the acts of aggregation present in the report and the score enable a number of successive aggregations at increasing scales and complexities.

Chapter 3: Securitization and Credit Rating

How to assemble a consumer finance agencement

The analysis that follows requires a couple of preliminary statements. First, there is a leap in moving from the last chapter to the present one. In order for this movement to make any sense at all, we'll have to address 1) how we arrived at the event securitization in general, and 2) how *I myself* – already a subject of consumer credit/debt – arrived at the particular securitization we'll be addressing in this chapter more definitely.

In the first case, we alluded in the last chapter to the fact that the credit report and score must be understood with relation to the many parties that use them. We'll discover in this chapter a pretty strong case for why this is necessarily so. If one were to start first with the process of securitization, and then look back at the contents of the credit report and the credit score, a lot of what was encountered there seems much more purposeful. But we don't necessarily have to force that directionality in order to arrive at securitization. The fact is that there are already several clues within the credit report that implicate the process of securitization, some more explicitly than others. Among the reasons listed on the Experian report, for instance, as to why and by whom inquiries might be made on one's credit report, we find the unobtrusive example of "a potential investor in assessing the risk of a current obligation" (Experian, 2011a). This term, 'investor,' we must be careful to distinguish from 'lender' in this context.

A 'lender' is anyone that extends credit directly to an individual borrower. And lenders, we saw, almost unfailingly 'pull' the credit reports of everyone to whom they extend credit. But 'investors'? An investor is not a lender. Lenders are typically larger 'capital markets participants' – i.e., persons or money who move a great deal of capital around by borrowing, lending, and investing. What possible motives might an investor have for rooting around in individual obligors' credit reports? A short sentence in Transunion's annual statement we noted earlier becomes hugely significant here. There, in describing the possible uses of the credit report, they explain how "capital markets participants use them to develop better valuations of securitized loan portfolios" (Transunion Corp., 2012, p. 5). This is the first direct mention of this phrase, 'securitize.'

Then, too, there were less-direct trails leading to the process of securitization within *my own* credit reports. Having recently consolidated all of my ‘Stafford’ loans – i.e., loans held by a private bank but guaranteed through the US government, and whose interest payments were subsidized by the US government while I was in school – I found a number of accounts listed on my credit reports as ‘Paid/Closed.’ From my perspective, these accounts were neither paid nor closed, please note, but were simply consolidated and sold directly to the US government after the US Dept. Education’s initiative to directly buy back subsidized loans after 2008. In addition to these loan sales, another of my private student loans – i.e., an unsubsidized loan held exclusively by the bank and not insured against default by the US government – was listed as “Transfer/Sold.” This was a loan I had initially taken out with Wells Fargo that was eventually ‘transferred/sold’ to another private lending institution. When I finally got the chance to talk with someone from Wells Fargo who works with the credit rating bureaus (CRBs) in maintaining both their and the bank’s borrower records, however, to ask her what ‘transfer/sold’ refers to, she explained to me that, prior to about 2009 or so, Wells Fargo routinely bundled and sold off their private student loans to other financial institutions (US Bank, Sallie Mae, and Great Lakes being among the most preferred customers) (personal communication, May 2011). The process of bundling and selling off individual loans in the aggregate is, in a nutshell, the process of securitization.

At that point in the analysis, I could have stuck to the private loans that were still held with Wells Fargo and tried to understand how capital circulates in that context; I could have followed the loans that were sold on the US Department of Education to more fully explore that route; or, I could have tracked down this private loan that was sold/transferred. In the end, I would find a route that connects all three of these paths, a path that came about largely as a result of my failure in tracking down the buyer of my own private loan.

Apparently the same phenomenon that occurred after the housing bust has occurred to a lesser extent in student lending: the company that bought my loan as part of a securitized loan portfolio from Wells Fargo seems to have evaporated. Wells Fargo, meanwhile, was less than forthcoming in helping me track down this loan, or in giving me any information on the specific ABS that it was a part of, whatsoever. This, I would

come to find, is perfectly legal. Because the loan was a private loan, and because it was ostensibly sold in a private sale – i.e., not sold publicly to public investors – none of the transacting parties was responsible for disclosing the details of this transaction to the borrowers making up the loan or to the SEC. These issues of transparency are now being somewhat addressed in current legislation (dramatically titled, “The Dodd-Frank Wall Street Reform And Consumer Protection Act). But at the time there was no such mechanism by which I could gain access to records of the transaction. So instead, I called Wells Fargo and asked for any information regarding the history of my Stafford loans, now sold by them to the US Dept. of Education...they were, again, less than forthcoming.

In the end, I resorted to finding a public filing, listed on the SEC’s website, of a student loan-backed security that would consist of loans similar to my own in many ways: it would have Stafford loans as its ‘underlying assets,’ it would contain loans which would have been disbursed around the same time as mine, and it would have been comprised of loans from the states in which I attended university. This is how I arrived at the Prospectus and Prospectus Supplement (form 424B2) listing Wells Fargo Student Loan Trust 2001-1⁸ as a publicly-traded asset-backed security (ABS).

These documents are legally required to be filed with the SEC, legally required to disclose of what exactly the ABS is assembled. In many ways, these documents can be analyzed very similarly to the ways in which we just finished our analyses of the credit report: viz., they are the public artifacts through which the ABS is given existence in the world, through which it is agenced...a prospectus, too, just as much as the ABS to which it is attached, can be an agent. Perhaps even more so than the credit report, however, these documents serve to explicitly index the list of ‘key participants’ involved in the assemblage of the ABS. It is a kind of manifesto, declaring why all these actors are meeting as they are, to do the things they are all about to do.

⁸ This entity is registered with the Securities and Exchange Commission (SEC), and can be accessed here:

<http://www.sec.gov/Archives/edgar/data/1158916/000095013601501891/0000950136-01-501891.txt>

How to assemble an Asset-Backed Security

In its description⁹ of asset-backed securities in Regulation AB – the legislation governing how asset-backed securities are to be filed – the SEC defines an ABS as follows (Regulation AB, 2004, p.10):

Asset-backed securities are securities that are backed by a discrete pool of self-liquidating financial assets. Asset-backed securitization is a financing technique in which financial assets, in many cases themselves less liquid, are pooled and converted into instruments that may be offered and sold in the capital markets. In a basic securitization structure, an entity, often a financial institution and commonly known as a “sponsor,” originates or otherwise acquires a pool of financial assets, such as mortgage loans, either directly or through an affiliate. It then sells the financial assets, again either directly or through an affiliate, to a specially created investment vehicle that issues securities “backed” or supported by those financial assets, which securities are “asset-backed securities.” Payment on the asset-backed securities depends primarily on the cash flows generated by the assets in the underlying pool and other rights designed to assure timely payment, such as liquidity facilities, guarantees or other features generally known as credit enhancements. The structure of asset-backed securities is intended, among other things, to insulate ABS investors from the corporate credit risk of the sponsor that originated or acquired the financial assets.

In fact, this is actually a pretty succinct description of what turns out to be a horribly complicated object. As with most socio-economic objects of research, it's not easy to encapsulate the essence of things quickly or directly, and objects related to high finance prove to be especially tangled technico-discursive examples of this fact. Asset-backed securities, a case in point, entail so many complexities and have come about as a result of so many unique historical contingencies that it's impossible to describe the thing in anything less than a lengthy, abstruse and slightly-tautological paragraph. Nonetheless,

⁹ We'll see in the last chapter that the terms of these regulations were heavily influenced by market participants (mostly banks) who were solicited for comments by the SEC in developing Regulation AB. Which is to say, this definition may be as close to a unified self-representation as we can hope to come.

trading a bit of precision here for a slightly less jargonized description, it might help to start with a baseline definition that is a bit easier on the palate. In essence, an ABS is an aggregated pool of individual loans, bundled and arranged from among the original lender's total body of loans, which is sold off to outside markets. The original lender gets a lump sum payment for the pool of loans, investors collect gradual repayments on the loans from the individual borrowers, and the original lender in many cases remains involved as an intermediary, collecting payments from the borrowers and disbursing them to the buyers.

The remainder of this section entails a more in-depth description of the parts and processes implicated in the assemblage of an ABS. Most of this process is horribly circular, and it proved incredibly difficult to deal with all the vocabulary in any kind of linear way. As such, I'll try to define the terms as I go, and I've also introduced a few terms of my own, as well as terms that were used to explain this process to me by interviewees. These I found to be helpful in actually getting my head around what the reader will soon find to be an *enormously* complex process. I'll be sure to note where these terms were used. In other words, unless otherwise noted, the terminology here all comes from the Prospectus or Prospectus Supplement themselves, or related documents (e.g., Regulation AB). That said, the remainder of this chapter will cover a description – and, be warned, it is *very* description-heavy – of the process of securitization in four parts: 1) Pooling, 2) Structuring, 3) Selling, and 4) Servicing. This is followed by a brief discussion of credit ratings, which closes the chapter.

Step 1: Pooling

The original lender ('originator') – who, in our case is Wells Fargo South Dakota, National Association, or just 'the Bank' – pools or bundles together a number of consumer (in this case, student) loans from among the individual borrowers (or 'obligors') listed on its balance sheet. At which point the originator comes to be known as the 'seller' (the circular vocabulary begins!). The number of loans and borrowers bundled together varies drastically from pool to pool, but in the case we're considering here 147,836 individual loans from roughly 67,100 billing accounts comprise a pool with an

‘Aggregate Outstanding Principal Balance’ of \$492,546,102. Each individual loan is treated as an asset, since each is assumed to promise a regularly-scheduled payment and, once aggregated, the collective loan pool comes to be treated as a singular, fungible, financial commodity (i.e., a ‘security’). Whence, the name, *asset-backed security*.

I would note here, it is slightly misleading to state that the first process in the chain of securitization is the pooling of the loans. While it’s true that each consequent stage of securitization hinges on this original event, all of the stages to follow are also present, through intentions, here at the beginning. Which is to say, the loans to be pooled together are not chosen helter skelter from the lender’s total body of consumer debts. They are pulled from its balance sheets according to very distinct characteristics with the explicit goal of securitization in mind...an intention that will come to make more sense as we go.

Step 2: Structuring

The multiple, often conflicting logics behind how a particular ABS is structured can be complicated, to put it mildly. To put it bluntly, they’re baffling and somewhat enraging for anyone unfamiliar with finance. The danger of generalization notwithstanding, it’s probably safe to say that very few of the borrowers whose financial fates hinge on the ABSs in which they are embroiled have any idea about how or why an ABS is structured the way it is, let alone what an ABS actually is. Nonetheless, if you are compelled for some reason to take an interest, to sift through all of the financialist jargon and implicit reasoning attendant upon this process, the structure of an ABS is exceptionally ripe for social analysis. Each ABS, every shape and movement it engenders, is intimately and extensively related to the many and multiplying intentions behind its formation. These intentions are not hidden in the least; they are not buried away in waiting for the hermeneutic social scientist to excavate. They are there at the fore, explicitly assembling and animating the ABS, imbuing it with a kind of semi-animate, pseudo-autonomy. The process of structuring an ABS is everywhere a testament to the incentives of the parties selling, buying, and otherwise interacting with the ABS, on the one hand, and the restrictions they all must navigate through, on the other.

That being said, the general exercise of securitization can basically be understood as a trade-off between two goals. One the one side, the lender or originator (here called the ‘seller,’ since it will be selling its loans off to the ABS) is trying to secure itself against risk (which is where the root, ‘*secur*’ comes from in securitization) by removing, pooling, and selling off some of the riskier loans from its balance sheets. Alongside that goal, however, the seller must also ensure that the resultant pool of loans is still attractive enough for investors to buy into. In other words, the bank is trying to rid itself of its riskier loans by selling them on to investors, but must add some of its more attractive loans in to sweeten the pot. At the same time, (most) investors are trying to buy loans with high rates of return and low risk. And since few investors are interested solely in securities forecast for failure,¹⁰ the bank is forced to throw in a few of its better performing, less-risky loans as a kind of protection against the entire pool going bust. This action of mixing more and less risky loans into a single pool, together with a number of additional maneuvers intended to make the loan more appealing and ‘safe,’ is known as ‘structuring’ the asset. The latter goal, though, of making the loan broadly appealing, is particularly tricky given different investors’ levels of attraction to different levels of risk for different reasons – that is, given the range of investor ‘risk aversion.’

Given even these basic considerations, the structuring of the ABS tends to be the most involved and complex aspect in the entire chain of securitization. For the purposes of illustration, though, we can break this process into three modes of structuring, all of which tend to happen at the same time and depend extensively on one another: 1) Note Tranches and Credit Enhancement; 2) Priority of Payments and the Calculation of Interest and Principal; and 3) Legal and Tax Structuring.

Structuring Note Tranches and Credit Enhancement

Depending, among other things, on the kinds of investors the lender is trying to attract and the kinds of loans the lender is trying to remove from its balance sheets, then,

¹⁰ The exception here, of course, is an investor who knows it can insure itself for an ABS that is sure to default...say, through the nefarious financial instrument that would come to be hated the world over after 2008, the ‘Credit Default Swap.’

each loan within the ABS will be grouped (or ‘classed’), and each class will lie somewhere along a number of spectrums. For example, the loan amount and interest rates of each individual ‘underlying asset’ – i.e., the *actual*, in this case student, loans comprising the ABS, which are, please recall, attached to *actual* people – are factors of how it will be classed, as are the individual credit scores and geographic locations corresponding to each individual borrower. Each of these little facts about each individual loan are known as the ‘credit characteristics’ of the loan, known collectively as the credit characteristics of the ABS, and each of them lies somewhere along a spectrum of more to less risky in the scheme of credit rating. We’ll return to specifically to the subject of credit characteristics in the discussion of credit ratings, but for now it’s important to understand that neither the lender nor the investor are responsible for determining which loans belong to which classes. This responsibility is (in theory) outsourced to a third party, known as a Credit Rating Agency (CRA)¹¹. This fact is essential for understanding how structuring applies not only to the pool of loans itself, but also to some of the parties that assemble and maintain the ABS. To put it simply, the higher the risk associated with an ABS, the lower the rating.

In this regard, the ABS is methodically – if circularly – structured according not just to the credit characteristics of the individual loans and borrowers comprising the pool, but also according to those of the lender assembling the loans, the servicer intended to service the loans after they are securitized, and a number of other parties that are privy to this transaction. These parties, too, are subject to ratings, bestowed by the same agencies rating the underlying assets. In this case, though, some of the credit characteristics of significance regarding these actors credit ratings are things like ‘bankruptcy remoteness’ (will the ABS continue to perform even if the original lender goes bankrupt?) and ‘servicing standards of care’ (are the roles of the servicer clearly delineated, will the servicer service the loans similarly to the way in which it services its own loans?). If any of these characteristics are in doubt, or if investors just aren’t buying

¹¹ Not to be confused with the Credit Rating Bureaux, which compile credit reports on individuals and sometimes also referred to as credit rating agencies. As noted earlier, the latter will always be referred to here as CRBs, while the agencies that rate ABSs will be referred to here as CRAs.

the kinds loans a lender is selling, the CRA may require the ABS to undergo an additional form or forms of ‘credit enhancement.’

Credit enhancement is the process through which, depending on the credit characteristics of the parties involved and the ABS itself, the security may be required to seek additional assurances that it will indeed perform as predicted. More directly, credit enhancement seeks to ensure that, should the ABS not perform as predicted, there are mechanisms and safety nets built into the ABS that will ensure investors get what they are promised when they invest in a particular class of loans at a particular rating. The actual methods of credit enhancement usually fall into two categories (and these are my terms): those that are exacted through the *internal* structuring of the asset itself, and those that are obtained through the *external* structuring of third-party guarantees, including ‘letters of credit’ and other such forms of ‘borrowed creditworthiness.’ We’ll pick up on the role of external credit enhancement in the discussion of how an ABS is actually sold. We’ll focus here on how an ABS is structured with internal credit enhancement.

ABSs receive internal credit enhancement through the addition of things like supplemental funds which may be used to make payments in lieu of borrower payment shortfalls. Alternatively, they can also be enhanced by the very rules determined to govern which class of investors is paid before the others (called, ‘subordination’). As our particular ABS describes in its Prospectus Supplement (referred to as the ‘PS’ hereafter), its internal credit enhancements include the following:

The credit enhancement for the senior notes will consist primarily of the following:

1. **reserve account;**
2. **overcollateralization**, to the limited extent described under "Reserve Account," below; provided that excess amounts released from the reserve account are sufficient to create and maintain such overcollateralization;
3. until November 25, 2003, **the demand note**; and
4. **subordination** of the subordinate notes.

The credit enhancement for the subordinate notes will consist primarily of the following:

1. **reserve account;**
2. **overcollateralization**, to the limited extent described under "Reserve Account," below; provided that excess amounts released from the reserve account are sufficient to create and maintain such overcollateralization; and
3. until November 25, 2003, the **demand note**(PS, pp. s-7,8).

While ‘Overcollateralization’ is explained with reference to the reserve account in the description below, ‘Subordination,’ as an explicit form of credit enhancement, nearly slips by without notice here. In actuality, subordination is absolutely crucial to the entire layout of this ABS. As the PS explains a little later, subordination is the process through which “any losses on the student loans not covered by other forms of credit enhancement will be allocated to the subordinate notes before being allocated to the senior notes” (PS, p. s-9). Meaning, the senior investors – those that invested in higher-rated classes with a lower rate of return – are paid first, while those investing in the riskier, or lower-rated classes, are paid only after the senior investors have first received their dues. This form of credit enhancement accomplishes a number of feats, but one stands out above the rest: it is how the seller is able to mix the less desirable of its loans in among the more desirable. Through this trick, the seller of the ABS is able to attract investors with different levels of risk aversion. Those hoping to make a bigger score, and also willing to take on a little more risk, will invest in the lower classes of loans hoping to make a larger profit on the spread made possible there by higher interest rates (more on this later). Meanwhile, investors whose taste for risk is a little less ravenous will find in the higher rated loans a pretty safe, long-term investment – which, of course, they will typically make less on. Everybody wins.

The next form of credit enhancement, the ‘reserve account,’ gets really complicated really quickly, as things in the world of securitization so often do. Very generally, funds in the reserve account will only be used to “cover shortfalls in servicing, administration and swap fees and distributions of interest on the notes” (the ‘notes’ being the claims on the amounts owed to investors for each payment cycle)(PS, p. s-8). The PS will go on, however, to devote several additional pages of dense legalese, in essence explaining the fact that the reserve account is another kind of safety cushion. Should the

regular flows of loan repayments start to dry up, the reserve account will kick in and start shelling out distributions, according to the scheme of subordination. Conversely, should the assets perform as predicted— i.e., should the underlying loans remain in regular repayment – then there is a chance that reserve account will pay everyone off sooner than expected, and eventually spill over into ‘overcollateralization’ (when the amount of money in the ABS is more than the amount owed to investors). Finally, after a complicated description of how any excess in the reserve account will be distributed to various parties through an elaborate waterfall of prioritized payments, we eventually learn that the reserve account can potentially result in a profit for the depositor – a subsidiary of Wells Fargo that acts as an intermediary between the Bank and the ABS, the depositor buys the loans from the Bank and sells them to the ABS.

The demand note as a form of credit enhancement, by contrast, is a bit more straightforward. Specifically, “on the closing date, the depositor will assign to the indenture trustee [the party legally obligated to fulfill the administrative functions of the ABS] for the benefit of the noteholders [the term used to refer to the investors, who hold ‘notes’ or claims on payments from the ABS] all of its rights under a non-interest bearing demand note issued by Wells Fargo Bank South Dakota, National Association [the Bank] in the amount of \$10,525,000. The demand note will expire by its terms on November 25, 2003. Prior to that date, the demand note may be drawn on to cover shortfalls in certain fees, distributions of interest on the notes to the same extent as the reserve account but only if amounts in the reserve account are insufficient to do so” (PS, p. s-7). Basically, the demand note will pay out to investors should the reserve account, in its turn, dry up.

Collectively, all the forms of credit enhancement are evaluated together with the ratings of each class of underlying loans, and the final product is a segmented and fully structured ABS for offer, which typically ends up looking like some variation of an inverted pyramidal or tiered structure.

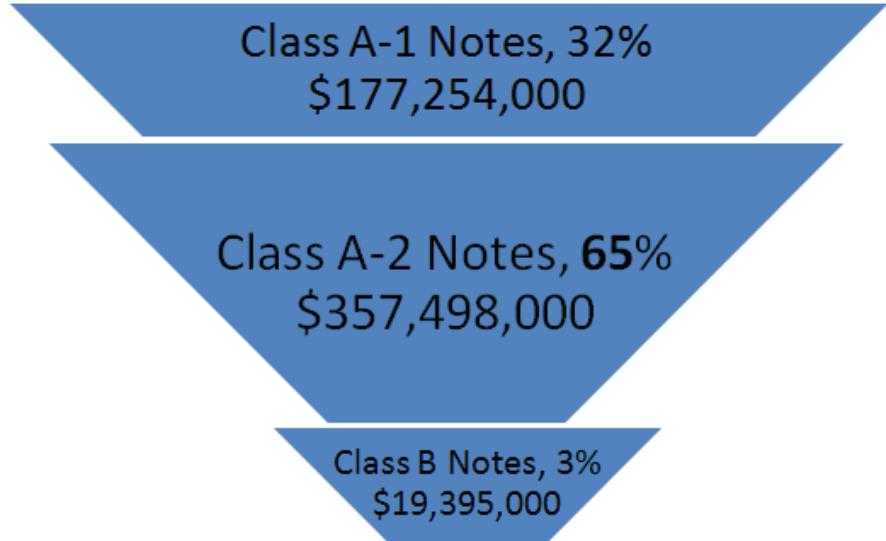


Figure 5, Distribution of loans by note class and dollar amount, adapted from tables on Prospectus and PS.

Each class is allotted a certain dollar volume or percentage of the total loan pool, and is then matched with the appropriate offering price and return on investment. In this case, the offerings are structured as outlined in figure 3 below. Note there how the lowest interest rates accompany the safest tier, or ‘tranche,’ of the ABS, but recall how that tier gets paid first, no matter what. Note also how interest rates on riskier loans are significantly higher, but that this tier is paid last...this point will be of some importance further on.

	PRINCIPAL AMOUNT	INTEREST RATE	FINAL MATURITY DATE
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Class A-1 notes	\$177,254,000	Three-Month LIBOR plus 0.08%(1)	Aug-08
Class A-2 notes	\$357,498,000	Three-Month LIBOR plus 0.18%(1)	May-30
Class B notes	\$19,395,000	Three-Month LIBOR plus 0.50%(1)	Aug-35
	\$554,147,000		

Table 1, Initial interest rate offering for return on investment (Prospectus, p.1).

Structuring the Priority of Payments and Calculating Interest and Principal Repayment

After the structure of the notes themselves has been determined, and credit enhancements have been applied to that end, the parties must additionally agree on how to structure the flows of principal and interest when finally the borrowers' repayments begin. Before getting to the details of this stage, though, there are two pretty important – in fact, essential – points to keep in mind during the discussion we're about to have, concerning what no doubt threatens to be an incredibly boring conversation otherwise. The first point follows from an interview I conducted, which became something of a watershed in the research. The interview was with a current employee in the student loans division of Wells Fargo South Dakota, National Bank (the Bank). Having previously held the position of president and CEO at an unrelated credit card processing organization – this was as far as he cared to elaborate on *which* company he worked for exactly – the interviewee reported some forty-plus years of experience in the consumer credit industry. During that interview, he noted something about the general scheme of securitization that hadn't occurred to me previously. He explained that securitization is not only about removing risky debts from the banks' balance sheets. Or, if you like, removing risky debt is only a kind of negative incentive. There is a positive incentive as well.

Originators of consumer debt often take on an additional role once they sell their debts on to a third party: the role of 'servicer.' Having already dealt with the borrower up to the point of securitization, the originator is perfectly poised to continue working with the borrower, servicing his/her loan(s) even after the loan is sold on. In general, servicing entails collecting payments, contacting the borrower when needed, and basically acting as an intermediary between the obligors and the indenture trustee (the party, recall, that essentially 'manages' the ABS). There are benefits to this arrangement all around, but note specifically that when a bank sells off its loans and chooses to continue servicing them – which it is by no means bound to do – the bank continues to collect fees and service charges for doing so, as per the agreement laid out in each ABS Prospectus. What the interviewee was pointing out to me in this regard was that this option to recapture capital on the loans through service charges rather than through interest payments represented something of a sea change in the world of consumer finance. It

allowed lenders to originate loans with riskier borrowers (so-called ‘subprime borrowers’) without any collateral down since they knew they would only be selling the loans on. And in addition to recouping the original amount of funds they lent out when the loans are resold on to investors – funds that will eventually be repaid to investors, but which for the time being allow the bank to show on their balance sheets an income of assets rather than liabilities, having filtered the latter through securitization to arrive at the former – *through their role as servicer*, originators pick up the additional funds generated in fees and charges. This fact is especially enlightening when taking note of how the prospectus structures the priority of funds first to the servicer in most cases, and that the servicer is the same party that sold the loans off to begin with.

The second important point is directly related to the first, and is a point that arose often during interviews and in the literature review. It concerns something called ‘the excess spread’ – noted earlier, which attracts risk-loving investors – and goes a long way toward explaining why investors would come anywhere near a pool of assets they know the banks are unloading exactly because of the underlying loans’ instability. When added to the benefit of potential servicing fees, the potential for excess spread also helps explain why on earth banks began lending so eagerly to subprime lenders in the first place. Basically, excess spread is just a difference between interest rates: between the interest rates the ABS is bringing in on its student loan repayments (‘receivables’ or ‘assets’) on one side, and the interest rates it is paying out to investors (its liabilities) on the other.

The ABS is expected to earn a certain amount based, among other things, on a calculation of the average of the interest rates that comprise it (the ‘weighted average interest rate’). The interest rates it promises to pay investors are likewise calculated based on this initial weighted average interest rate, together with other industry benchmarks (e.g., the LIBOR or 90-day Treasury rates [‘T-bills’]). If a significant number of loans in the pool exceed this weighted average interest rate, then there is an excess between what is earned and what is paid out. And recall, whenever this excess occurs, there is the potential for profit on the part of the depositor. And since it is specified in the prospectus, as we’ll see, that the depositor may continue to repurchase additional related loans after the closing of the ABS deal, it provides the bank the opportunity to off-load more of its

debts, and the ABS itself the opportunity to purchase subprime loans with higher interest rates, thereby increasing its future cushion of excess spread.

The amount generated from the excess spread can then be diverted back to a number of places, and the dense legal explanation of the reserve account in the PS delineates precisely those places and which ones receive funding before the others. As explained above, any excess spread goes first into the reserve account until that account reaches the specified amount (\$1,386,284). Funds in excess of this amount are then paid out 1) as principal to noteholders, 2) to the swap counterparty (a party whose role we'll discuss in the course of things), 3) to the demand note provider (who we'll also describe later), and 4) to pay additional principal to maintain overcollateralization before they are eventually released back to the depositor.

Often considered an additional source of internal credit enhancement the excess spread is therefore worth emphasizing for at least two reasons. First it explains why lenders would ever have begun lending to subprime borrowers without those borrowers being capable of providing the appropriate collateral on their debts: quite simply, because higher interest rates can result in larger excess spreads. More immediately, though, the excess spread is noted here for the external relations it imposes between ABS participants. At one and the same time, the excess spread provides a reassurance for investors – in that the ABS is backed-up with an additional income should widespread default occur – while at the same time providing yet another source of potential profit for the parties involved. Since, in this case, the excess spread may potentially be diverted back to the depositor, whose funds may eventually find their way back to the originator and servicer, there arises the capability of funding even more ABSs and removing even more risky debt from the seller's books (see the role of depositor, more clearly explained below). So on, and so forth: iteration, reproduction, recursion, aggregation.

Finally, after all of that qualification regarding the incentives behind the structuring of payment priorities, the PS explicitly lays out the structure of payments as follows.

Priority of Payments

On each quarterly payment date, the indenture trustee will make the following distributions in the following priority to the extent of available funds:

- (1) certain fees, to the servicer, administrator and swap counterparty;¹²
- (2) interest, pro rata, to the senior noteholders;
- (3) interest, to the subordinate noteholders;
- (4) principal, to the noteholders; and
- (5) remaining funds, to the reserve account(PS, p. s-6)

Note the clear distinction between principal and interest in this priority scheme. Although we've touched briefly on why this distinction matters, the Prospectus and PS actually go to great lengths in specifying the distinction between principal and interest repayments, which suggests they might also be of some additional interest here. To be sure, in the typically, confusingly, frustratingly circular motion in which this ABS loves to swirl, the distribution of excess spread noted above actually depends on this distinction.

Interest payments made to investors are easy enough to understand. They are simply pegged to the rates initially disclosed on the first page of the Prospectus (see table 1 above). Principal payments, on the other hand, are slightly more complicated. As the PS explains.

Principal payments on the notes generally will be made sequentially. Therefore, no principal will be paid on the subordinate notes until the senior notes are paid in full and no principal will be paid on the Class A-2 notes until the Class A-1 notes are paid in full.

¹² Without reiterating again how the various parties' incentives are reflected in this priority scheme, the fact that the seller and the servicer are the very same actor in this case, and that both of the latter are subsidiaries of the swap counterparty, should not go overlooked.

However, if the notes are accelerated following a default under the indenture, principal will be paid first to the senior notes, on a pro rata basis, until they are paid in full, and second, to the subordinate notes until they are paid in full (PS, p. s-6).

Structuring the Legal and Tax Status of the ‘Trust’

Our ABS is additionally structured with two fundamental aversions in mind: taxes and lawsuits. In fact, the ABS actually loses its generic title as ‘*an ABS*’ in light of these very aversions. At this point, via tax and legal constraints – via tax and legal opportunities, too – we come to know our ABS by a different name entirely: a *Trust*. This is where the legal title of this entity as listed with the Securities and Exchange Commission comes from: ‘WELLS FARGO STUDENT LOAN TRUST 2001-1.’

The Trust is so named because carrying the status of a ‘trust’ as opposed to, say, a corporation, implies different legal and tax consequences should anything unexpected arise in the course of the Trust’s lifecycle. And to anyone familiar with tax and business structures in 21st century American finance, these kinds of redefinitions and transformations, changing one kind of business or financial entity into another altogether, are perfectly natural. An individual becomes a Limited Liability Company (LLC); a partnership becomes a C- or S-class Corporation; etc. These redefinitions, of course, render the newly-created entity into a different agent entirely when it comes to its treatment in courts and by the Internal Revenue Service regarding settlements and taxes owed. Depending on the type of entity created and the applicable laws or regulations (constant only in their inconstancy), the entity will be, on the one hand, subject to an entirely different set of legal and accounting constraints; but on the other hand, it will be exposed to an entirely new set of opportunities, as well – that is, opportunities to avoid taxes and dodge lawsuits. And though in the common sense of the term we don’t often think of the entities thus created as ‘agents,’ it’s important to understand that that is exactly what they become via the kinds of financial constructions we’re discussing here.

In the first place, the Trust becomes a new agent in the legal and accounting sense, whereby non-taxable and bankruptcy-remote entities are *practically* recognized as ‘real,’ and not as fictitious entities in the way commonsense most immediately perceives

them. Legal issues, if they arise at all, are thus dealt with by containing them to within a couple of legal and accounting constructions – more precisely, ‘limited-purpose entities’ – structurally restrained from spreading to any of the, for example, associated *corporate* parties, who would otherwise be subject to *corporate* lawsuits.

By forming the depositors to purchase the student loans being sold to a trust, the Bank [Wells Fargo South Dakota, National Association] has taken steps intended to prevent any application for relief under any insolvency law from resulting in consolidation of the assets and liabilities of the depositor with those of the Bank. As a separate, limited-purpose entity, each depositor's limited liability company agreement contains limitations...Among other things, each depositor will maintain its separate corporate identity by: maintaining records and books of accounts separate from those of the Bank and EFS; refraining from commingling its assets with the assets of the Bank; and refraining from holding itself out as having agreed to pay, or being liable for, the debts of the Bank. We have structured the transactions described in this prospectus to assure that the transfer of the student loans by the Bank to a depositor constitutes a "true sale" of the student loans to that depositor.

The transferring [sic] depositor will also represent and warrant that each sale of student loans by the depositor to the trust is a valid sale of those loans. The transferring [sic] depositor and the Bank will take all actions that are required so the eligible lender trustee will be treated as the legal owner of the student loans while they are held beneficially by either the depositor or the trust (Prospectus, pp. 14-15).

Under this arrangement, both the Depositor and the Trust – referred to here as a ‘limited purpose entity’ and elsewhere as a ‘variable interest entity,’ respectively (or collectively as ‘special purpose vehicles’) – are given independent legal and accounting status to maintain their ‘bankruptcy remote’ status from the Bank and other associated parties – a crucial status for several reasons, and one we will return to in the discussion of credit ratings. So that what was finally meant by the mouthful, “steps intended to prevent any application for relief under any insolvency law from resulting in consolidation of the assets and liabilities of the depositor with those of the Bank,” was quite simply: ‘the Depositor and the Trust are on their own in the event of bankruptcy.’ The Bank is not

responsible for the outstanding debts of the Depositor or the Trust because the latter are each their own distinct (special-purpose) entity. The distinction is made with one eye toward remaining bankruptcy-remote, and the other toward avoiding taxes (and, perhaps a ‘third eye’ toward better credit ratings). Such that taxes, if they are paid at all, are not paid on attendant flows of capital treated as income or profits, but rather as debts: “the trust will not be treated as an association or a publicly traded partnership taxable as a corporation; and the notes will be characterized as indebtedness for federal income tax purposes” (PS, p. s-10).

Here we can change gears for a moment to pick up a running thread in this thesis. One of the overarching premises of this work is that a agent is an agent precisely (though not entirely) because of its formal recognition by some artifact or another (e.g., the credit report), in one language or another (e.g., the language of consumer finance), and always with respect to some relational referent (e.g., creditworthiness as defined vis-a-vis the aggregate creditworthy archetype). Within a given set of relations, it is the specific modes of interaction that validate and perform agents through these artifacts, languages, and referents. Latour makes the point eloquently: “there are all of those official and legal papers which designate ‘you’ as being *someone*. If you doubt the ability of those humble paper techniques to generate *quasi-agents*, try living in a large European city as an ‘undocumented alien’ or extracting yourself out of the FBI’s grip because of a misspelling of your name” (Latour, 2007, p. 208).

So the question of particular interest in this regard becomes, if human subjects are at least partially enacted through the kinds of generally and practically accepted artifacts we’ve been talking about so far, what are we to make of non-human subjects that are treated similarly? From the start, even within the PS itself where the language veers toward anything but a concern for novel epistemology, the Trust is individuated as its own kind of cultural construction, its own socio-economic entity. Even in this context, the Trust is an uneasy subject-object, an ‘entity’ not easily defined. For example if *personhood* is a constitutive element necessary for enacting an agent, we might note that the Trust *is in fact* a person, at least “to the extent provided in Treasury regulations,” whereby “certain trusts in existence on August 20, 1996, that are treated as United States persons on August 19, 1996, and elect to continue to be treated as United States persons,

are also considered "U.S. Persons" (PS, p. s-57). But in case the Prospectus Supplement has wandered already too far toward confusing its reader, the Trust's designation as a '*person*' is qualified a little further:

As used herein the term "U.S. Person" means a beneficial owner of a Senior Note that is for United States federal income tax purposes (i) a citizen or resident of the United States, (ii) a corporation or partnership, including an entity treated as a corporation or partnership for U.S. federal income tax purposes, created or organized in or under the laws of the United States or any State thereof or the District of Columbia, unless in the case of a partnership, U.S. Treasury Regulations are adopted that provide otherwise, (iii) an estate the income of which is subject to United States federal income taxation regardless of its source, or (iv) a trust if a court within the United States is able to exercise primary supervision of the administration of the trust and one or more United States persons have the authority to control all substantial decisions of the trust(PS, p. s-57).

So if the Trust is a kind of person, then what kind of person is it exactly? It's clearly not a human citizen or resident of the United States as these terms are commonly understood. And whether it is an estate whose income is subject to United States federal income taxation is unclear, given what is known through the Prospectus and PS. We can be certain, on the other hand, that "the trust will not be treated as an association or a publicly traded partnership taxable as a corporation" (PS, p. s-10). So it's not a citizen and it's not a corporation. Neither, so far as we know, does it seem to be an estate. The Trust certainly seems to fit definition (iv) given above, however, as a trust whose administration can be supervised by US courts and controlled by one or more US *persons*. But be careful not mistake that phrase, 'United States persons' for the referent one's mind no doubt conjures up most immediately. With characteristic circularity, this trust can ostensibly be controlled by 'persons' of all varieties: partnerships, corporations, citizen residents and other trusts of the like. And our Trust, WELLS FARGO STUDENT LOAN TRUST 2001-1, is most certainly controlled by one or more persons of this ilk exactly.

In fact, this Trust is legally-required to be composed of one or more ‘persons.’ Since ours is an ABS comprised of student loans, and since those loans are all federally guaranteed, a number of parties and elements are legally required to take part in its constitution. In other words, this Trust is governed by a set of binding conditions without which it could not be securitized and offered for sale in public markets. That set of conditions is so essential to the composition of the Trust itself that a number of its more pressing points are included in the Prospectus and PS through a discussion of the Federal Family Education and Loan Program (FFELP).

So far as the Prospectus is concerned, the “Federal Family Education Loan Program (“FFELP”) under Title IV of the Higher Education Act of 1965...provides for loans to be made to students or parents of students enrolled in eligible institutions to finance a portion of the costs of attending school” (Prospectus, p. 18). Through a series of intermediary parties, the program guarantees between 75% and 100% of student loans made under particular conditions by particular parties. “In addition, the related eligible lender trustee, as a holder of the federal student loans on behalf of a trust, is entitled to receive from the [US] Department [of Education] interest subsidy payments and special allowance payments” (Prospectus, p. 18).

In essence, the FFELP – which was officially replaced by direct federal lending in 2010, but which effectively governed the structure of our ABS in 2001 – outlined a set of requirements necessary for lenders and borrowers to adhere to if the former wished to lend (and possibly securitize) federally guaranteed student loans, and if the latter wished to borrow them. The program describes what kinds of students and educational institutions are eligible to receive funding under its terms, and what kinds of lending institutions were able to provide those funds. According to the Prospectus, students were admitted into the program based on both their and their parents ‘financial needs analysis,’ conducted by the Department of Education. Restrictions on admissible schools additionally included requirements like accreditation, legal authorization to operate within the state in which they were located, and a number of similar stipulations. Meanwhile eligible lenders, the Prospectus explains, “generally include[d] banks, savings and loan associations, credit unions, pension funds, insurance companies, and with conditions, schools and guarantors” (Prospectus, p. 20).

To return to our point, the FFELP is of interest here for the way that it inflected the process of securitization and configured the Trust as a particular agent by legally requiring – and thus validating – that process to unfold in a particular way. Specifically, the “Act authorizes Federal Guarantors to support education financing and credit needs of students at post-secondary schools. The Act encourages every state either to establish its own agency or to designate another Federal Guarantor in cooperation with the Secretary of Education (the "Secretary")” (Prospectus, p.28). What’s more, each “federal student loan to be sold to an eligible lender trustee on behalf of a trust will be guaranteed as to principal and interest by a Federal Guarantor pursuant to a Guarantee Agreement between the Federal Guarantor and the applicable eligible lender trustee” (Prospectus, p.28). Whereby, please recall, “the related eligible lender trustee, as a holder of the federal student loans on behalf of a trust, is entitled to receive from the Department interest subsidy payments and special allowance payments” (Prospectus, p. 18).

If the FFELP did not exactly *determine* how the process of securitization would unfold in this context, it certainly laid out some of the fundamental constraints and opportunities that would shape this process indelibly. Constraints in this context generally took the form of restrictions on eligibility for participation in the program; and opportunities were generally extended through the mechanisms of federal guarantees, special allowance payments and interest subsidy payments. In constraining the process by determining who was allowed to participate, the FFELP ensured that at least a trust, an eligible lender trustee, a federal guarantor, and an outside lender would be involved in the process of selling and securitizing student loans. The program further ensured that, so long as the parties lived up to their responsibilities as outlined in their respective agreements, almost all of the risk would be transferred away from the private lenders and federal guarantors, and eventually back onto the Federal Government – or, by extension, its taxpayers. Crucially, though, the program also provided for a steady stream of interest subsidy payments and special allowance payments, on top of which an extensive network of asset-backed securitizing parties – together with the markets they create – would eventually, *opportunistically* emerge.

Through the artifact of the Higher Education Act of 1965 and the terms of the FFELP, the language necessary to delimit the Trust as a particular kind of agent was

formalized. That is, the FFELP partially crystallized and configured the Trust as a distinctively agenced agent by providing a site where multiple parties and their multiple intentions could convene. The Act formalizes at least a few of the actors' relations possible beneath its umbrage by legally defining which parties were and were not essential to its enactment. More directly, the FFELP ensured the Trust would always necessarily be comprised in related but distinct pieces: pieces of lending institutions and eligible lender trustees here, pieces of the Department of Education and federal guarantors there, and pieces also of borrowers and eligible educational institutions sprinkled throughout. Thereafter the Trust is recursively *performed* into existence by each of these parties fulfilling their daily obligations with the Trust and each other, agglomerating ever-more actors and elements through the ever-increasing incentives spinning off in all directions – a process that becomes a bit clearer in the discussion of how ABSs are sold. And it would eventually be in this final sense that Wells Fargo South Dakota, National Association (the Bank) was able to opportunistically insert itself and several of its subsidiaries into this emergent, aggregating entity known as the Trust.

Finally, the enduring significance of the legal and tax structures of the Trust has to do with the kind of agenced agent it implies for this research. Through these structurings, the Trust takes on many of the characteristics we associate with an active, agenced agent – in a conventional sense, in that it wields some influence or agency on the actions of those associated with it. It takes on these characteristics in the context of special purpose legal and accounting entities, but also by a general comparison with how individual human agents are defined, enacted, articulated, etc. within the logic and performance of consumer credit/debt.

An agent is typically rendered as such in consumer credit/debt partly through its ability or *capacity* to engage with other associated agents in the buying, selling, and discharging (or amortizing) of debt – a capacity most often represented through the agent's credit report, credit score, or credit rating, or alternatively through the various artifacts supposed to depict the constitution of an agent with reference to its character-as-capacity. So too are the Trust and, to varying degrees, many of the associated parties rendered as agents with capacity in mind. But there is also a crucial difference.

Most human subjects of interest to consumer credit/debt can also be treated as easily-defined objects, with more or less discernable boundaries and an accountable history of performance. It is in fact this treatment of subjects as mechanistic objects that allows the standardized metrics of consumer finance to gain their prevalence. The Trust, on the other hand, has at its conception neither clear cut boundaries nor any history to speak of in any sense. And that's partly because the Trust isn't really embodied in the same way that individual human bodies and associated corporations are. The Trust *is* embodied, yes; it's no more incorporeal than any other object of social analysis. It is comprised of the same kinds of artifacts, material resources, standardized languages and external contextual referents. But it is embodied in a much more *distributed, disincorporated* kind of way: "In offering ABS, there is generally no business or management to describe." So what kind of subject-object are we dealing with then?

In the end, the Trust turns out to be a kind of web or network stretched between various actors and material bodies, *conjoining* those bodies through the iterative flows moving always from one to the next. Indeed, a 'networked' agent of that kind exactly emerges through a discussion of the buying and selling of debt through the process of securitization, especially as it relates to our Trust specifically.

Step 3: Selling

We've seen already how the Trust is initially assembled according to the credit characteristics of 1) its underlying loans (or assets) and 2) the associated parties selling and servicing those loans. All the pooling and structuring aspects of asset-backed securitization we've covered so far, however, are more or less preparation for the actual selling of the loans in 'secondary markets' – i.e., markets where outside investors can buy the consumer loans already purchased once by the bank. In anticipation of a decent return on its investments, the seller mixes its loans with various degrees of creditworthiness and credit-riskiness into a pool, adds a few forms of overall credit enhancement, restructures the thing according to tax and legal considerations, until it's finally ready for sale. The whole package is then sold on to a number of additional actors through a number of additional intermediaries, until it eventually finds its way into the hands of outside

investors. But the Prospectus and PS explain that this is only the first of two phases through which the Trust is borne into the world.

Once proceeds from these initial sales start accumulating, a portion of them is recycled back into the Trust for the purchase of additional loans, during what is referred to as the ‘funding period.’ In this manner, in the course of forming and selling the Trust, two parallel phases can be thought of as operating simultaneously: the Productive and the Reproductive (my phrases). The Productive phase is responsible for fund-raising, for generating all of the capital necessary for everything we’ve discussed so far. Without this initial sale of the Trust (as ‘notes,’ or claims on borrower repayments), there would be no money to pay the underwriters who sell the notes on into the market and ostensibly keep the secondary markets in ABSs churning. Neither would there be any money to pay the servicers of the loans, who would effectively (if circularly) be responsible for collecting future borrower repayments and keeping the lifeblood of the thing in circulation. And though a good deal of time and money will already have been spent preparing the Trust for sale, the entire productive phase does not really begin until after all the loans have been pooled together: after they have been structured just so, after they’ve been compiled, reassembled, transformed for their meeting with the outside world.

After the loans have been pooled and structured, they’re sold on to several subsidiaries of Wells Fargo, National Association (the ‘holding company’). Those subsidiaries – referred to earlier as ‘depositors’ – are Wells Fargo Student Loans Receivables I, II, III, and/or IV, LLC. Each subsidiary is listed independently with the SEC as a limited liability company (LLC). In the eyes of both the Bank and the regulators, therefore, each LLC is a distinct (limited purpose) entity who buys loans from Wells Fargo South Dakota, National Association (Seller and original owner of the loans, ‘originator’), and may in turn retain those loans or sell a few in private sales, but will sell the majority of them on to Bank One, National Association (the eligible lender trustee) – which is actually a sale to the Trust, since the eligible lender trustee is just a kind of legal guardian for the Trust: a wet nurse acting in place of an incredibly helpless but incredibly rich ward.

After which time the eligible lender trustee, on behalf of the Trust, sells the entire sum of ‘the principal amount’ it bought from the depositors on to the underwriters:

Salomon Smith Barney, Bear, Stearns & Co. Inc., and Wells Fargo Brokerage Services, LLC. And finally, through the underwriters – who are basically investment banks – and the extensive networks of investor brokerage they've already established, the loans eventually find their way back into secondary public (so-called 'capital') markets. In total, the productive phase thus consists of four separate sales, each generating its own service charges or fees for the intermediaries involved: 1) Seller → Depositors, 2) Depositors → Eligible Lender Trustee (Trust), 3) Trust → Underwriters, 4) Underwriters → Investors.

After these initial sales, the reproductive phase commences. During the funding period – which occurs after the underwriters have paid for the entire Trust – a portion of the proceeds are returned to the Depositor . The latter then reallocates that determined portion (in this case, 9.02% of the overall sale, or \$ 50,000,000) of the proceeds from the initial sales into a 'prefunding account' – an account which is 'held' by the indenture trustee (JP Morgan Chase). Money from that account would then have been used either to "originate federal consolidation loans, each made for the purpose of consolidating one or more federal student loans at least one of which is already held by the trust" or to "purchase from the depositor serial loans. For a student loan to qualify as a serial loan it must have been made to a borrower under a student loan held by the trust on the closing date and must meet other criteria specified in [the] prospectus supplement" (PS, p. s-7). Should the prefunding account run dry before the Trust is satisfied with its overall portfolio, however – which is to say, before the bank is satisfied that it's rid itself of all the loans it wishes to, or must under regulations – then the Trust has the additional option of using "principal collections received on the student loans" to purchase even more loans within the same parameters. The funding period lasts about two years from the closing date (the date from when the Trust is sold to the underwriters), and adds to the Trust's overall property both the serial and consolidation loans bought during the funding period and the prefunding account itself. The total 'property' now belonging to the Trust includes the following (most of which we've already discussed in the section on credit enhancement):

Component	Contents
Initial Financed Student Loans	\$492,546,102 (after expenses and allotments to special accounts)
Reserve Account Initial Deposit	\$1,386,284
Prefunding Account	\$50,000,000
Collection Account	Varies according to payment each cycle
Demand Note	\$10,525,000

Table 2, Combined property of the Trust by account and dollar amount, created from information on the Prospectus.

A summary of the entire selling process can thus be depicted as follows:

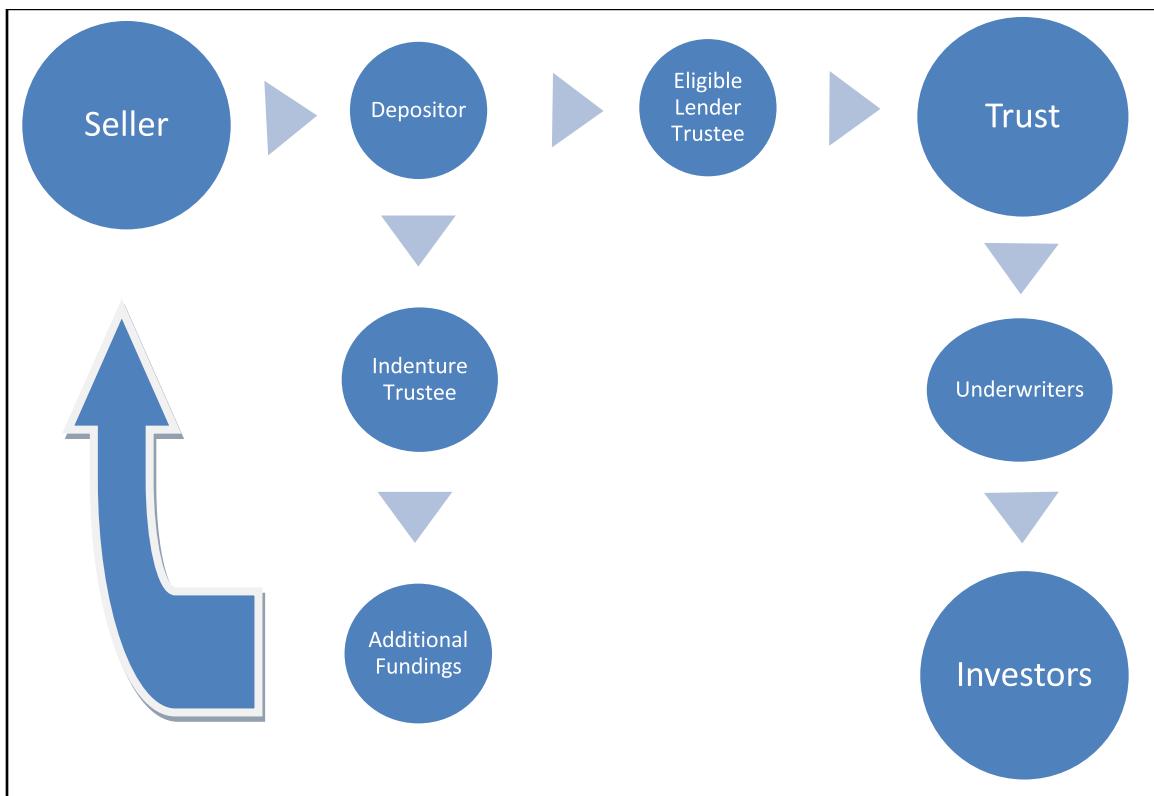


Figure 6, Selling cycle of assets in the Trust, adapted from descriptions in the Prospectus and PS.

Principal Parties & Their Roles (Actors & Relations)

Already it should start becoming clear that the Trust is not so much a *thing* as it is *relation between other things*, or at best *a shifting site where relations converge*.

Borrowing a bit from Social Network Analysis (SNA) and Actor-Network Theory (ANT), we could call the things doing the relating ‘actors’ or ‘nodes,’ and the things that are related, ‘relations,’ ‘associations,’ ‘edges,’ ‘ties,’ or ‘degrees’ (I’ll try my best to stick to ‘actors’ and ‘relations’). Regardless of terminology, a true depiction of all the relations bound up in this Trust would of course overflow these lines, and any other lines with which we would try to encircle it. Each dot would have to be represented as a kind of scalar, dynamically shrinking and enlarging object; and this because each actor is, on the one hand, comprised of myriad smaller networks – each overlapping with other, external networks – and is, on the other hand, embedded in countless, additional, larger networks more or less related to the network in question. Nevertheless, what follows is an attempt to re-present in a dynamic and graphical way what was discursively described in the Prospectus and PS.

So far, we’ve seen that the Trust is admitted into the world principally via a set of material artifacts (i.e., the Prospectus and PS, tax and legal filings, etc.). These artifacts serve as indices of how associated actors are related to one another. Through them, we see that the Trust is dislocated from a single site, distributed among its actors through (to name a few) various records of payment, quarterly and annual reports and filings, flows of ‘receivables’ and ‘distributions’ (of course), and a small army of user agreements¹³ binding each associated actor to another and one to them all. And in case the reader has lost track of all the actors involved and what they are relating, it may be helpful here to briefly account for some of those actors, and then map the relations between them – at least cursorily – before finally describing of what some of those relations consist.

¹³ Though the user agreements were appended elsewhere, for example, I counted at least ten such agreements referenced in the Prospectus and PS, including initial borrowers’ Loan Applications, Financial Need Analysis Forms, the Borrower’s Agreement, Lender’s Agreement, the Loan Servicing Agreement, the Loan Sale Agreement, Guarantor’s Agreement, the Trust Agreement, the Transfer Agreement, and the Guarantee Agreement.

Fortunately, the PS has done a lot of this work for us, listing what it considers to be the most important actors under the heading of “principal parties,” no less. Though many of these parties have already been discussed, short descriptions will be added here for the sake of reference.

THE SELLER

- Wells Fargo Bank South Dakota, National Association

In this context, the seller is the consumer bank that originates each individual loan with each individual borrower. By the time each loan is ready to be sold by the seller to the depositor in any securitization transaction, it has already undergone a series of evaluations and reassemblies: first at the level of the individual borrower’s creditworthiness – itself assembled out of histories of customer relations, loan records, credit reports and scores, and the exigencies of specific underwriting practices – and then again when the loans are pooled together based on their individual characteristics for the purposes of obtaining a target credit rating.

THE DEPOSITOR

- Wells Fargo Student Loans Receivables I, II, III, IV LLC

“limited-purpose entities formed to purchase separate pools of student loans originated by the seller and to sell and deposit these loans to a trust. For each series of notes, one [Depositor]...will act as depositor for the trust formed to issue that series. A depositor may act in this capacity for more than one series. Each depositor is a Delaware limited liability company and a subsidiary of [Wells Fargo] Bank” (Prospectus, p.14).

THE SERVICER

- Wells Fargo Bank South Dakota, National Association

“The servicer will be appointed the custodian of the promissory notes representing the student loans for each trust and the related eligible lender trustee” (Prospectus, p. 13). The servicer is also more specifically responsible for “collecting and depositing into the Collection Account all payments with respect to the student loans, including claiming and obtaining any Guarantee Payments,

any Interest Subsidy Payments and Special Allowance Payments with respect to the student loans, responding to inquiries from borrowers under the student loans, investigating delinquencies and sending out statements and payment coupons. In addition, the servicer will keep ongoing records with respect to the student loans and collections thereon and will furnish monthly and annual statements”

(Prospectus, p. 46). Furthermore, “the servicer has agreed to prepare and file with the Department all claims forms and any other required documents or filings on behalf of each eligible lender trustee as owner of the related federal student loans on behalf of each trust” (Prospectus, pp. 23-24).

THE ADMINISTRATOR

- Wells Fargo Bank Minnesota, National Association

Among other things, the Administrator is required to determine the LIBOR rate, with which to calculate interest rates for each note class on each quarterly payment cycle, and to provide extensive summary statements of loan and repayment histories, principal and interest breakdowns, servicing costs, balances on the reserve and prefunding accounts, realized losses, etc.

THE ELIGIBLE LENDER TRUSTEE

- Bank One, National Association

“The eligible lender trustee on behalf of the related trust will acquire legal title to all the related student loans acquired under the related loan sale agreement and will enter into a guarantee agreement with each of the guarantors with respect to the student loans. Each eligible lender trustee will qualify as an eligible lender and owner of all the federal student loans held by the trust for all purposes under the Higher Education Act and the guarantee agreements” (Prospectus, p.13).

THE INDENTURE TRUSTEE

- JPMorgan Chase Bank

Maintains legal rights to The Collection Account, the Reserve Account, the Prefunding Account, the Demand Note and the Swap Agreement (not the Initial Financed Student Loans, which are held by the Eligible Lender Trustee). The Indenture Trustee is also responsible for forwarding payments from the Trust onto the clearing agencies and furnishing annual reports for the noteholders.

THE SWAP COUNTERPARTY

- Wells Fargo Bank, National Association

Though the Swap Agreement itself and its specific terms are well beyond the comprehension of this research, the swap counterparty is essentially a party that enters into a kind of betting arrangement with the Trust (via the administrator).

Since the notes for sale in this ABS have floating rates – that is, since the interest rates paid out are pegged to an external index that is constantly changing, e.g., the London Interbank Offered Rate (LIBOR) or the 90 day Treasury Bill Rate (T-Bill) – and since some of the student loans themselves also have floating rates, any potential difference in those rates could mean that either not enough money is coming in to pay the investors, or that there is a surplus in the amount collected. In order to mitigate the risk of the former option the Trust and the swap counterparty hedge their bets against one another with a mutual understanding.

The “Swap Counterparty will pay to the Administrator on behalf of the Trust...an amount calculated on a quarterly basis equal to the sum of’ the excess of Class A-1, A-2, and B Interest Rates over the Student Loan Rate multiplied by the Notional Swap Amount per note class.” And “in exchange for the Swap Counterparty's payments, the Trust will pay to the Swap Counterparty, on each Quarterly Payment Date while the Swap Agreement is still in effect, a fee (the “Swap Fee”) equal to 0.04% per annum on the Notional Swap Amount for each Class of Notes” (pp. s-46-50). The idea behind this arrangement is that both parties’ losses are covered should the difference between interest rates be too drastic; but at the same time, both parties stand to make a profit during that very same event. These agreements are, of course, a stone’s throw away from the ill-reputed Credit Default Swaps so notorious during the credit crisis of 2008.

And without meaning to second-guess the judgment of the Prospectus or PS as to who were or were not ‘principal’ parties in this Trust, we might also add to this list the following actors:

THE TRUST (itself)

- Wells Fargo Student Loan Trust 2001-1

The duties of the Trust as enumerated in the PS include the following:

- acquiring, holding and managing the student loans (the "Initial Financed Student Loans") sold to the Trust on November 27, 2001 (the "Closing Date"), the additional Student Loans acquired or originated by the Trust after the Closing Date (the "Additional Student Loans" and, together with the Initial Financed Student Loans, the "Financed Student Loans") and the other assets of the Trust;
- issuing the Notes;
- making payments on the Notes;
- originating Federal Consolidation Loans during the Funding Period;
- entering into the Swap Agreement; and
- engaging in other activities that are necessary, suitable or convenient to accomplish the foregoing or are incidental to or connected with the foregoing (PS, p. s-18).

UNDERWRITERS

- Salomon Smith Barney, Bear, Stearns & Co. Inc., and Wells Fargo Brokerage Services, LLC

Underwriters buy the notes from the Trust, and either hold or re-sell the 'notes' on to a secondary market through public or private offerings. It is the task of the Underwriters to create and maintain this secondary market for securitized debt, and in doing so, explains the Prospectus, they "may engage in over-allotment transactions, stabilizing transactions, syndicate covering transactions and penalty bids with respect to the notes in accordance with Regulation M under the Securities Exchange Act of 1934." All of which are actions that "may cause the prices of the securities to be higher than they would otherwise be in the absence of these transactions" (Prospectus, p. 61).

CLEARING AGENCIES

- Depository Trust Company, Euroclear, Clearstream

An agency which “hold[s] securities for its participating organizations...[and] facilitate[s] the clearance and settlement of securities transactions between Participants through electronic book-entry changes in their accounts, thereby eliminating the need for physical movement of certificates. Participants include the underwriters, securities brokers and dealers, banks, trust companies and clearing corporations and may include certain other organizations” (PS, p. s-33).

FEDERAL GUARANTORS

- Illinois Student Assistance Commission, National Student Loan Program, Colorado Student Loan Program

“Under its Guarantee Agreement, each of the Guarantors guarantees payment of 100% of the principal (including any interest capitalized from time to time) and accrued interest for the Financed Student Loans as to which any one of the following events has occurred” (PS, p. s-27): (paraphrased)

- failure by the borrower to make payments (dependent on loan origination date number of days in default)
- any filing by or against the borrower for bankruptcy
- the death of the borrower
- the total and permanent disability of the borrower to work and earn money or attend school, as certified by a qualified physician
- the school closed, thereby preventing the borrower from completing his/her program of study
- the loan application was falsely certified.

US DEPARTMENT OF EDUCATION

- Of interest here primarily in its capacity as Guarantor and Regulator of this process writ large.

As to the task of delineating some of the concrete relations binding each of these actors together, we can think of this network or assemblage as being held together – explicitly, at least – by two kinds of relations: flows of capital, and flows of performance

data. It's important to understand here that it's not only the money flowing back and forth between actors that has efficacy.

Especially when concerned, as we are here, with understanding how an agent is constituted in the world, it's essential to account for the flows of performance data in this context alongside the flows of capital. It is through the former flows – as, for example, through quarterly and annual reports on earnings and losses, reports on changes in asset and liability balances, or reports on demographic or performance changes in the underlying loan data – that all of these actors are able to convince themselves and one another that they are all in fact dealing with the same agent: an agent possessed of character-as-capacity with reference to an aggregated creditworthiness. If there is a quarterly report, then we can all be settled that there is indeed a Trust, and that this Trust is behaving largely as the agent we take it to be. It's important not to sidestep this fact. As we'll see in the discussion on credit ratings, flows of performance data are not incidental or supplemental to the assemblage of consumer credit/debt; they are the arterial pathways absolutely essential to the production and reproduction of consumer finance. But, of course, capital is important, too.

Flows of Capital

Actor	Actor	Relation type
Collective borrowers	Seller ('The Bank,' also the Servicer)	Borrowers 'buy' Initial student loans (or sell their debt)
Seller	Depositor	Depositor buys initial Financed Student loans principal (\$554,147,000) from Seller
Depositor	Eligible lender trustee	Eligible lender trustee buys student loans from depositor
Eligible lender trustee	Trust	Trust buys student loans from Eligible lender trustee
Depositor	Trust	Trust is 'assigned' Demand Note (\$10,525,000) from Depositor
Trust	Underwriters	Underwriters buy all of the principal in the pool

Actor	Actor	Relation type
Underwriters	Investors	Investors buy shares in the Trust (as ‘notes’) through various note classes: A-1, A-2, B
Depositor	Trust	Trust buys Pre-funding account (\$50,000,000) from Depositor
Seller	Depositor	Depositor buys additional student loans from seller
Trust	Servicer	Servicing fees
Trust	Administrator	Administrator’s fee
Trust	Indenture Trustee	Funds for payment to noteholders
Trust	Swap Counterparty	0.04% per annum of the principal balance of the notes
Trust	Depositor	Excess cashflow [define]
Swap Counterparty	Trust	Quarterly basis payment
Indenture Trustee	Clearing Agency	Payments from trust
Clearing agency	Noteholders	DTC holds book-entry records of depositor, and distributes notes to noteholders (i.e., pays investors)
US Department of Education	Federal Guarantors	% of loan guarantee; insurance premium on each loan; Student Loan processing and issuance fee; account maintenance fee
US Department of Education	Eligible lender trustee	Subsidy interest and special allowance payments

Table 3, Depiction of relations between actors based on flows of capital.

Flows of Performance Data

Actor	Actor	Relation type
Administrator	Indenture trustee; eligible lender trustee	A summary statement of loan and payment balances, servicing costs, etc. (see p. 48)
Indenture Trustee	Noteholders	Indenture Trustee’s annual report
Servicer`	Clearing Agency	Quarterly and Annual reports

Actor	Actor	Relation type
Trust	Indenture Trustee	Annual compliance statement
Independent accounting firm	Trust; indenture trustee	Compliance statement, proof of servicers compliance with agreement and notice of any defaults

Table 4, Depiction of relations between actors based on flows of performance data.

Finally, after all of that, we might look at a map of the relations between actors as described in the Prospectus and Prospectus Supplement:

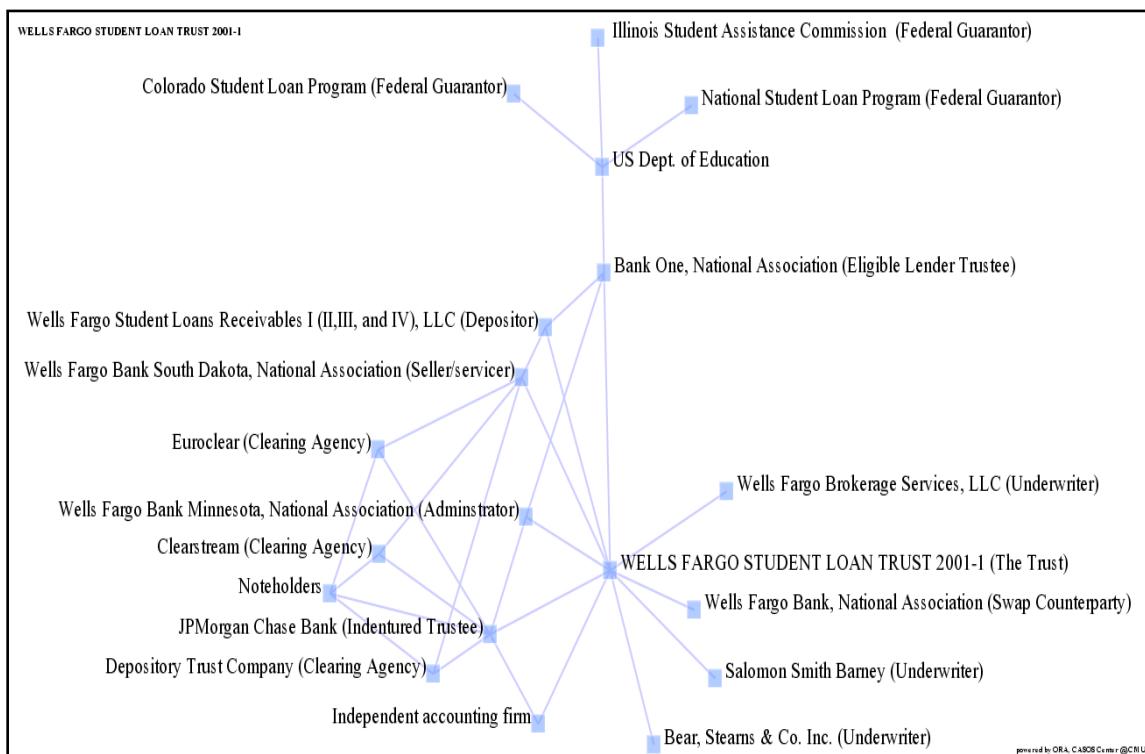


Figure 7, Relations of the all the participating parties in the assemblage of the Trust.

Credit Ratings

When we left chapter two, we did so having come to understand the credit report as a market device capable of agence-ing – that is, articulating and admitting – human

persons into the world of consumer credit/debt. And there they might have remained, standing idly just inside the gates, were it not for the intervention of yet another market device: the credit score. The latter device, we came to conclude, gives a kind of order and status to the newly admitted agents. It arranges them in hierarchies from the most to the least creditworthy – according to how and where they will be assembled within particular (e.g., prime, or subprime) credit/debt assemblages. In so doing, the score defines each agent relationally. Which is to say, an agent's creditworthiness is determined in relation to the sum total of all agents' creditworthinesses.

This is done by aggregating all of their character attributes, and scoring these according to which among them co-occurs most frequently with the best performing loan accounts. And so, at the end of that chapter, we arrived at two overarching conclusions. Firstly, the application of the credit score to the credit report is the application of a kind of operating logic or logical operator which orders and in-forms how and where an individual agent of consumer credit/debt will be assembled into further credit/debt arrangements thereafter. Secondly, we saw how the credit score opens onto a first aggregating event, through which agents become commensurate and able to be ‘detached’ from their unique socio-economic contingency and ‘attached’ to further processes of credit/debt assemblage. Something very similar is occurring here at the level of the Trust, as well.

In many ways credit ratings are to the composition of the Trust what credit scores are to that of individual agents of consumer credit/debt. They – that is, both scores and ratings – are each systematic, quantified evaluations of performance data with respect to predetermined credit characteristics. They are methodical classifications of borrowers and loans according to their distance from different poles of ‘creditworthiness.’ In first choosing which characteristics (or predictors) are significant (statistically speaking) among either an aggregate ABS or an individual borrower, both ratings and scores already delineate what kinds of agents will or will not be taken as agents of consumer credit/debt. After which task, both scores and ratings redistribute the agents thus delineated within ordinal rankings from the least to the most creditworthy – that is, from the least to the most likely to repay debts borrowed, and to do so predictably and with regularity.

Additionally, both credit scores and ratings are intimately and extensively relational in nature. Both are articulated with respect to – assembled out of nothing other than – giant, aggregated databases of historical performance records. Take the quote we've seen already from FICO about how it derives its credit scores as "calculated by a mathematical equation that evaluates many types of information from your credit report...By comparing this information to the patterns in hundreds of thousands of past credit reports, the FICO® score estimates your level of future credit risk" (FICO, 2007, p. 1). Compare that with Moody's (the credit rating agency of interest here) description of its method, which is a bit more detailed:

"we use historical performance data from existing or past pools with similar characteristics to help inform our view of the likelihoods of various future scenarios for the loan pool being securitized. We refer to that process as 'benchmarking.' Moody's estimates the variability of the loss estimate for private student loans indirectly. The judgment of a rating committee is used to assess the level of credit enhancement that would be consistent with a Aaa rating (i.e., the Aaa level of credit enhancement) for the given asset pool, based on the pool loan characteristics and the historical performance and Aaa credit enhancement levels of comparable pools. Using the assumption that the distribution is log-normally distributed, we then combine our estimate of the mean and the subjectively determined Aaa level of credit enhancement to infer the variance of the distribution, and therefore, to determine the full probability distribution consistent with the asset pool"(Rice, 2010, p.3).

In other words, neither credit scores nor credit ratings make any sense at all without their explicit reference to a kind of simulacral, aggregate, archetype of creditworthiness: take, say, half-a-million recorded loans (either individual or collectively asset-backed), distinguish which among them 'performs' the best, and pin the idea of 'most creditworthy' to those characteristics (and the attributes within those characteristics) most recurrent among the best performing. Of course it's more complicated than that, but that's the general idea.

On the other hand, credit scores and ratings also differ in at least one key respect: the credit report can be (and is) assembled without the credit score; but the Trust, at least the one we're concerned with here, could not have existed without its credit ratings being assembled first out of components of the Trust, and then back into its overall constitution. The thorough integration of credit ratings into the composition of the Trust will be our primary focus in this section, but a brief methodological aside bears consideration first.

As to the general appropriateness of considering the role of credit ratings in this analysis, the Prospectus Supplement has done all the work of validation for us: “It is a condition to their issuance that at least two nationally recognized rating agencies must rate the senior notes ‘AAA’ or its equivalent; and the subordinate notes at least ‘AA--‘ or its equivalent” (PS, p. s-10). And although neither the Prospectus nor the PS are explicit about which “nationally recognized agencies” they are referring to, both documents are littered with references to these agencies in the context of various agreement conditions:

“If (i) the short-term unsecured debt rating of the swap counterparty or its credit support provider, if any, is withdrawn or reduced below "A-1" by *Standard & Poor's*, "P-1" by *Moody's* or "F-1" by *Fitch* or its long-term unsecured debt rating of the swap counterparty or its credit support provider, if any, is withdrawn or reduced below "A--" by *Standard & Poor's* or any successor rating agency, "Aa3" by *Moody's* or any successor rating agency, or "A" by *Fitch*...” [my emphasis] (PS, p. s-8)

“If (i) the short-term unsecured debt rating of Wells Fargo Bank South Dakota, National Association...falls below "A-1" by *Standard & Poor's*, "P-1" by *Moody's* or "F-1" by *Fitch* or if Wells Fargo Bank South Dakota, National Association's long-term unsecured debt rating...falls below "A-" by *Standard & Poor's*, "A2" by *Moody's* or "A" by *Fitch*...” [my emphasis] (PS, p. s-9).

“Wells Fargo Bank has long-term, senior unsecured debt ratings of "Aa1" and "AA-" by *Moody's* and *Standard and Poor's*, respectively” [my emphasis] (PS, p. s-49).

In the aftershock of 2008’s credit crisis, of course, Standard & Poor’s (S&P), Moody’s, and Fitch have become familiar names. And for good reason. Just as Fair Isaac & Co. (FICO) has become *the* credit scoring agency within the consumer credit industry, so have these three companies become the mainstay credit *rating* agencies (CRAs) a level out from individual credit/debt evaluation, rating all sorts of securities from your run-of-the-mill corporate debt offerings to the more notorious collateralized mortgage and debt obligations (CMOs and CDOs). There can be little doubt, therefore, that these three agencies are most certainly among the “nationally recognized agencies” referred to in our Prospectus and PS.

As such, the analysis of credit ratings that follows is drawn entirely from two documents: “Moody’s Approach to Rating U.S. Private Student Loan-Backed Securities” (2010), and “Moody’s Approach to Rating Securities Backed by FFELP Student Loans” (2012). The former document was given to me directly from an interviewee who is a

portfolio manager and assistant vice president of a bank in South Dakota that bought and sold securitized student loan pools from Wells Fargo Bank National Association, South Dakota. Since, as its title indicates, that document covers Moody's methodology for rating private student loan ABSs, however, and since the ABS we've been discussing here is federally guaranteed, I've also included in the analysis the latter document: also written by Moody's, which is an analogue to the first but which covers Moody's specific considerations in rating federally funded, so-called "FFELP" loans.

On the one hand, Moody's approach to rating FFELP-backed securities figures prominently in the assemblage of the Trust we've been looking at here. The terms and references in this document are quite familiar by now, given our discussion so far. On the other hand, because FFELP-backed loans are considered to pose significantly less risk to investors, Moody's approach to rating FFELP-backed securities is much less explicit in describing how it evaluates individual loans and borrowers and the effects of the latter on overall ABS assemblage. As Moody's itself notes, "unlike federally guaranteed student loans such as Federal Family Education Loan Program (FFELP) student loans, which have minimal credit risk, private student loans do not benefit from a federal guarantee to reimburse for defaulted student loans, and therefore, rely solely on the credit of the student borrower and any co-signers for the repayment of the loan. As a result, the methodology for rating private student loan securitizations is significantly different from rating federally insured student loan transactions" (Rice, 2010, p.1).

When rating FFELP-backed ABS, Moody's explains that it focuses on 'stress-testing' "cash flow variable[s] based on up-to-date historical performance information, adjusted for trends in the data and the effects of macroeconomic and legislative developments" (Fustar, 2012, p. 5). Whereas, when rating private student loan-backed securities, they focus much more specifically on "analyses of the credit quality and cash flow characteristics of the underlying loans, servicing and collections quality, the structural features of the transaction (including cash flow allocation mechanisms, interest rate mismatches, credit enhancement and liquidity support), the legal structure, and operational risk" (Rice, 2010, p.1). Further, as the same interviewee who directed me toward these documents noted, ratings of FFELP-backed ABS tend only to look at historical data. As a result, he reported often being driven to "look under the hood" of the

FFELP loans – i.e., dig into the individual statistics of individual borrower data by looking at the associated Prospectuses and Prospectus Supplements – in order to better grasp how the ABS was assembled. It seems prudent, therefore, to include both approaches in our analysis of the role of credit rating in the assemblage of consumer credit/debt.

What follows, then, is a look at the general scheme of credit rating according to Moody's, including some of the similarities and differences between the two credit rating approaches. In both cases, Moody's generally applies the same base assumption of 'benchmarking' – i.e., using 'historical performance data from existing or past pools with similar characteristics to help inform...[their] view of the likelihoods of various future scenarios for the loan pool being securitized.' In both cases, too, there are several common considerations that each method attends to in constructing its ratings. Those considerations are the 1) credit risks, 2) liquidity risks, 3) operational risks, and 4) legal risks of the pool of ABSs. We'll explore each of these in the context of their respective ratings approaches.

Lastly, when dealing with the differences between methods, we're trying to simultaneously understand micro- and macro- perspectives that both result from and motivate this process. So we'll look broadly at some of the 'macroeconomic' factors considered to effect the FFELP loans, listing them and giving them brief definitions, since Moody's itself considers these factors to have a greater impact on the performance of FFELP student-backed securities. Meanwhile, since Moody's places a great deal more significance on each individual loan throughout its private rating methodology, we'll spend a bit more time looking at what Moody's considers to be some of the 'microeconomic' factors influencing the performance of those ABSs. This latter approach is especially interesting here since it deals with the application of credit rating methods to actual human persons – after all, one of the driving goals of this thesis continues to be the task of locating individual subjects within the aggregate. In the end, however, the goal of this section is quite simply to understand how the logic "embodied in the ratings" works upon the structuring (or assemblage) of the Trust, rearranging its internal elements according to that operating logic.

Moody's Approach to Rating Securities Backed by FFELP Student Loans

Methodological considerations aside, “Moody’s Approach to Rating Securities Backed by FFELP Student Loans” (‘Moody’s federal approach,’ hereafter) is actually quite direct in explaining how the process of credit rating comes to inflect the process of assembling a FFELP-backed security. Of course, you wouldn’t know it to look at the Prospectus or PS on their own and the ever-so-brief inclusions of the *actual ratings* therein (which occur only twice). The actual *products* of the ratings agencies’ labor can only be found at the very beginning of the Prospectus Supplement, where the distribution of the notes by credit ratings is listed (see figure 3 above), and on page s-49 of the same document where, as we’ve seen, Wells Fargo Bank reports it “debt ratings of ‘Aa1’ and ‘AA-’ by Moody’s.” The scarcity of the ratings’ explicit presence, however, should nowise obscure their implicit influence throughout the process of assembling the Trust. Which is to say, although the ratings occur only briefly – a few short characters, taking up less than one line of text in the entire Prospectus and PS – the amount of work put into constructing and achieving those ratings, and the influence they have in the assemblage of the Trust appears to be immense.

On the general point of how ratings relate to the overall structure of FFELP-backed securities, for instance, Moody’s describes how it evaluates securities according to “the loan pool’s cash flows, available credit enhancement, and liquidity support – given the underlying collateral pool and structural features of the securitization” (Fustar, 2012, p.6). In this statement already, we’re getting a sense for just how much labor is packed in to so small a deliverable product (i.e, the rating itself). In regard to the “pool’s cash flows,” for instance, the rating will take into account the federal guarantee behind each loan. But instead of that guarantee simply increasing the credit rating of the security, as one might assume, it can also lead to a slightly lower rating, since “in FFELP student loan ABS, defaults are considered involuntary prepayments because when a loan defaults, cash from the government guarantee and credit enhancement is used to pay off the balance of the defaulted loan, resulting in a prepayment to investors” (Fustar, 2012, p.4). Quicker repayments, of course, lead to a lower overall return on investment for

investors since the potential for gradual interest accumulation is thereby curtailed. The result is a slightly diminished credit rating.

Similar things are going on with yet another ‘structural feature of the securitization,’ one we’re already familiar with from the example of our Trust: the prefunding period. Moody’s recognizes the prefunding period as “recycling periods [that] allow for additional student loans to be added to the trust after the securitization’s closing date.” The funding period introduces “the risks that (1) the new loans added could reduce the overall credit quality of the pool and (2) the gross excess spread could be reduced because of the risk of holding cash for long periods of time (i.e., negative carry)” (Fustar, 2012, p.9). The significance here being the fact that each aspect within a security’s structure carries with it a kind of weight that pushes the credit rating in one direction, or pulls it another. And all of this is already rolled into the ratings by the time they appear on the front of the Prospectus Supplement.

Then, too, aside from assessing a security’s overall structure before assigning a credit rating, Moody’s also takes into account risks associated with that security’s legal and tax organization. Their legal analysis, for one, “focuses on two major sources of risk posed by potential bankruptcies of the following securitization parties:

1. the securitization sponsor and any affiliated entities in the chain of title of the assets transferred to the securitization vehicle; this includes the originator and seller if either is a separate legal entity from the sponsor ...and
2. the securitization vehicle (Fustar, 2012, p. 13).

Basically, risks arise in this context when either the seller or the security itself is facing bankruptcy. As noted in a previous section, one of the main goals of creating legally-distinct special-purpose entities (SPEs, which are essentially the same as special purpose vehicles, or SPVs) is to keep those entities ‘bankruptcy remote’ from the other parties involved (e.g., from the seller, servicer, indenture trustee, etc.), and also to keep a bankruptcy among the latter parties remote from the security itself. Again, this is accomplished by effecting a ‘true sale’ of the loans from one party to the next and eventually to the Trust or some such similar vehicle. So what Moody’s is looking at in this case is how thoroughly and legitimately that separation has been exacted. The

relation of our Trust to its many mediating parties – indeed, the very legal existence of the Trust itself, *as a Trust* – appears anew in light of this fact.

Furthermore, “In addition to the opinions mentioned above regarding ‘true sale’ ...and the inability to be petitioned into bankruptcy, [Moody’s] typically review[s] the following opinions:

Tax opinions regarding whether the securitization is in compliance with applicable tax law and has been structured so that the issued notes will be treated as debt for United States federal income tax purposes, and that the issuer will be a tax-exempt entity in light of the contemplated securitization” (Fustar, 2012, p. 16).

The language of our Trust’s Prospectus Supplement is suddenly all the more intelligible. Recall from our discussion of the tax structure the language in the PS: “the trust will not be treated as an association or a publicly traded partnership taxable as a corporation; and the notes will be characterized as indebtedness for federal income tax purposes” (PS, p. s-10). The phrasing matches Moody’s almost verbatim.

In fact, a lot about the language and organization of the Prospectus and PS becomes a little more intelligible at this point. There are dozens more explicit references in Moody’s Federal Approach that seem to relate quite directly to items we’ve encountered in our Prospectus and PS. The importance of all the participating parties’ credit ratings is discussed, for instance, as is the integrity of the many operating agreements said to govern the transaction. Whether the former are favorable and the latter binding has a measurable effect on the overall credit rating process. Which is to say, many of the facets we’ve discussed in our examination of the Trust are accounted for in Moody’s document: to be evaluated and compiled into the final credit ratings eventually applied to each tranche of a given security. Reading Moody’s Federal Approach in its entirety thus feels in some ways like reading the blue prints of the building we spent the last 30 pages sitting inside: the placement of its furniture and fixtures makes much more sense and we can *almost* start to understand why everyone around us seems so concerned with interior design.

On the other hand, it’s all too easy to get the impression while reading Moody’s Federal Approach that Wells Fargo Student Loan Trust 2001-1 was assembled with Moody’s particular guidelines specifically in mind. This is not necessarily case. In fact,

that our trust was originally assembled in 2001, and that this document is dated in 2012, seems to preclude their direct relationship – save for the possibility that our Trust is included among the many FFELP loans that Moody’s has begun retroactively re-rating in 2012 (Dang & Faynzilberg, 2012). It must be made clear that the relationship of Moody’s ratings’ criteria and the Trust itself is not made explicit in the Prospectus or PS, other than the mention of that agency as a potential ratings candidate. To be sure, Poon (unpublished) and others have noted that the operating documents of these transactions left the choice of CRAs ambiguous intentionally, precisely because it allowed the many participating parties to ‘shop around’ for the best credit ratings before filing a Prospectus with the SEC.

Then again, this fact does not necessarily take away from the existential significance of these documents’ relationships to one another. Credit ratings and the rating process are more generally, of course, simply a few among the many constitutive elements that go into the assemblage of the Trust. It’s true, the Trust is structured *as a Trust* so as to, among other things, avoid paying taxes. But its structure as such has the additional benefit of enabling it to receive a slightly higher credit rating. The same can be said for the rationale behind its legal structure. And in each of these little crossovers, in the piling up of layer upon layer of significance, the contours of how and why consumer credit/debt is assembled as it is become just a little bit easier to comprehend.

Moody’s Approach to Rating U.S. Private Student Loan-Backed Securities

If Moody’s approach to rating federally-backed student loan securities is concerned with “the effects of macroeconomic and legislative developments,” it’s because the final hope for recouping defaulted debts in that case hinges on the US government and all of the political and socio-economic exigencies to which the latter is subject. Indeed, the federal guarantee behind the FFELP is a promise that, so long as all the conditions are met, the US Department of Education will foot the bill if and when an individual borrower becomes ‘permanently delinquent’ on his or her payments. In the case of Private Student Loan-Backed Securities, meanwhile, that responsibility falls directly onto the shoulders of the borrowers themselves, as well as those tasked with

collecting their debts. “Moody’s Approach to Rating U.S. Private Student Loan-Backed Securities” (“Moody’s private approach,” hereafter), though similarly concerned with securities’ structural features, is therefore much more specific on how the aggregated pool of borrowers is evaluated and eventually rated.

This process Moody’s refers to as “evaluating the characteristics of the loan pool,” and depends primarily on the following nine characteristics (discussed in this order in the document itself):

1. Presence of a Co-signer
2. Credit Scores
3. Origination Channel and School Certification
4. School Type and Degree Type
5. Borrowers Who Drop Out of School
6. Loan Payment Options
7. Exceptions and the Reliability of Underwriting Standards
8. Forbearance Policies
9. Servicer Quality

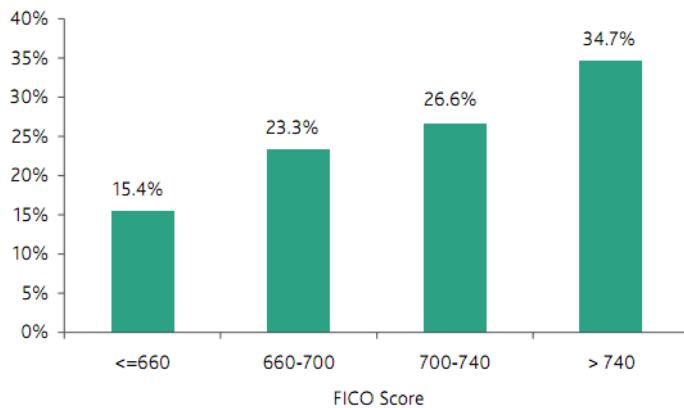
Some of these characteristics are self-explanatory; some of them are even intuitive. Nonetheless, so as not to confuse our own logic with that of the assemblage, a brief description of each of these characteristics, *in Moody’s own words*, may help to keep things clear.

Beginning with the first characteristic, Moody’s defines a co-signer as someone who is legally entangled, contractually conjoined, obligatorily attached, assembled together with the individual borrower of the student loan before the two of them together dive into the pool. “[O]ften because of a lack of credit history, sometimes referred to as a ‘thin’ credit file [–] some lenders require student borrowers to obtain a co-signer with a deeper credit history who does meet the minimum [lending] criteria. The co-signer is often a parent, but can also be a legal guardian or other individual, representing a second potential source of repayment for the lender. The co-signer is legally bound to make payments on the student loan when those payments are not made by the student.” Moody’s notes that “[t]he percentage of loans with co-signers in securitized private

student loan pools typically ranges from 50% to 80%.” And the presence of a co-signer is finally significant to Moody’s because, “[b]ased on an analysis of static pool information of several large private student loan issuers, the cumulative gross default rate for non-co-signed loan pools is roughly 1.5 to 2.5 times that of co-signed loan pools” (Rice, 2010, p. 6). In other words, loans *without* co-signers default at roughly twice the rate of loans *with* co-signers.

As for the second characteristic deemed consequential by Moody’s, individual credit scores – that tiny number attached to most credit reports when the latter are ‘pulled’ by bank underwriters – are also considered significant. The credit score, according to Moody’s, is “an evaluation of the creditworthiness of a borrower, based on information on a borrower’s credit history, including (but not limited to) loan payment history on utility payments, store cards, credit cards, mortgage loans, auto loans and student loans” (Rice, 2010, p.6). The score, Moody’s explains, is derived from one of three credit reporting bureaus and scored by a fourth, additional scoring agency: these agencies are listed explicitly as Equifax Inc., Transunion LLC, and Experian Plc., and FICO, respectively. On a scale that ranges from 300 to 850, Moody’s reports that the majority of borrowers’ scores fall between 710 and 730. They add that although most “private student loan programs require a minimum FICO score of around 660 for co-signers and/or student borrowers...the percentage of the aggregate pool balance underlying Moody’s-rated securitizations issued between 2006 and 2009 with FICO scores below 660 (the widely-used dividing line in consumer assets between prime and sub-prime credit quality) has typically been around 15%” (Rice, 2010, p.6). They add the following graph for reference:

Percentage of Loan Balance by FICO Score (1) Buckets for Moody's-Rated Private Student Loan Securitzations, 2006-2009 (2)



(1) For student loans with a co-signer, the higher of the borrower or co-signer FICO credit score is used.

(2) Includes all securitzations issued by Sallie Mae, First Marblehead, The Student Loan Corporation, Keybank and Access Group between 2006 and 2009.

Figure 8, National distribution of student borrowers' FICO scores between 2006 and 2009 (Rice, 2010, p.6).

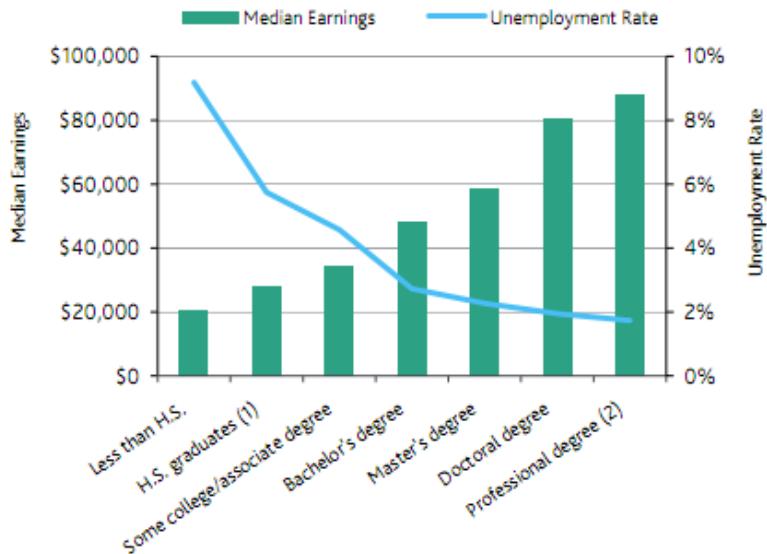
Regarding the third characteristic considered consequential in evaluating a security's underlying pool of loans, Moody's accounts for the origination channel and school certification – i.e., how and by whom the loan was originally sold to the borrower. Moody's reports an increasing trend over the past five years for private student loan-backed securities to be comprised of loans that are marketed directly to students and/or co-signers ("direct-to-consumer" or "DTC" loans). These loans are not 'school certified,' as many student loans in the US have been traditionally, and are not offered through school financial aid offices: that is, they are not "school channel" loans. These facts are significant, according to Moody's, because "DTC loans typically do not have the safeguards inherent in school channel loans that mitigate the risks that borrowed funds will not be used for education or that students will take on excessive or unnecessarily expensive debt...Moody's expected lifetime default rate for DTC loan portfolios [i.e., ABSs with DTC loans bundled into them] ranges from roughly 1.25 to 3 times the expected rate for school channel loan portfolios" (Rice, 2010, p.7).

The first three factors aside, the fourth, fifth, and sixth characteristics considered by Moody's rating criteria are especially interesting from an anthropological perspective. Each of these characteristics tends to fracture the homogeneity of the loan pool a little bit,

conjuring images of actual, human, subjective persons, as opposed to mechanical cogs whirling smoothly in deterministic, algorithmic engines spitting out ratings and data points. They even have the aire of ‘choice’ about them...just before that aire is completely evacuated by total commensuration within a normalized credit rating.

The fourth characteristic taken into account by Moody’s, for starters, is the School and Degree Type associated with each individual loan. “In particular, we have found that pools with high concentrations of borrowers in proprietary or vocational schools tend to have higher lifetime cumulative default rates,” and accordingly “cumulative default rate expectations for loans to borrowers who attend proprietary or vocational schools are considerably higher than for loans to those who attend two- or four-year institutions” (Rice, 2010, p. 7). Furthermore, “loans made to borrowers pursuing professional degrees [noted as “Doctor of Medicine, Doctor of Dental Surgery, Doctor of Veterinary Medicine, and Juris Doctor”] tend to perform better than those made to borrowers pursuing bachelor’s degrees. The differing default rates by degree-type probably reflect differences in the likelihood that a borrower will (1) drop out (2) obtain employment, and (3) earn a stable income that is sufficient to repay the loan” (Rice, 2010, p. 7). The bit of socio-economic interpretation tagged on here about why default rates “probably” differ in this area is an interesting marker of the fact that this characteristic is not so easily removed from the social and economic contexts with which it is so often associated. As if to validate their position, Moody’s includes the following graph along with its sources:

Correlation of Median Earnings and Unemployment Rate to Higher Education*



*Source: Median Earnings: U.S. Census Bureau, Current Population Survey, 2009 Annual Social and Economic Supplement – Represents median earnings for a full time, year-round worker 25 years old and over, work experience in 2008.

Unemployment Rate: Current Population Survey, U.S. Department of Labor, U.S. Bureau of Labor Statistics – Represents the unemployment rate of the civilian non-institutional population 25 to 64 years of age by educational attainment, 2008 annual averages.

Figure 9, Correlation of median earnings and unemployment rate to various degree types (Rice, 2010, p. 7).

Similar things are going on with the fifth characteristic considered here, which evaluates the effects that ‘Borrowers Who Drop Out of School’ have on the aggregated pool. On this point, Moody’s cites some external research which concludes that “overall, the default rate for students who dropped out was almost five times that of all student borrowers (including students who dropped out as well as those who did not drop out).” Additionally, as was the case when considering School and Degree Type, Moody’s cites the same study’s finding that “higher unemployment rates and lower earnings for student borrowers who drop out than for those who complete their studies,” and concludes that these factors “are likely contributors to the higher default rates of dropouts” (Rice, 2010, p.8).

The sixth characteristic, Loan Payment Options, is actually directly discussed by Moody’s as being closely related to the ‘choice’ of the individual borrower: “The payment type a student borrower chooses can impact the expected default rate of a pool of private student loans.” Moody’s lists three typical repayment choices here that can

have such an effect, including 1) Immediate Repayment, whereby the student pays both the principal and the interest on the loan from the moment it's disbursed; 2) Interest Only Repayment, whereby the student pays only the interest of the loan while s/he is in school, picking up the principal payments upon graduation; and 3) Fully Deferred Repayment, whereby the student pays neither the interest nor the principal of his or her loan while in school, but begins paying both upon graduation. Interest typically accrues during deferment, and that accrual is added to the total loan balance upon graduation (that is, the interest is 'capitalized'), "resulting in a higher outstanding loan balance when repayment begins." As to the effects of this choice on the performance of the overall pool, Moody's concludes that both full- and interest only repayment options often carry lower default rates than deferred loans, and have the additional benefits of social disciplining, which "allows the lender to be in full communication with the borrower during the in-school period and establishes early habits and responsibility of payment" (Rice, 2010, p.8).

Unlike the fourth, fifth, and sixth characteristics just listed, the last three characteristics listed in Moody's approach to rating private student loan-backed securities all deal with the entities (banks, mostly) tasked with collecting individual debts once they've entered repayment. As noted, private student loan-backed securities lack the safety net provided by the federal guarantee in FFELP loans. As such, the responsibility for repayment lies directly with the borrower. But since the clearing houses and indentured or eligible lender trustees can't be expected to go chasing after individual obligors with all the serious, market-making work they have on their plates already – certainly, hedge funds and investment banks can't be bothered with such trifles – some thought must also be put into evaluating the agencies that both underwrite the loans to begin with, and then service them thereafter. Thus, the seventh characteristic considered by Moody's, 'Exceptions and the Reliability of Underwriting Standards,' reflects this distribution of labor exactly. Please note, however, that 'underwriting' in this context does not refer to the underwriters listed above – those whose job it is to buy the ABSs initially and then market them accordingly. The underwriters referred to in this case are those working for the originator (the original lending bank), and it is the job of these underwriters' to evaluate each individual loan that crosses their desks according to the company-specific policies of the bank.

Up till now, this link in the chain of securitization – which occurs after credit reporting, when an application for a loan has been made to a specific bank, and before the loan is eventually bundled and sold off into an ABS – this link has been treated largely as a black box in my analysis, due mostly to issues of access. This is nowise to downplay the significance of underwriting, which is admittedly a crucial step on the way to aggregation – evinced, if nowhere else, in the fact that Moody's sees fit to include this factor among their rating criteria. Indeed, the one underwriter I did manage to interview from Wells Fargo verified the importance of his work in the overall scheme of securitization. In fact, in citing the factors deemed most significant in his employer's underwriting policies, he bridged an enormous gap between how particular items on the credit report are used and where they fit into the overall assemblage of consumer credit/debt. He explained that a borrower's relationship with the bank – i.e., the historical data documenting that relationship – is the single most important factor in underwriting decisions. After which, however, or if there is no such data to be had, underwriters turn to information on the credit report in their decisions. Specifically, he cited borrower's 'debt-to-income' (D+I) ratios, income types, and credit scores as being most significant. These figures, he explained, are typically crunched through some automatic underwriting software which advises whether or not a loan should be accepted. Recall here that the first two of these items (D+I and income type) occur on the credit report by default, and the third (the credit score) is often appended to that report when 'pulled' by the underwriter. In any case, to finally return to the seventh rating characteristic that started this tangent, we can see how Moody's is concerned and familiar with not only the general practice of underwriting, but how specific items on the credit report or elsewhere are used by underwriters in making their decisions given the variation in how those decisions can be made from bank to bank.

When Moody's considers Exceptions and the Reliability of Underwriting Standards in assigning a credit rating, they are looking specifically at "the extent to which a lender allows individual loan underwriters to deviate from the lender's specified underwriting standards. A lender's guidelines may specifically permit those 'exceptions' to be made on individual loans, usually when a loan has some compensating factors; for example, it may permit a debt-to-income ratio that is higher than its standard maximum

as long as the credit score is higher than some specified level” (Rice, 2010, p.9). This is completely contradictory to Lewis’ advice to underwriters never to deviate or make exceptions based on ‘gut instincts’ when lending, but to always rely on the cold, hard reliability of the credit score (Lewis, 1992). Moody’s, quite to the contrary, “believes that in limited circumstances such ‘exceptions’ may be in line with prudent lending standards.” They quickly add as a cautionary note, however, that “pervasive use of exceptions could lead to unreliable and inconsistent underwriting and possibly to credit performance that is inconsistent with expectations” (Rice, 2010, p.9).

Similarly, the eighth characteristic considered by Moody’s deals also with the policies of lending institutions as opposed to the debt-repaying-capacities of individuals, but deals in this case with how debts are handled by those agencies *after* they have been disbursed. When Moody’s considers lenders’ ‘Forbearance Policies,’ they are looking at what proportion of the total loan pool is in forbearance. Forbearance, Moody’s describes as “a temporary suspension of payments, giving the borrower time to resolve his or her financial difficulties.” And this matters to Moody’s because, “[o]verall, Moody’s views portfolios with high rates of forbearance as higher-risk portfolios, everything else being equal.” But they add that qualifier at the end, “everything else being equal,” because credit ratings and forbearance policies do not always speak the same language. Moody’s devotes several paragraphs to explaining how, in some cases, forbearance can be beneficial for the pool since “[l]oans that are in forbearance likely otherwise would have been in delinquency or default,” and therefore lost as a source of capital to investors. Which is to say such loans still hold out the hope of eventually re-entering repayment. On the other hand, in some cases “granting forbearance only serves to delay delinquencies and defaults,” and leads to loans that “have a higher severity of loss if they do default. That is because loans that are placed in forbearance typically accrue interest during the forbearance period, building up the principal balance; consequently, when the loan defaults, more principal would tend to be lost than on a similar loan for which forbearance was not granted” (Rice, 2010, pp.9-10).

Finally, there is Servicer Quality to consider. That loan servicers receive a credit rating in some ways feels like the universal application of a principal: *in the overall scheme of consumer credit/debt, no one (no entity) is exempt from the leveling effects of*

creditworthiness-commensuration. Of course, the servicer's ratings aren't wholly dependent on their actions since a large part of the servicer's rating is dependent on the pool's composition to begin with: "high-credit-quality pools require less collection efforts and hence the servicer's quality is less important for those pools than for low-credit-quality pools that require more intense collection efforts." Nonetheless, the servicer's ability to fulfill its obligations as detailed in the servicing agreement attached to most ABSs is taken into account by Moody's. More specifically, Moody's evaluation of "[s]ervicer ability includes the areas of collections and loss mitigation." Toward this end, Moody's takes into consideration the following capabilities of the servicer (worth quoting in full):

Moody's examines the techniques and tools used by the servicer, including the use of scorecards on delinquent or defaulted accounts to determine the most effective way to deploy collection resources, automated dialers to efficiently contact borrowers, "champion-challenger" strategies to determine the most effective outside collection vendors, and loan counseling to help borrowers avoid default. In addition, Moody's assesses the responsiveness and quality of customer service(Rice, 2010, p. 10).

Whether servicers employ the strategies above in the full knowledge that they'll receive higher ratings for doing so, or whether Moody's simply took note of the fact that servicers employing these strategies had higher collection rates and therefore added these methods into their ratings criteria, is difficult to say conclusively. In any case, there are two things we can know for certain. First, an interview with an 'Operations Processor' at Wells Fargo validated many of the strategies noted above. It was her job to monitor student loans specifically, keep close contact with the credit scoring bureaus, and adjust the bank's internal borrower records accordingly; so that when she passed her findings on to the next stage of servicing, they could decide there which strategies to employ in collections, how long to hold on to delinquent loans, or whether to just sell them off to other buyers of student loans who would presumably go on to make their own ABS therefrom (personal communication). So regardless of why or how servicers came to adopt these strategies, we can be sure that they are a contemporary, *practical* fact of consumer credit/debt.

Secondly, and this point is of some significance, the relationship of credit ratings to the Trust are in many ways mimics the relationship between credit scores and

individual credit/debt agents. This ‘rolling’ of the servicer into the credit rating – making both the servicer and borrower commensurate in some ways, and then the two of them commensurate within a single rating – this action brings into view something that is fundamental about the entire scheme of consumer credit/debt assemblage. It’s a theme we’ll pick up at length in the final chapter, but it’s worth emphasizing here in its proper context, as well. Moody’s rates both FFELP- and the private student loan-backed securities according not just to the creditworthiness of the individual borrowers, but according to that of the associated parties as well (e.g., the servicer, seller, trustees, administrator, swap counterparty, etc.). On top of that, Moody’s pays a great deal of attention in both of their ratings methodologies to how they rate the credit and liquidity support of a security, as well as its legal and accounting structures. Which is to say, whether it’s discussed in terms of risk or creditworthiness, there is a broadly applied logic at work here being overlaid on almost every single element of the securitization process. From the individual borrower out to the aggregated Trust, and among all of the smaller or larger agents along the way, they are all of them *agenced* by the same common concern: character-as-capacity with reference to an aggregated creditworthiness.

Securitization as Agencement

Returning finally the concept of agencement, I’d like to look at how the Wells Fargo Student Loan Trust 2001-1 presents itself as a unique entity to socio-economic analysis: neither subject nor object, neither human nor non-human, but mutually comprising all of these elements at once. This we will do by briefly reviewing the range of actors, relations, and objects covered so far, and by considering how the Trust is equally dependent on all of these elements for its constitution. Furthermore, I’d like to take a closer look at one class of those elements specifically: objects or market devices. I’d like to revisit the idea from chapter two that market devices act as intersections of socio-economic activity, binding together the actors and relations of the Trust as they pass through these market devices. In so doing I hope to reveal the concrete sites where human persons and market devices assemble themselves together in the formation of broader socio-economic relations.

To begin with, the notion of agencement, as it applies in social studies of finance, has been treated most explicitly in two texts. One of which we've already encountered, *Market Devices*(Callon et al., 2007), the other being *Material Markets* (MacKenzie, 2009). Muniesa, Millo, and Callon, as we've seen, explain how the idea of agencement is “an idea that emphasizes the distribution of agency and with which materiality comes to the forefront” (2007, p.3). MacKenize, meanwhile, considers at length what it means to deal with analytical objects of this nature: taking fully into account the material connections relating the actors between whom agency is distributed. He makes the point succinctly when he describes agencements as made up of “combinations of human beings, material objects, technical systems, texts, algorithms, and so on” (2009, p.4).

To be sure, there are few definitions better suited to describing the analytical object of interest to this chapter. Wells Fargo Student Loan Trust 2001-1 cannot be conceived of as anything other than a combination of ‘human beings, material objects, technical systems, texts, algorithms, and so on.’ There is no way to put this analytical object into mind without thinking of it in those terms. It is far too messy, far too fuzzy to be bound by some preexisting and coherent disciplinary category like ‘institution’ or ‘financial sector.’ The concept of agencement, on the contrary, purports itself toward our analytical object with a special eye for its complexity. It helps us appreciate just how many elements it takes to assemble an ABS in the first place. What’s more, it exposes to us just how much of a socio-economic nexus an ABS can become having had all of those elements assembled into it.

For starters, Wells Fargo Student Loan Trust 2001-1 is a stunning example of an agencement in the sense that it is made up of *at least* 67,100 agents, conceived of in the special sense of the term agent worked out above. These are the *agenced* agents connected to the loans all bundled together under the parasol of the legal entity, 'Wells Fargo Student Loan Trust 2001-1.' Together with this initial set of quasi-human agents, however, the Trust is also made up of more than a dozen discrete firms or economic entities, in the ‘persons’ of the seller, the depositor, the indenture trustee, the eligible lender trustee, the US Department of Education, etc. In turn, remember that each of these entities can itself be composed of numerous subsidiaries and thousands of employees collectively working to produce and reproduce these companies in practice.

Additionally, as the Prospectus and PS explain, the Trust is also composed of – and explicitly concerned with – *relations between these agents*, insofar as these relations bind the agents together from the start and continually thereafter. The Trust, we observe through the technical artifact of the Prospectus and PS, is made up of almost-unthinkably large flows of performance data and capital, materialized as quarterly earnings reports to investors and the SEC, as well as book-entry form dollar deposits made to investors and servicers via clearing agencies around the world. In addition, the Trust is constantly being renewed by updated performance data and loan payments streaming in from the other end, where consumer information from loan servicers and/or credit reporting bureaus and debt payments on individual loans’ feed in to constantly readjust the statistical composition of each tranche in the ABS.

And yet, in identifying the individual agents and a few of the ‘key participating parties,’ together with the flows of performance data and capital that keep them all connected, we’ve still only arrived at the most skeletal description of the process of securitization. On top of which we would also have to consider some of the discursive constructions that animate this process, helping to order and form it. We’ve noted briefly already how an overarching narrative operates to arrange the agents of this agencement (that is, to ‘detach things and attach them to other things’). That overarching narrative we’ve identified as the global application of a ‘character as capacity’ assessment with respect to an aggregated creditworthiness. In applying this rule or argument to the entirety of the Trust, credit scores and credit ratings must be understood to distribute obligors and participating parties throughout the Trust according to their distance from various poles of creditworthiness.

The credit score, for its part, first helps determine whether an individual loan will be disbursed or not in the first place, and then whether it will be added into a securitized pool. Thereafter, credit ratings – partially based on their evaluation of individual credit scores and borrower characteristics – help determine how loans will be ‘trashed’ within the Trust. Loans with higher credit scores and a number of other creditworthy qualities are placed in tranches that in turn receive higher credit ratings – and, by extension, lower rates of return for investors, but more of an assurance against the risk of default. In addition to that, as we’ve seen, the Trust can be reassembled at any time depending on

the credit ratings of the key participating parties: lower scores threaten a possible expulsion from the agencement. Which is how a firm or larger economic entity can be delimited in identity and capacity in just the same way as an individual agent: universally evaluated according to their character-as-capacity with reference to an aggregated composite of creditworthiness. In all of this, credit scores and ratings – more specifically in this context, the organizational rationale embodied in them – must be considered essential elements in the assemblage of the agencement: coursing through it like a kind of DNA, reordering and replacing parts and pieces of the agencement as needed to maintain something like a global level of creditworthiness.

Finally, in addition to credit reports, credit scores, and credit ratings, this trust depends on a number of additional objects (or market devices more accurately) for its functioning. Were it not for confusion's sake, these might well have been listed among the 'nodes' listed in the last section, since these devices' agency is every bit as present within the organization of the Trust as is that of human or institutional actors. On the other hand, though, part of the goal of this section is to come to understand the full significance of the connective capacity of agencements and the things assembled within them. So it may be worth considering some of these market devices in their own right, as separate entities. More specifically, we might consider one of the several variable interest rates assembled into the Trust: the LIBOR (London Inter-bank Offered Rate).

Although assembled seamlessly into the Trust rather unceremoniously, the LIBOR is itself already the result of an extensive process of socio-economic assemblage. This fact is made patent in MacKenzie's (2009) work, where he describes the LIBOR rate as "one of the world's most consequential set of numbers...[and] the dominant global benchmark for interest rates" (p.1). His sentiments are echoed in a recent story on US National Public Radio, in which Gillian Tett (Editor at the Financial Times) describes the LIBOR rate as "a bedrock of the financial system." She substantiates that claim by explaining how, to date, around "\$350 trillion – if you can imagine all those zeros – worth of contracts in global markets have been struck with reference to LIBOR" (Smith, 2012).

The suspicion arises immediately: anything attached to a number that large will have to have been (and continue to be) meticulously, laboriously assembled. Indeed,

MacKenzie finds this to be the case. He spends several pages describing how the LIBOR rate is constructed each day – before 11:10 am, to be precise – as banks around the world (self)report the rates at which they would be charged to borrow from one another.

Recalling in this aspect the significance of other kinds of human flows, these bankers will literally call each other up or email one another and exchange figures before submitting their quotes to a centralized LIBOR staff – indeed, it was a manipulation of this process that resulted in the recent scandal whereby the LIBOR was purported to be ‘fixed’ (or tampered with) by several employees from a number of very influential banks.

MacKenzie, for his part, discusses the social and material networks, staggering in scope, which are necessary to produce and exchange this number on a global scale, and concludes that the LIBOR rate “is produced rather than stumbled upon” (2009, p.9).

Grasping the LIBOR in this light accomplishes several goals in the context of this discussion. Firstly, it is yet another example of how the concepts of market devices and agencements are very scalable concepts. It’s easy to see why none of the SSF authors above spends too much time drawing too fine a distinction between these concepts. It’s easy to view the LIBOR or credit score as an agencement in their own right, for instance. Secondly, though, looking at the LIBOR with reference to the *huge* flows of capital attendant upon it and all of the social and material labor that goes into producing it gives us at least a vulgar understanding of how market devices (or agencements) like the LIBOR exercise a very crucial sort of agency. Indeed, part of the reason SSF scholars prefer the term ‘agencement’ to ‘assemblage’ is precisely because the notion of agency comes to the fore immediately upon its being spoken or written.

In stating that the LIBOR has agency, I don’t mean to rehash what turns out to be a surprisingly touchy debate in the social sciences: namely, that objects, too, can have agency, and that the world of social and economic action is not confined to rational human actors. I’m not sure how opponents of the ‘objects-have-agency’ debate envision what they are arguing against exactly, but I personally am not interested in proposing that objects like the LIBOR or the credit report have a will of their own and are able to consciously intervene in human affairs. Rather, my interest in the agency of the LIBOR and similar market devices is much less abstract. I am concerned with how such objects act *observably* and *concretely* to draw different elements together in the assemblage of an

agencement. In some cases, it is in the very irreducibility of the object, in its endless complexity that we can locate its agency. The fact that the LIBOR requires the relations of so many different bankers from so many different banks, for instance, exemplifies how the LIBOR *acts* to bring these actors together.

Likewise, the fact that so much of what occurs in the Wells Fargo Student Loan Trust 2001-1 depends on the LIBOR reveals a similar kind of agency. For starters, the number of basis points attached to the LIBOR will determine which or if investors are attracted to the Trust in the first place, which will recursively determine how much capital is available to the student loan financing sector over time. More directly, though, consider the fact that payments are received by and distributed from the Trust according to the variability of the LIBOR. The uncertainty that arises from this arrangement – the possibility of potentially receiving less than the Trust is capable of paying out – this possibility draws yet another actor and all of its associated personnel and infrastructure into the Trust. That actor, of course, is the Swap Counterparty – a party whose role in national and global economies turned out to be instrumental first in connecting ‘capital markets participants’ from around the world, and then in annihilating more than a few of them in the mortgage market bust (Eisinger & Bernstein, 2010; M. Lewis, 2011).

This is finally the kind of agency I have in mind when I emphasize the importance of market devices, agents, and agencements in drawing together disparate elements from wider socio-economic settings. The LIBOR, credit reports and the reported agents, the Trust itself: all of them come into being through an intersection of the persons and the companies and the capital and the interests that are assembled within each of them. They *enable* these intersections, from one perspective, but actually *produce* them from another.

In the last analysis, understanding Wells Fargo Student Loan Trust 2001-1 and its relation to credit ratings from this perspective might provide an insight toward better understanding socio-economic organization in the United States in the 21st century. Hopefully, it would do so in a couple of ways. First it would help us understand that enormous socio-economic events (e.g., the credit crisis) unfold in the concrete relations that market devices and agencements make possible as they create and govern intersections between human beings, material objects, technical systems, texts,

algorithms, and so on. In so describing the Trust, however – that is, how and of what it is assembled – we might also find some empirical evidence of the fact that the social and economic arrangements we assume ourselves to be a part of are much more complex and much less bounded than we tend to imagine.

In other words, understanding these kinds of complex relationships might allow us to comprehend how disparate elements of our socio-economic environments, otherwise considered to be unrelated, are in fact not separate at all, but are experienced by most of us as complex ensembles of governmental bodies, market and educational institutions, interest rates, employment prospects, and so on. Which is to say, if we look at observable interactions and the concrete mechanisms by which they unfold, a unique understanding of 'society' emerges. It allows us to shift our perspective from one that identifies discrete institutions fulfilling specialized, *functional* roles in a stable socio-economic 'system,' to one where the sites at which these institutions come together becomes the focus – through which they change over time, becoming more or less destabilized with respect to one another. Within such a perspective, it's not the institutions themselves that form the bedrock of our socio-economic realities. Neither, for that matter, are social and economic agency concentrated within such institutions or the persons who manage them exclusively. Rather, within such a perspective, our socio-economic environments are shaped much more through the unique, concrete, aggregated relationships that draw different institutions and persons and market devices together.

Chapter 4: Conclusion

Connecting Agents and Agencements, Distributing Agency

There is a professor in our department notorious for asking of others' research, "So what?; who cares?; how could any of this possibly be meaningful to anyone who does not speak anthropology, or high finance, or worse, the muddy pidgin you've stuck us with here: Social Studies of Finance?" These are fair questions, deserving of honest answers. I would respond that understanding economic phenomena through the SSF approach used here helps to ground otherwise abstract processes of socio-economic aggregation. It does so by illustrating how aggregated organizational forms are observably assembled from individual agents, concrete sites, and discrete technologies according to explicit goals and often clearly-defined sets of beliefs. The unique formations thus assembled form stable networks intimately connecting individuals to their larger socio-economic settings: networks at once revealing the profoundly distributed nature of 'agents' in this context, and at the same time intimating alternative approaches to questions of individual and collective agency outside the agent/structure dichotomy. And if, up to this point, I haven't shown all of this to be the case, I'd like to approach consumer credit/debt from a slightly different perspective in making these facts finally appreciable.

The overall organization of this thesis has followed a path from individuals and the relationships they have with consumer credit/debt, and moved outward. In order to better contextualize this research, though, I'd like to reverse that approach. I'd like to start with the kinds of massive flows of consumer finance portrayed in popular media, and work back toward the individual. This transition is not as seamless as the transition moving from persons to the Trust, but I think seeing things in this 'global' perspective will help make things a little more palatable for our professor.

We can start with the widest possible implications encountered in this research. Consider the involvement of those international clearing agencies in the preceding chapter, which could easily have given way to an analysis of global flows of credit/debt. What we were seeing through this one tiny reference in the Prospectus and PS was the start of something *very* large. To be sure, it was partly the involvement of securitized

flows of consumer debts and their relationship with the so-called ‘Giant Pool of Money,’ sloshing around from country to country prior to 2008, that inspired this research.

Tributary flows of this pool were exemplified most recently and concretely in the trillions of dollars siphoned from US mortgage consumers and sold around the world to international capital markets leading up to the Credit Crisis (Blumberg & Davidson, 2008).

The significance of these flows is twofold. In the first place, we see in these *global* flows – and *only* or *at least* in these flows, please note – observable, traceable connections relating different parts of the planet for different reasons. That is, we see a *bounded* form of global interaction, an interconnection that occurs through the specific characteristics (vagaries, some might say) of consumer credit/debt assemblage. How do these flows contribute, in other words, to debates on ‘Globalization’? Some interesting questions that arise in this context have to do with how we should think about global flows of debt and investment linking up with American homeownership, or what it means when these flows dry up and leave the defaulted property of poor US neighborhoods in the hands of international financial institutions (Williams, personal communication, Oct. 17, 2010).

The second reason these flows are significant speaks more directly to this research. Namely, if global flows of *student* debt are anywhere near as extensive as those of *mortgage* debt leading up to the crisis, how should we interpret the comment given during one of my interviews that the market in student loans could very easily – and there are many indications that it will – go the way of the mortgage market? In a moment of candor – speaking not specifically about *his* institution, he was quick to clarify, but rather about the nature of consumer finance in general – this interviewee explained to me how the acquiring and reselling of ‘subprime’ loans became something of an industry standard over the last thirty-or-so years. As noted in the last chapter, subprime loans are known to generate huge flows of capital in charges, fees, and excess spreads right before they inevitably explode – an eventuality every bit as anticipated as the flows of capital they create. “It’s not a question of if, but when,” he explained – an insight that comes with forty-plus years experience in the industry and hindsight.

Due in part to the calculative successes of the market devices discussed in this thesis, lenders can be fairly certain about how each loan they approve will perform in each particular circumstance. In some cases, they understand that a certain class of loans may not generate the same amount of money that was invested into it if it is kept on the balance sheet as an asset indefinitely – since they will end up taking losses on it when it inevitably defaults. They know, too, that they can get their money back much more quickly by securitizing and selling off these loans before they stop ‘performing.’ What’s more, they can replace the potential interest accruals they lost in selling the loans by continuing to service these loans even after they’ve been securitized. These institutions are generating the amount of capital, therefore, but have distanced themselves from any of the risk involved. But stop to consider for a moment what happens to the places where all of these toxic securities start pooling together. If the US government winds up being stuck with the ‘Old Maid’ in the case of student loans they way it was in the case of mortgage loans – i.e., if the government ends up owning all of these volatile student loan-backed securities, which it already does to some extent since it started buying back and consolidating a large number of its subsidized loans – the implications are systemic.

A couple of additional similarities exist between the student loan industry and the mortgage industry prior to the crisis that are worth mentioning, as well. Both industries operated with very low reserve requirements (see the description ‘Federal Guarantors’ Required Reserve Funds’ on p. 30 of the Prospectus); both circulated swap agreements based on the lowest tranches of securities (see description of the swap counterparty’s maximum obligation on p. s-9 of the Prospectus Supplement). Each of these conditions has been likewise cited as co-contributing to the eruption of the mortgage market, built as it was on similarly faulty and fundamentally unstable premises (Blumberg & Davidson, 2009).

To pick up the significance of the default swap specifically, consider that during the mortgage implosion swap counterparties of all varieties were providing insurance against mass-defaults on, by then, not just the ABSs themselves, but also on a dizzying array of new derivatives thereof. When certain capital markets participants caught wind of the fact of that the market was plummeting, they bought as many of these insurance policies as possible, taken out against the riskiest securities they could find. When these

toxic securities began to dive the swap counter parties owed unthinkable amounts to their policy-holders. And since some of the swap counterparties were among the largest banks and insurers in the US (e.g., AIG), and since these firms in turn operated largely on capital borrowed from other firms, the devastation was systemic (Eisinger & Bernstein, 2010; Lewis, 2011).

All of these are among the reasons why this interviewee explained to me that he foresaw the student loan industry going the way of the mortgage industry. The same kinds of risky and irresponsible lending practices and heedless borrowing in both private and public student lending over the last thirty years, he explained, have resulted in some systemic instabilities. Ratings agency, Moody's, corroborates exactly the existence of this kind of risky lending and heedless borrowing in student lending, with regard especially to recent developments:

Over the past five years, several issuers of securities backed by pools of private student loans have sold transactions with a significant portion of “direct-to-consumer” (“DTC”) loans. DTC loans are disbursed directly to the student borrower and/ or co-signer and are not school-certified regarding enrollment status and the loan amount, unlike the more traditional “school channel” loans. In addition, DTC loans primarily are marketed directly to the borrower(s) and not through school financial aid offices. DTC loans typically do not have the safeguards inherent in school channel loans that mitigate the risks that borrowed funds will not be used for education or that students will take on excessive or unnecessarily expensive debt. As a result, Moody's expects default rates and losses on DTC loans to be higher than on school channel loans (Moody's, 2010, p. 7).

Additionally, in April of 2012 Moody's placed on review for possible downgrade a large number of student-loan ABSs backed by FFELP loans (Dang & Faynzilberg, 2012). Which is understandable: in many ways, the FFELP (now inoperative) created agencies that resembled the same kinds of ‘government sponsored entities’ (GSEs) Poon and others have discussed as being hugely instrumental in the implosion of the mortgage industry. In the latter industry, ‘Freddie Mac’ and ‘Fannie Mae’ started out offering explicit governmental guarantees on a certain class of securitized mortgages. Though these agencies themselves operated as private corporations, the loans they offered to a certain class of borrowers were guaranteed by the US government...just like student loans under the FFELP. That guarantee carried through implicitly even after it was

publicly disavowed by the government, and wound up losing investors a lot of money when foreclosures started piling up (Blumberg, 2011; Poon, 2009; Poon, 2012).

‘Sallie Mae,’ one of the largest lenders and securitizers of student loans in the US, began as just such a GSE, and has since similarly drifted from its one-time governmental guarantee. To date, it is one of the largest owners of student loans in the country (supported concretely by comments from the interviewee in the previous chapter). Of course, similar histories don’t necessarily bring about similar fates in each case, but Sallie Mae is only one among many GSEs in the student lending industry. As we saw in our Trust, the FFELP turned state-run organizations like the Illinois Student Assistance Commission and the Colorado Student Loan Program – or in my case, the Alaska Commission on Postsecondary Education – into GSEs of a similar caliber.

At these sites specifically, the sites where the US government fuses with corporate governance in the formation of government-sponsored entities, we find some very interesting questions arising about the contemporary character of the national US economy. On the one hand, the general proposition that a credit/debt-driven economy is systemically unstable is historically supported by the crises posed to such an economy in recent years. The incessant ‘passing-on’ or externalization of risk – first from banks to investors, then from investors to the US Government and its taxpayers – is a structural feature of contemporary US economics, evinced clearly in the discussion of the FFELP here.

Then, too, there are interesting abstract or theoretical issues related to the contemporary character of the national US economy. The fact that similar GSEs exist (or have existed at one time) to lend and securitize loans to some of the most ‘vulnerable’ populations in the US – e.g., low income students trying to attend university and low income families trying to buy their own homes (Pavel, 1989) – evinces a kind of underlying or emergent *Ordoliberalist* ideology and socio-economic baseline in the United States. The Ordoliberalist intention, described by Foucault (2010), doesn’t necessarily (or explicitly, at least) *intend* to drain resources and wealth from the poor by privatizing *everything*. In fact, Ordoliberalism – closely related to what we today would call ‘Neoliberalism’ – seems to have started with the best of intentions: the poor need money, rich private investors have it, why not let the latter finance the former and we (the

State) will subsidize and guarantee the loans? It's a way of supporting social progress without financing it through public funds and at the same time garnering returns on investment for private investors.

And it is in the vein exactly that we encounter the benevolent rhetoric of capital-centric economics today, praising the ability of private investment not only to drag 'low income America' out of poverty but, in going one step further, to actually retool that America to better suit the machinery of financialization: "Now, even low-income Americans are able to buy homes with little money down, allowing them to capitalize on the substantial benefits of making a leveraged investment in an asset that is likely to appreciate in the long run" (Retsinas & Belsky, 2005, p. 3). If not purely for humanitarian reasons, another contributor to the same volume adds, then at least because "[t]he financial services industry is gradually awakening to the message that low-income consumers are a huge, untapped market for financial products and services" (Berry, 2005, p. 47).

Here we find an Ordoliberalist rationale justifying government sponsorship of private investment in socially-progressive initiatives, which ties into a sea-change of both public policy and economic organization in the United States in the 21st century: "Since early 2000, this market [the secondary mortgage market] has facilitated the large debt-financed extraction of home equity that, in turn, has been so critical in supporting consumer outlays in the United States" – financial speak for the simple proposition that the health of the American economy in the beginning of the 21st century hinged on its ability to produce debt on a massive scale that could then be distributed and converted immediately to spending power among those who would not otherwise be consuming (Alan Greenspan, quoted in Nothaft & Chang, 2005, p. 75). To bring things back to this research specifically, this is exactly the same kind of operating logic – in fact, it was even explained to me as such – that governs the relationship of subprime lending to excess spreads discussed in the last chapter. That is, the rise of risk-based lending in concert with the rise of securitization was explained to me as a potential mechanism through which persons with poor financial histories might also borrow money – never mind the alarming interest rates they would incur along with that opportunity, or the staggering

amounts of money to be made on the myriad transactions necessitated by the chain of securitization.

And this is where the really big questions – about how the United States turned from an industrial and manufacturing giant in the first half of the 20th century, into a country whose major product for national export was debt at the start of the 21st – can start to be answered by looking at really small things: the technical, material, discursive machinery necessary to support the production and consumption of consumer debt on such a massive scale. When you start to reframe consumer credit/debt in these terms – in terms of its means and modes of production, considering debt a consumer good in the same way we would a television or an automobile – everything becomes a little more tangible.

Looking back at chapter three, we saw the makings of a formidable national industry in this respect. It was an industry fostered by the stupendous flows of capital created by and available to lenders and others in the chain of securitization, on the one hand, and nurtured on the other by key intersections between ‘the market’ and governmental guarantees. Recall, from chapter three, how US legislation “authorize[d] Federal Guarantors to support education financing and credit needs of students at post-secondary schools. The Act encourage[d] every state either to establish its own agency or to designate another Federal Guarantor in cooperation with the Secretary of Education” (Prospectus, p.28). In addition, the FFELP ensured that at least a Trust, an Eligible Lender Trustee, a Federal Guarantor, and an outside lender would be involved in the process of selling and securitizing federally-guaranteed student loans. Stepping back for a moment to appreciate the size of the industry these governmental initiatives helped to create – being repeated year after year between 1992 and 2010 all over the United States – we begin to understand how an international market for US student loan-backed securities could have developed: what else *could* have been done with *all that money*? Bodies of capital that large in the US do not remain un-parasitized for long, and there are few places in the world better suited for turning parasitic economies into national industries.

Even now, the mammoth size of the industry thus created shines through in Sallie Mae’s opposition to the recent decision to fund *direct* federal student lending –

effectively cutting Sallie Mae and intermediaries like them out of the picture. Sallie Mae is fighting student lending reform now on the grounds that such reform will cut thousands of US jobs...and it probably will! Jobs and industry grow just as easily around ignoble and specious endeavors, as though they were no different in kind from industrial pursuits to educate the public or redistribute wealth. Never mind for now the fact that Sallie Mae had first to bring several thousand of its call-center jobs back from overseas before it could stand on the ‘Save US Jobs’ platform (Abramson, 2009). The point is, whether we think of this industry in terms of the employees that keep it churning or the debtors that keep it fed, we’re approaching more tangible mechanisms to explain national agglomerative processes too often discussed as alienated and incomprehensible.

To really hang on to the importance of socio-economic aggregation in this respect, consider that in July of 2012, there were \$2.6 trillion in outstanding consumer debt (Federal Reserve, 2012). As of April 2012, \$904 billion of that was student loans (Ward & Priest, 2012). Some estimates put that figure as high as \$914 billion (Associated Press, 2012). Nearly 1-in-5 households in the US currently carries some amount of student debt – the highest percentage to date (Fry, 2012). The average amount owed in 2010 was \$26, 682 per debtor. To put these figures into perspective, the Current-dollar GDP for the entire US economy is \$15.5 trillion (as of October 2012). Neither 0.914 nor 0.904 of 15.5 are small numbers by comparison (US Department of Commerce, 2012; Vo, 2012; Ward & Priest, 2012). And if it is difficult to grasp in mind what all those billions and billions of dollars must look like, try to think instead of all the individual persons that underlay them. The figures get a bit fudgy here since each of them is based on different parameters, but if we take these averages to give us a general idea about how many persons are carrying the student debt from the figures listed above, we get somewhere between 33.8 and 34.2 million individual debtors carrying an average debt load of over \$26,000. That’s a population of student debtors roughly the size of Canada, each of them carrying a debt load equal to one year’s salary at the bottom income bracket.

With all of this in mind, maybe we can pause here for a moment to return to our professor’s question. Hopefully by this point we have at least an idea of ‘who cares’ about this research. We can suppose the 67,100 persons owing money to our Trust

specifically might care. We could round things off and say that possibly another roughly 33 million persons in the US (or roughly 9.4% of its total population) might care. And if we really wanted to stretch things, we could say that anyone who has anything to do with global capital markets in securitized US student debts might care – or anyway, they should! From global capital markets to national economic trends and the millions of employees and debtors they effect, therefore, the mechanics of consumer finance seem at least relevant.

In responding to the question, ‘how is this research meaningful,’ on the other hand – a question that, to me, speaks to the best parts of the social sciences – I’d like to return for a moment to the first chapter of this thesis. There I touched on the methodological problems of describing *either* ‘objective economic conditions’ (statistical relations between statistical flows) *or* purely subjective social relations that don’t fully account for the material and technological relationships between objective (if performed) market devices and the stable forms of industrial organization that arise as a result of these technologies. Both of these approaches, we said, fall short of actually locating our analytical object within the realm of human meaning, on the one hand, and paying due diligence to the efficacy and reality of objective market devices on the other. In order to answer the question, ‘how is this research meaningful,’ I would say that we have to show that this research is capable of addressing these latter concerns.

We would have to show that this research has taken a human look at, among other things, market devices themselves, paying special attention to how these devices link up with human actors to form more complex socio-economic agents. In doing so, we would show how this research locates human persons within the analysis by orienting them vis-à-vis their connections to different sites, actors, and technologies. And we would do all of that by overlaying this theoretical approach back on top of the wider socio-economic settings and significance sketched up to this point in the concluding chapter. Indeed, we’ll find out very quickly whether or not this research is meaningful if it is able to accomplish these feats as it moves back up the scale we just came down.

Let’s start with the 33 million, or at least the 67,100 persons we left off with. How do they *observably and concretely* relate to consumer credit/debt? We probably all have a sense that they have *something* to do with the larger implications noted above; but what is

that ‘something’ exactly, and how do they relate to it? How do all these persons hang together as a part of that something? The aggregate does exist: we have statistics and global economic trends (and crises) to assure us of this fact. But where is this aggregate and how do all of its parts connect? To my knowledge, there is no one site containing 67,100 (let alone, 33 million) persons, in constant contact, exchanging handshakes, papers and money. So where is this aggregate exactly, and how does it come about? To be direct, *it is formed through the assemblage of specific kinds of agents, who become agential nexuses relating other market devices, agents, and agencements on increasingly aggregated scales.*

The first step of that process, we now have some idea, begins with assembling agents of consumer credit/debt. Persons are transformed into consumer credit/debt agents *through and with* other market devices, and as such become connective links between other actors in consumer credit/debt networks. This is one of the final anthropological significances of this work: our agency as human beings, along with the markers of our social existence that help to make us subjects in the world, are distributed into constellations of human/material/discursive/technological organizational forms that are neither human nor non-human, forms that at the same time lack any observable 'center' or central dictate. This is a fact of human existence at the beginning of the 21st century that fundamentally reshapes how we envision ourselves in the world.

Of course, in keeping with a distinction made in chapter two, we’re going to uphold the distinction here between the person or individual we typically think of when we think of ourselves on the one hand, and an ‘agent’ on the other. If there was something in particular meant to be taken away from chapter two, it would be a delineation of the specific processes by which an individual person – a human being who takes out loans to pursue an education or to more fully develop themselves as a conscious being in some way – is turned into a agent of consumer credit/debt. It was an analysis of how the material, technological, economic, and political networks of consumer finance operate in tandem to agence borrowers, to create agents with character-as-capacity, and then to govern how they will relate to one another through the logic of aggregated creditworthiness. And it is in this sense – in this very specific, bounded sense – that the

agent becomes artificial and traceable. Traceable not as a person, but as an agent. In this way an agent is defined by the network in which it is encountered.

The use of the term ‘agent’ here follows partly from the conventional usage of that term in micro- and macroeconomic literature. An ‘economic agent’ – i.e., an individual, human consumer or producer – is often the grounding unit of analysis, out to which the price of goods, and back to which the rate of unemployment, tend to refer. But the use of the term ‘agent’ is alternatively *instrumental* when it is used in social studies of finance. There, the agent is already understood as a *complex assemblage of human and non-human elements*. In our case, too, the agent in its simplest form must be understood *at least* as a person-plus-credit-report-&-score. As it moves from a bank, to a credit reporting bureau, to the credit scorer, to all the consumers of the credit report and score, the agent is not a body, nor a person, nor a simple representation of either of these. Rather, the agent is what emerges in the overlap of all the different events that act upon it as it moves through the networks of consumer credit/debt assemblage.

The agent moves through these networks in alphanumerical form: in dates, account balances, account status, borrower status, geographical data, personal information, etc. Until the image of the agent we’re dealing with is constituted only in part by its person and his behaviors. Instead, there is an image of the agent at the center of a Venn diagram: the outer edges of the circles being the components of the agent assembled at each distinct site; the overlapping centers being the contents that connect all of them together collectively. If there is something like an essence to the consumer credit/debt agent, surely this is it: a core cluster of components, whose attachments include the credit score, the behaviors of its person, the borrowed creditworthiness of a cosigner, etc.:

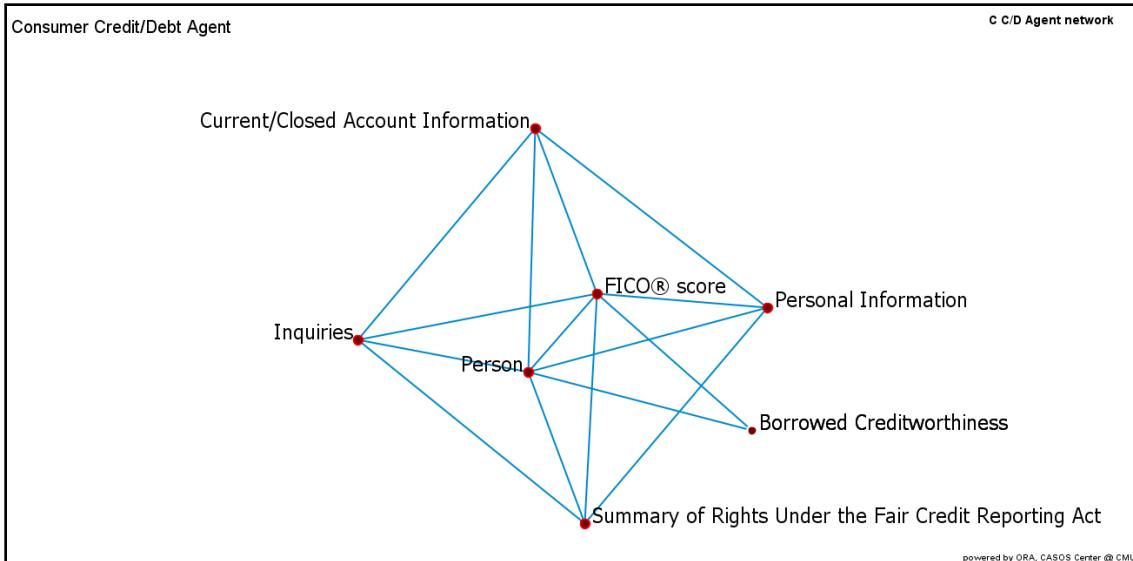


Figure 10, Minimal depiction of the Agent through the credit report.

But then this depiction, too, falls short. We don't encounter this agent anywhere in life, walking around upright, self-possessed and automatically assembling itself. It is neither self-naming nor self-directing; it is not *autonomous*. In reality, the consumer credit/debt agent must consist, at least partially, in each of the material bodies that assemble it as it circulates among them. The agent is distributed across the material bodies of its person, across its loan documents and notices, across the communication networks that collect, report, and score the agent according to the continued and renewed physical behaviors of its person. Which is why, finally, the network metaphor so aptly applies: the agent is stretched between all of the bodies that assemble and exchange it.

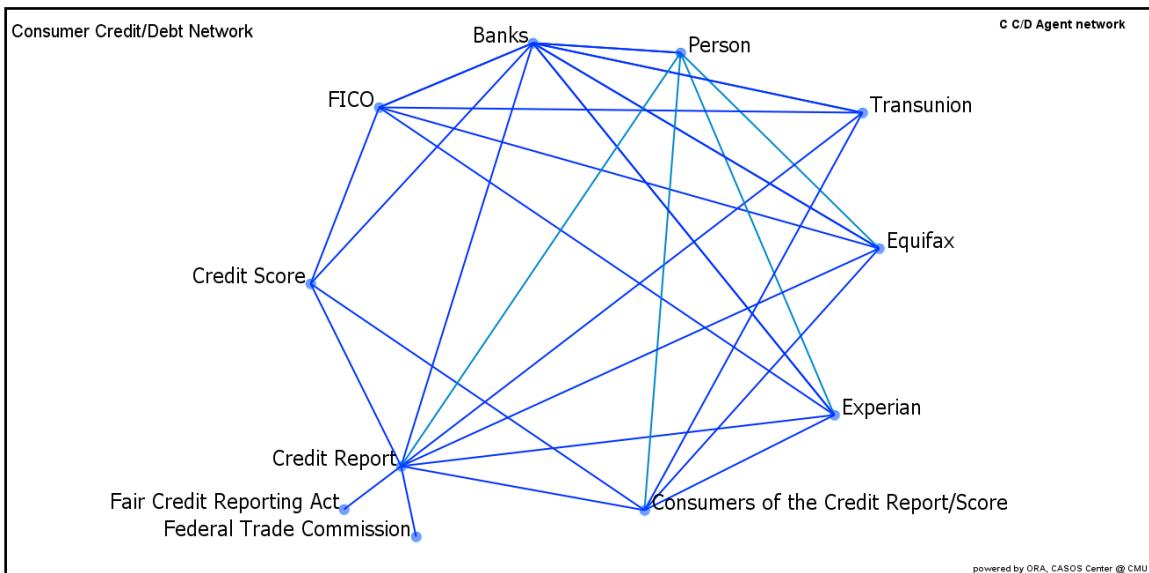


Figure 11, Network depiction of the Agent through associated actors.

When we find ourselves in the context of consumer credit/debt, we encounter agents whose range of movement and autonomy is delimited by the very fact that they are agents within consumer credit/debt. They cannot be admitted otherwise, they simply won't be recognized. And understanding the agent in this way, as an agent-plus-attachments (an *agenced* agent), goes a long way in explaining how the chain that carries the individual all the way out to his economy can remain unbroken. One of the most useful aspects of understanding agents in this way derives from its ability to explain how otherwise disparate or incommensurate entities (either in nature or in scale) can link up to form semi-coherent, reproductive, and aggregative structures, such as the aggregate character-composite of creditworthiness from the second chapter, or the Trust covered in chapter three.

This understanding is based first of all in a conception of the agent – like the market devices it co-assembles and that co-assemble it – as comprised of a definite set of heterogeneous components: current/closed account and personal information, the credit score, borrowed creditworthiness, and so on. The unique form this agent takes – that is, the number and nature of the components that are a part of its composite – relates to all of the actors that have an interest in associating *in* and *through* this agent. An agent is defined by the network in which it is encountered. There would be no association otherwise. But an awareness of these facts almost immediately gives way to another,

indissociable revelation, one that is so axiomatic that it can be easily overlooked: the fact that *all these subjects and objects are relating in the first place*. The point, so indispensable to this thesis, is the same as Klein's (2001), in that agents serve as an intersection which draw participating market actors together. This fact is partly why the credit report is so significant. It is partly why the Prospectus and Prospectus Supplement are so significant. But it is also why the agent itself is so significant. From this perspective, the agent itself becomes an *agential nexus*:

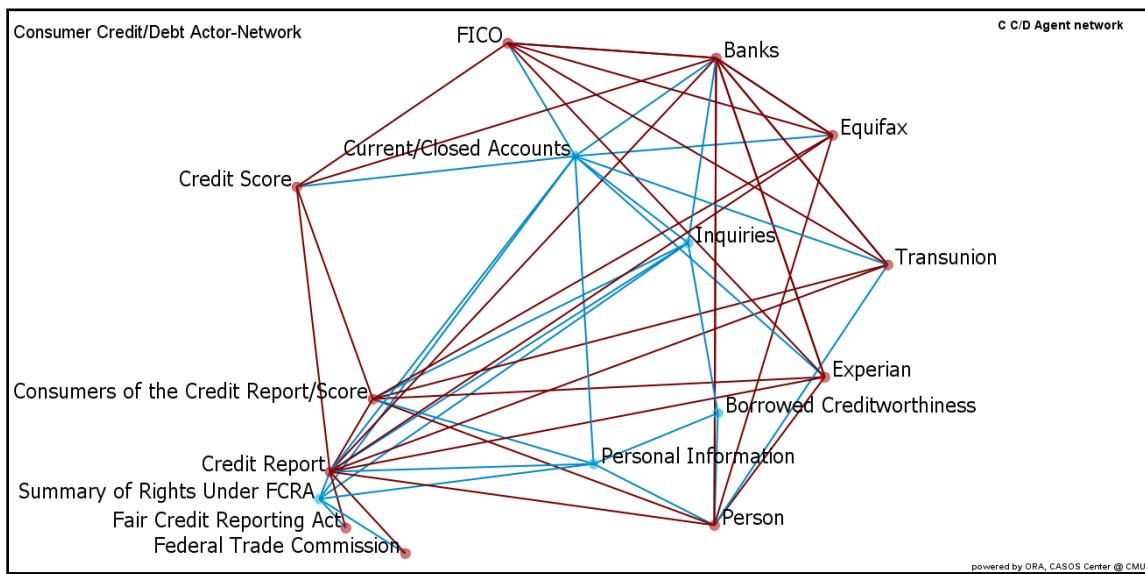


Figure 12, Actor-Network depiction of the Agent.

Through the information compiled on the credit report – i.e., through the process of agent assemblage that occurs there – we, as agents, come to connect credit reporting bureaus, banks, the credit score provider, renters and leasers, governmental tax collections agencies, telecommunications providers, legislators, etc. They connect in us. Similarly, the credit score – in conjunction with the aggregated data of the CRBs – acts itself as a nexus to connect all of us disparate and wayward consumer credit/debt agents together through ‘benchmarking’ and other similarly Baysean statistical operations. We are all of us piled up, *aggregated*, shaped into smooth distribution curves exposing the least and the most creditworthy among us. At least in the combined databases of the CRBs, then, in the servers that store all of our performance records, and in the algorithms that reduce us from a complex mess of intractable-subjective-human-consciousness into a

score between 300 and 850, we have an answer to the question, ‘where is this aggregate and how is it connected?’ How do 33 million consumer credit/debt agents relate to one another? As agential nexuses assembled through the credit report and the credit score.

The task of moving out in scale from all of these scattered individual agents to a larger scale requires only that we take the agents thus arrived at, connect a bunch of them together with a few more market devices, possibly create a few novel forms of agential nexus, and aggregate them all again. It is important at this point, though, not to overlook the roles of those various market devices in helping to assemble and connect the agent to networks, assemblages, or agencements at these larger scales. In the case of an ABS agencement specifically, each agent is agenced in the Prospectus Supplement by the following of his/her individual characteristics (taken from PS, pp. s-20-26):

1. Loan Type (Stafford, un-subsidized, etc.)
2. Interest rates (ranging from 5.5% to 9.5% and above)
3. Amount of outstanding principal balance (ranging from less than \$2000 to \$28,000 and above)
4. Type of school attended (2-year, 4-year, vocational, other)
5. Number of months remaining until the loans are paid off [i.e., reach ‘maturity’] (ranging from less than 25 to 193 and above)
6. Borrower payment status (in school, grace, deferment, forbearance, repayment)
7. Borrower’s location (states, territories, other)
8. Date the loans were disbursed (ranging from before Oct 1, 1993 to Oct 28, 1998 and after)
9. Number of days (if any) the borrower has been delinquent (ranging from 0 – 220)
10. Which federal guarantor the borrower is under (Colorado Student Loan Program, Illinois student Assistance Commission, or the National Student Loan Program)

Please note in the above characteristics how *the agent is transported, admitted, assembled into this agencement through his/her credit report, as well as from loan application materials taken from the originator*. Items 2, 3, 5, 6, 7, 8, and 9 can be drawn, as we’ve seen, directly from the credit report. Items 1 and 4, meanwhile, come from the loan application and promissory note. These latter documents are so far new to the analysis, but are documents according to Lewis (1992) that are equally indispensable to the process of aggregating agents in the credit score (note especially the title of the loan, which is not FFELP sanctioned, and box 11, which lists the attended school as a 4-year institution):



Wells Fargo Collegiate™ Loan
2004-2005 Academic Year

**APPLICATION &
PROMISSORY NOTE
C333**

UID: 8071760000R867988

SID: 8724974

All requested information must be completed by the student in blue or black ink.

1. Legal Name Last <u>ROBBINS</u>		2. Social Security Number or Resident ID Number		3. Birthdate		4. Driver's License Number State <u>SD</u> If None, check here: <input type="checkbox"/> N/A			
First <u>THOMAS</u> M.I. <u>J</u>				Month	Day	Year			
5. Permanent Home Address (required) Street Address (required) _____ P.O. Box _____ City <u>RAPID CITY</u> State <u>SD</u> Zip _____ Home Telephone No. _____ Cellular No. (_____) _____ Email _____				6. Address while in school <i>Correspondence will be sent to this address.</i> Street Address (required) _____ P.O. Box _____ City <u>ANCHORAGE</u> State <u>AK</u> Zip _____ Telephone No. _____					
7. Your school's name, city and state Name <u>University of Alaska Anchorage</u> City <u>Anchorage</u> State <u>AK</u>		8. Grade Level <u>3</u> Grade Level		A First yr. Graduate B Second yr. Graduate C Third yr. Graduate D Fourth yr./Other Graduate	9. Anticipated Graduation (e.g., June 15, 2005 = 06 15 05) 05 Month 30 Day 2006 Year		10. Loan Amount Requested <i>Any changes must be initiated here by each applicant in Box 15.</i> \$ <u>2,000</u> ,00		
11. Program of Study Major: <u>All</u> Degree (check one) <input type="checkbox"/> Associate's <input checked="" type="checkbox"/> Bachelor's - undergraduate <input type="checkbox"/> Master's - graduate				12. Citizenship Status (check one) <input checked="" type="checkbox"/> U.S. Citizen or National <input type="checkbox"/> International Student <input type="checkbox"/> Permanent Resident <i>For Permanent Resident or International Student please attach a copy of the front and back of your Registration Card. A cosigner is required.</i>				13. Enrollment Period for use of these funds <i>Should not exceed 12 months.</i> From <u>08</u> Year <u>2004</u> To <u>05</u> Year <u>2005</u>	
14. Personal References <i>You must provide two different names, U.S. addresses, and telephone numbers.</i> (a) Parent or Guardian Name _____ Address _____ City, State, Zip <u>RAPID CITY</u> SD Telephone No. (_____) _____				(b) Another adult relative not listed in or residing at the same address as 14(a) Name _____ Address _____ City, State, Zip _____ Telephone No. (_____) _____					
15. CAUTION - IT IS IMPORTANT THAT YOU THOROUGHLY READ THE CONTRACT BEFORE YOU SIGN IT.		NOTICE TO CONSUMER 1. Do not sign this agreement before you read it. 2. You are entitled to a copy of this agreement. 3. You may prepay the unpaid balance at any time without penalty and may be entitled to receive a refund of unearned charges in accordance with law.		I have reviewed the information contained on this Application & Promissory Note, which includes terms on pages 1 through 3 and the information contained on the Application Addendum (if applicable) and certify that it is true and accurate to the best of my knowledge and belief. I understand that you will retain this information whether or not this loan is approved. You are authorized to check my credit and employment history and to answer questions about your credit experience with me. You and/or your agents are also authorized to release any information to the school pertaining to this application and specifically any information gathered in the credit review process. I have read, understand, and agree to the terms of the "Borrower's Certification and Consents" printed on page 3 of this Application & Promissory Note, and I understand and agree that Wells Fargo Bank, N.A. (you) will be my lender.					
STOP! If a cosigner is used, confirm a completed Application Addendum has been submitted unless the cosigner is applying online or by phone.									
EFS: 03407722800210945918116792004-09-07-16:2000 Signed by THOMAS J ROBBINS 09/07/2004 Student Borrower Signature mm/dd/yy Cosigner 1 Signature (If Applicable) mm/dd/yy Cosigner 2 Signature (If Applicable) mm/dd/yy									
MARRIED WISCONSIN RESIDENTS: (Spousal notice is required.) If the Student is married and is applying for the loan individually (or with a co-signer who is not his/her spouse), Student must 1) provide the name and address of his/her non-applicant spouse to enable Wells Fargo Bank, N.A. (Lender) to provide notice of the loan to that spouse in accordance with the Wisconsin Marital Property Act, and 2) sign the certification below. See NOTICE TO MARRIED WISCONSIN RESIDENTS on page 3. By signing below, the loan requested, if granted, will be incurred in the interest of my marriage or family. I certify that information concerning my spouse is true and accurate. Signature of Student - If married Wisconsin resident _____ Name of Student's Spouse: _____ Address: _____									
To be completed by the School Financial Aid Office.									
16. Department of Education School Code <u>011462</u>		17. School Branch Code (if any) <u>00</u>		18. Name of School <u>University of Alaska Anchorage</u>		School Phone Number (<u>907</u>) <u>786</u> - <u>6173</u>			
19. Grade Level <u>3</u> Grade Level		A Freshman/First yr. B Sophomore/Second yr. C Junior/Third yr. D Senior/Fourth yr. E Fifth yr./Other Undergraduate		20. Anticipated Graduation (e.g., June 15, 2005 = 06 15 05)		21. Other loans for this loan period (required) <i>Do not include loan amount requested in question 10.</i> \$ _____			
22. Loan Period (e.g., July 15, 2004 = 07 15 04) From _____ Month _____ Day _____ Year _____ To _____ Month _____ Day _____ Year _____		23. Recommended Loan Disbursement Amount(s) and Date(s) Amount _____ Month _____ Day _____ Year _____ 1st \$ _____ 2nd \$ _____ 3rd \$ _____ 4th \$ _____ Total* \$ _____ <i>* Total can not exceed the lesser of \$25,000 or cost of education minus other financial aid.</i>		24. I have read and agree to the conditions set forth in Section P of the "School's Certification" statement on this Application & Promissory Note. I hereby certify that the student named above has been accepted for enrollment or is currently enrolled in an educational program determined to be eligible for the loan program, and the Total Amount does not exceed the student's cost of education (minus other financial aid) or \$25,000.		Signature of School Official _____ Name/Title (printed) _____ Date _____ Month _____ Day _____ Year _____ <input type="checkbox"/> Check box if application is electronically transmitted.			

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(2/2003)

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Page 1 of 3

Figure 13, Application and promissory note, taken from the author's records.

But the PS, and credit score are neither the only market devices to have performed this agent assemblage, nor to have depended on the credit report and the application and promissory note to have done so. Similar things occurred already with the credit ratings

attached to this Trust. Recall again how Moody's assembles its agents based on the following nine characteristics:

1. Presence of a Co-signer
2. Credit Scores
3. Origination Channel and School Certification
4. School Type and Degree Type
5. Borrowers Who Drop Out of School
6. Loan Payment Options
7. Exceptions and the Reliability of Underwriting Standards
8. Forbearance Policies
9. Servicer Quality

Here again, note how these characteristics align with figure 12 above: #3 comes from boxes 16, 17, and 18; and #4 comes from boxes 7 and 11. The first item is usually available on loan applications, too (where applicable), and the remainder of these characteristics are simply drawn from the originator/seller/servicer's records and credit reports.

Just as in chapter three, we have a network image of the Trust forming. Just as in chapter three, this image encompasses only the most immediate level of actors and relations. What was not included in chapter three, however – I suppose what was implied – was a scaling depiction of the network that somehow made it possible to understand how many heterogeneous elements are packed into every single one of the nodes depicted in the network. That kind of depiction is impossible to comprehensively create here, but having reviewed the agent and agent-network depictions above (see figure 11 especially), we see how an agent is squeezed –with 67,099 other agents just like it, and all of their agence-ing market devices – into a single node. We have finally arrived at a fully distributed, aggregated agencement that links market devices, individual agents, corporate and special purpose entities together on ever-expanding scales:

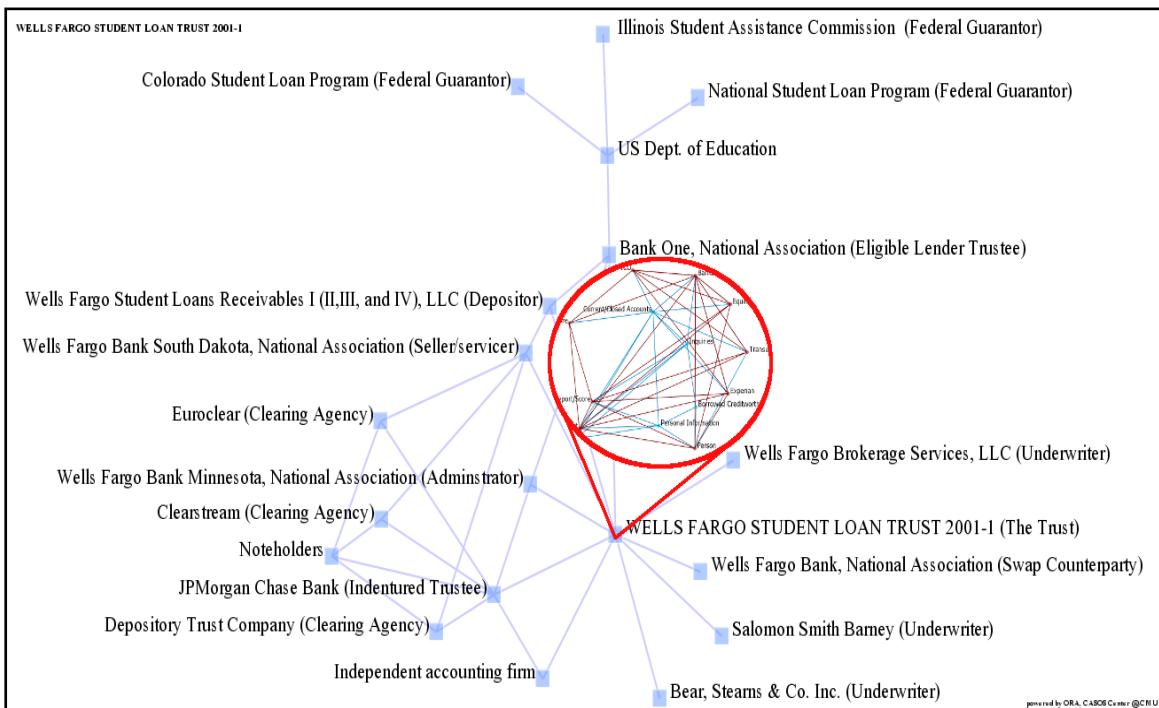


Figure 14, Depiction of the Trust network with relation to its the Agent-Networks.

In order to move from these semi-disconnected, semi-independent agencements occurring all over the country to approach something resembling a coherent national industry of consumer credit/debt, we simply need another agencement to connect the sites, one aggregated even further. In the FFELP, of course, we saw this agencement exactly, helping to foster and inform – by validating and performing – a national industry of consumer credit/debt in the United States. We could also look at one final site, however, to really solidify the notion of how the securitization agencement acts to connect larger socio-economic entities together, in a sense helping to create a kind of market-governmental agencement. That agencement would be the network created between US governmental agencies and huge financial institutions at the site of securities’ filing requirements regulations.

There has for some time now been a general outcry against the extensive influence that financial lobbying interests hold over the legislative process in the United States. These concerns are not unfounded. Increasingly prevalent and apparent in the Clinton and George W. Bush administrations, and even more so in the Obama administration, has been the marked inability of the legislative branch to regulate increasingly complex financial transactions. In the face of this complexity, the legislature

turns directly to market participants for their input on how to best construct and apply financial regulations (Kirk, 2009a, 2009b; Smith & Gaviria, 2012a, 2012b). This arrangement litters an analysis of consumer credit/debt. It is first of all evident in the fact that the Prospectus and Prospectus Supplement – documents that, as we've seen, are essential for investors or portfolio managers to truly 'look under the hood' of the underlying assets of a securitized pool of loans – were themselves pulled from a public, governmental site operated by the SEC.

Contrary to popular rhetoric, financial regulation is not necessarily a market hindrance. In fact, the SEC describes in its legislation on asset-backed securitization – Regulation AB, which amends the Securities Act of 1933 and the Securities Exchange Act of 1934 to better reflect the reporting exigencies of asset-backed securities in particular – how in many cases the drive for disclosure is fully supported by market participants themselves. Regulation AB explains how the SEC "issued proposals to address comprehensively the registration, disclosure and reporting requirements for asset-backed securities...[and] received over 50 comments in response to...[their] proposals." "Commenters," the document continues, "expressed overall support for our proposals to establish a separate framework for the registration and reporting of asset-backed securities due to differences between asset-backed securities and other securities" (Regulation AB, pp. 8-9).

In response to that need, the SEC was resolute and direct: "The final rule and form amendments we adopt today have been revised, as discussed in this release, to incorporate a number of changes recommended by commenters" (Regulation AB, 2004, p.9). The list of those who responded with comments reads like a most-wanted list of those purported to be the most notorious and influential organizations in US financial sectors to date, including the American Bankers Association, Bank of America Corporation, Citigroup Global Markets, Inc., Financial Services Roundtable, JP Morgan Chase & Co., and Moody's Investors Service among many others. Indeed, the last name on that list is none other than Wells Fargo Bank, National Association, itself (Securities and Exchange Commission, 2004, footnote 27, pp. 8-9).

In looking at the letters of these commenters a little more closely, the intimate connection between regulators and market participants is painfully obvious. In a letter by

Wells Fargo, for example, the latter's appreciation of the process of disclosure is made explicit – and whether in jest or otherwise, the simple fact *that* they chose to respond should be enough for us to look at *how* they did: “Wells Fargo is appreciative of the work of the Commission staff in attempting to distill current staff positions and industry practices under the federal securities laws with respect to asset-backed securities into a set of comprehensive rules; and we believe that such rules will prove to be of great service to investors and other market participants” (Frere, Jr., 2004). Adopting almost verbatim the language of its commenters, the SEC will eventually respond in a kind of mirror-discourse, almost indistinguishable from the native language of ABS: “We are adopting a principles-based definition of asset-backed security, substantially as proposed, to demarcate the securities and offerings to which the new rules apply. The definition consolidates several staff positions regarding the definition of asset-backed security, including those regarding delinquent and non-performing pool assets, with several revisions to the proposal in response to comment” (Securities and Exchange Commission, 2004, sec. 17 CFR PARTS 210, 228, 229, 230, 232, 239, 240, 242, 245 and 249 p. 12).

In praising its own ‘principles-based definition,’ the regulation notes how “one commenter representing ABS investors believed proposed Regulation AB represents a major step in improving disclosures provided to investors and includes many of the items investors have previously recommended as critical to investors” (Securities and Exchange Commission, 2004, sec. 17 CFR PARTS 210, 228, 229, 230, 232, 239, 240, 242, 245 and 249 sec. 17 CFR PARTS 210, 228, 229, 230, 232, 239, 240, 242, 245 and 249). Indeed, the legislation does seem to simply replicate what the market had already been doing, at least insofar as our Trust is an example of market practices dating back to 2001. This legislation (dated 2004) simply formalizes as reporting requirements much of what occurred on our Prospectus and PS three years earlier (Securities and Exchange Commission, 2004, sec. 17 CFR PARTS 210, 228, 229, 230, 232, 239, 240, 242, 245 and 249 7) :

3. Transaction Parties

- a. Sponsor
- b. Depositor
- c. Issuing Entity and Transfer of Asset Pool

- d. Servicers
 - e. Trustees
 - f. Originators
 - g. Other Transaction Parties and Scope of Disclosure
4. Static Pool Information
- a. Disclosure Required
 - b. Method of Presentation
5. Pool Assets
- a. Pool Composition
 - b. Sources of Pool Cash Flow
 - c. Changes to the Asset Pool
 - d. Rights and Claims Regarding the Pool Assets
6. Transaction Structure
7. Significant Obligors
- 8. Credit Enhancement and other Support
 - 9. Other Basic Disclosure Items
 - a. Tax Matters
 - b. Legal Proceedings
 - c. Affiliations and Certain Relationships and Related Transactions
 - d. Ratings
 - e. Reports and Additional Information

This entire discourse about disclosure thoroughly binds ‘the market’ to ‘the government’ through a common concern for market devices and the role they will play for other market actors. We see the same kind of thing looking at how legislation on credit reporting wound up benefitting credit scoring agencies, who opportunistically used the rejected applicant data (mandated by legislation to be reserved for two years) to build the obverse side of their scoring algorithms. In cases like these, when legislation is not directly creating or protecting spaces for markets to operate within, legislative restraints will often simply give way to another set of market opportunities.

And this kind of to-and-fro between government regulation and market participants is interesting for a couple of reasons. First, it lends still further evidence to

the position that the market – even at its most Ayn Rand-ian, when it is feverishly (or ostensibly, anyway) ‘Neo-liberal’ – actually depends on regulation to function smoothly (Chang, 2008; Galbraith, 2008). In any case, this thesis lends at least an additional bit of empirical evidence to the proposition that ‘the economy,’ if only in the Classical sense of the term, cannot exist without the state. Secondly, though, this kind of to-and-fro – especially when it occurs with the regularity and consistency we see here – suggests that at some point it just makes more sense to dissolve the boundary that separates the state from the economy and form a new network (or agencement) out of the places where governmental and market spheres co-occur.

The fact is that we don’t find ‘the market’ on one side of a clean divide and ‘the government’ on the other. In fact, in our case, we don’t really find ‘the market’ or ‘the government’ at all. Instead we find specific financial institutions (e.g., those listed above as ‘commenters’); we find subsidiaries of these institutions and still other financial entities fulfilling various roles as depositors, indenture trustees, underwriters, etc.; we find specific acts of legislation; and we find specific regulatory and administrative bodies of the US government (e.g., the SEC or the Dept. of ED) closely entangled with these market entities in very discrete, consequential encounters. In some cases – as in the case of federal guarantors – we even find organizations that are explicitly public-private enterprises, whose very success *as an enterprise* depends on the intersection between ‘the government’ and ‘the market.’

Polanyi (2001) may have been misleading in this sense, along with other many others hypothesizing a clean divorce between, and alienation of, ‘the social’ from ‘the economic,’ or either of these from ‘the political.’ We need only think anecdotally about the ‘social’ causes behind taking out any kind of loan, the ‘social’ causes behind defaulting on those loans, and the political and global economic epiphenomena that ripple outward from these ‘social causes.’ As one professor of finance and former financial analyst at a large US bank put it (paraphrased), ‘I’ve been explaining at industry conferences for months now that the financial industry needs social scientists: we [financial analysts] understood the math behind the housing boom, but we had no way of predicting the spate of defaults that followed, the social causes behind them’ (Nason, personal communication, August 2011). Alternatively, from a literary or

anthropological/historical perspective, we can look at Atwood (2008) or Graeber's (2011) work into how deeply connected debt and morality really are: cozy as the two concepts tend to be in several religious traditions. These 'separate' spheres of human endeavors are actually deeply embedded, one within the other. It's just that we lost track somewhere along the way of all the staggering complexity that relates them.

In the end, however, a recognition of the blurred boundaries between entire economic and political sectors, between financial firms and branches of all types, between humans and non-humans, all this is important because of the practical implications it has for us as individual human beings. Through these analyses emerges the fact that nearly all of us who has ever taken out any kind of consumer loan potentially contributes directly to broader events in national (possibly global) socio-economic phenomena. We might have sensed this fact abstractly before, but hopefully now it's made more tangible through the analyses gathered here: *The process of consumer credit/debt assemblage connects individuals to wider socio-economic settings by assembling an unbroken chain of agential nexuses, connecting and aggregating market devices, agents, and agencements in increasingly complex forms and redistributing their agency throughout.*

And this is really the final, anthropological or sociological significance of this work: as non-human entities are personified or 'subjectified,' as persons are objectified through market devices, as human and non-human entities are seamlessly enmeshed together sharing in the distribution of agency, we arrive at a new form of social organization, at new social entities altogether. The agencements we've been looking at here are neither human nor non-human, but a complex mix of both of these acting in concert to agence their socio-ecologies. What should be stressed in this regard is not necessarily the ceding of agency in one direction or the other, but rather the distribution of agency among novel social entities.

Through the cobbling together of various market devices, legislation, etc., agents are at once agenced and linked together with countless other agents. They are made perceivable and actionable, they are made connective and interdependent. Through the process of securitization, thousands of them can be attached together on increasingly larger scales. To their sides can be pinned credit enhancements of all sorts: subordination,

overcollateralization, reserve accounts, demand notes, etc., each of which connects yet another set of heterogeneous external actors, expanding the overall agencement in scale still further. Through the legal formation of the Trust – i.e., through the creation of another aggregated agential nexus, disclosed in the market devices of the Prospectus and the Prospectus Supplement – it becomes possible to link together agents, special-purpose entities, lending institutions, underwriters, trustees, lawyers, and accountants from all over the country. And through international clearing agencies, the entire process turns, if not global, multinational. Each of these elements relates through agential nexuses, and a redistribution of agency is produced almost supplementarily through these interactions. Each market device swells in scale as it attaches individuals to firms and entire economic sectors, creating an unbroken chain between the micro- and the macro- that is all the while concretely traceable.

So it is that we assemble ourselves from consumer credit/debt; it assembles itself out of us. Some aggregated, distributed entity emerges which is neither human nor nonhuman, which has many of the characteristics of human actors, which none of us can control single-handedly, but whose overall form we collectively shape. This may not be the worst of circumstances imaginable. In understanding ourselves to be seamlessly connected to our wider socio-economic settings, a kind of hope echoes forth: a whispering implication that the things we do *actually matter*. This is not so much a liberal humanist recognition of the capacity for individual activism. It is a practical recognition of collective, distributed agency: a recognition of the fact that we are sharing agency in processes we cannot help but contribute to, even when we are trying not to contribute. If anything, we're dealing here with a liberalist *post-humanism*.

The final analysis bears this out: whether individual taxpayers voted for legislation supporting the FFELP or not, whether or not debt is structurally necessitated by broader conditions in US economics, we have to recognize that consumer finance is from one end to the other populated by distributed agencies. And while individual persons play only a partial role in this scheme, that role is by no means negligible. Individuals receive the loans, individuals finance the servicing of the loans, individuals guarantee the loans against default (as taxpayers). The agencies of individuals are scattered and distributed all across these sites. And as though born of the very logic of

consumer finance itself, the distributed agencies of persons, too, begin to agglomerate. They hemorrhage with collective iteration, becoming an Ordoliberalist machine for massive wealth accumulation, on the one hand, and the tumorous mass responsible for systemic economic instabilities on the other.

And yet, for all that, these forms of agglomeration are not wholly predictable. They are in no way beholden to the original processes of assemblage that produced them to begin with. The agglomeration created in the mortgage market as a buffer between the financial sector and the inherent risk of that market, for instance, winds up producing and displacing risk on an unthinkable scale, until that risk eventually circles back around and comes threaten the continued existence of the entire US financial sector writ large (Blumberg & Davidson, 2008; Lewis, 2011; M. Smith & Gaviria, 2012a, 2012b, etc.).

But this spontaneous, supplemental capacity for distributed agencies to agglomerate in all directions has not been totally overlooked, and high finance is the only cultural sphere taking note of it. There is a call in counter-cultural movements, too, to *assume an active role* in processes one cannot help but contribute to, even when one is trying not to contribute. It is the agglomerative capacity that movements like the “Occupy Student Debt Campaign” (<http://www.occupystudentdebtcampaign.org/>), specifically, are mobilizing when, after receiving one million pledges to stop making payments on student loans, the campaign promises to effect all sorts of agglomerative changes to society, education, and politics by drying up these collective flows. Indeed, we understand at this point that, given the massive presence of student lending in a debt-driven economy, a collective debt refusal would with some certainty effect massive changes. Whether the changes intended by this particular campaign would or would not materialize is, of course, anyone’s guess. What we can be certain of – what I am certain of, at least, after three years of research on this topic – is that distributed aggregative agency should not be underestimated.

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