

**Institutional Transplants and Market Economies:
How Capitalist Institutions Move Around.**

DRAFT

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I start from the premise that capitalist markets exist on the basis of institutional foundations. When these are in place, markets become possible. And capitalist markets not only move goods and services around space and time, they also involve the movement of institutions and practices. For instance, renaissance Italian traders didn't just export textiles to northwestern Europe, they also exported double-entry bookkeeping and promissory notes: two noteworthy practices that helped firms measure their own performance, and mobilize capital. There are many capitalist institutions that one could study with the development and expansion of market economies, but I will examine two that are closely intertwined: credit rating and bankruptcy law. Conveniently, I have been researching both (in separate projects), and I will use them as cases to begin to think about how market institutions spread. They do not exhaust all the possibilities, but I think they are exemplary in some useful ways. The fact that they are so interdependent makes it something of a puzzle that they have spread at such different rates and in such different fashions. My analysis here is provisional, although I hope to address these issues more systematically later.

Corporate bankruptcy law (BR) and Credit Rating (CR) are interdependent institutions that bound markets and determine economic viability. One lays the groundwork for survival in a credit economy (creditworthiness), the other defines economic failure and structures the response to it (bankruptcy law). Each of them acts like a third party, mediating relations between two others (*ex ante* lenders and borrowers, in the case of credit rating, and *ex post* debtors and creditors, in the case of bankruptcy law). The financial stakes of how they operate are considerable: ratings affect the price of the hundreds of billions of dollars of debt instruments issued annually and determine the availability of credit to consumers, corporations, and governments. Bankruptcy law allocates billions of dollars worth of assets under circumstances of corporate duress, and reconciles the directly conflicting claims of corporate creditors.

The connections between the two work in a number of ways: chronic inability on the part of a debtor to secure or manage credit (e.g., being over-leveraged) is one of the things that characteristically lead to bankruptcy. Conversely, the extension of credit creates the basis for a claim by a creditor in a bankruptcy court, in case the debtor fails. More generally, credit market conditions have a powerful effect on bankruptcy rates: tighter credit leads to more failure (bankruptcy rates move counter-cyclically). And for individual firms and consumers, going bankrupt is an event that undermines future credit and creditworthiness. In a nutshell, "irrationally exuberant" credit systems create messes for bankruptcy systems to clean up once the slump or crash is underway. During the present era of post-communist transitions and neo-liberalism, both credit rating systems

and bankruptcy laws play key roles in governing market economies. How did they spread so far?

Despite their interdependence, both are embedded in and enacted by institutions with different rules, internal structures, degrees of centralization, and levels of transparency and accountability: courts and legal systems for BR, and credit rating agencies for CR. Both rely heavily on numerical information, albeit in quite different ways. CR is a private institution that produces quantitative information, and the product is commodified and sold widely. Ratings are exceedingly mobile and can spread internally and be adopted, incorporated, and used in other locales and by other institutions. By contrast, BR is a legal institution that produces a re-allocation of assets and a reconfiguration of “failed” firms; it is not so “mobile.” BR systems are much “heavier,” “stickier” and mostly they spread through some form of modeling. Despite their differences, however, both now assume global importance, and in each case, developments in the U.S. have propagated elsewhere around the world.

Standard globalization-cum-market-pressure arguments can be made to underscore the significance of BR law and CR, and to explain why global convergence might occur: *ceteris paribus*, investors tend to put their money into economies with abundant information about the creditworthiness of borrowers, and good BR laws. Without them, investor/creditors will have a harder time picking good risks, or dealing with the aftermath of firm failure. Thus, by this kind of argument, internationally mobile capital will tend to flow to economies that possess effective BR law and a functioning CR system, and such economies will flourish relative to those that do not. Differential rates of investment and economic growth will eventually lead to the world-wide spread of “better” BR laws and CR systems. Such an argument is not merely academic, for it motivates and is used to rationalize the recent interest the IMF and World Bank have shown in institutional reform. Where formerly the IMF concerned itself with macro-economic factors like exchange rates and budget deficits, now it is much more interested in institutional matters like privatization, deregulation, and rule of law. Similarly, the World Bank used to fund concrete infrastructural projects (dams, roads, irrigation systems); now it is much more concerned about how “good” institutions lead to economic growth. Behind this switch lies the conviction that international financial institutions should help developing countries build the kind of economic institutions that are good for market growth.

Having given a very crude characterization of BR law and CR, and what they do, I will now review the historical record of these two institutions and outline how they have, in fact, developed and spread.

Credit Rating

CR developed in U.S. in 19th century to solve the problem of trade credit (as far as I can tell, no comparable system developed elsewhere, at least not until recently). Suppliers and wholesalers based in New York City wanted to know about the creditworthiness of firms that sought trade credit from them. For example, suppose a general store owner in a small Midwestern town wished to purchase goods from a New York supplier. Usually, the supplier would ship the goods and the customer would pay in 30 days time. For those 30 days, the supplier had extended trade credit to the buyer. As

commerce became increasingly inter-regional, Eastern suppliers increasingly had to deal with distant customers who were unknown to them. It was important to be able to tell the difference between those who were truly creditworthy, and those who were not. Credit rating firms, like the Mercantile Agency founded in 1841 by Lewis Tappan, acquired and sold information about the credit worthiness of the firms they rated.

The Mercantile Agency, which became known as R.G. Dun and later merged with Bradstreet's to form Dun and Bradstreet's, was among the biggest and most famous credit rating agencies, and it is certainly the best documented (given that its records from the 19th century now sit in the Baker Library at the Harvard Business School). From these documents, we learn many of the details about how credit rating worked, and how the system was organized. CR involved gathering complex, narrational qualitative information, and "noisy" quantitative information, about firms through network of correspondents and later branch offices, and funneling this to the head office in New York City. Correspondents were usually local attorneys or bankers: men (and they were all men) who were knowledgeable about business in their community. Such information was unsystematic and of variable quality and provenance. Once gathered, such information was recorded (the original letters sent by correspondents were destroyed in order to protect confidentiality of sources), and transformed into systematic and quasi-quantitative ratings. By the 1860s, most raters provided ratings along two dimensions: general credit, and pecuniary strength (the latter roughly meant "net worth," although in the absence of accounting standards or rules it had no precise meaning). A rated firm was placed into the two sets of ordinal categories. These ratings were then published in reference books and these were sold to subscribers. Reference books were published with increasing frequency, and eventually came out four times a year. The books were organized by geographical region, and listed firms alphabetically by the name of the proprietor or owner. They stated the business of the firm (dry goods, grocer, printer, etc) and stated how the firm was rated in terms of general credit and pecuniary strength. Subscribers would use these ratings to guide their credit decisions, especially when dealing with new or otherwise unknown customers. Hence ratings were a commodified form of information that came into widespread use.

Credit rating was done on a private, for-profit basis with virtually no regulatory oversight at either the federal or state level. CR was only loosely constrained by competition among credit raters (which led, for example, to the widespread publication of reference books, and to the convergence on two-dimensional ratings), and the threat of lawsuits from firms who were unhappy about the rating they were given, or from customers unhappy because the credit decisions they made on the basis of rating information turned out poorly. Over time, rating agencies developed a variety of legal protections that mostly worked (elaborate subscriber agreements containing many disclaimers/provisions, explicit statements about the status of ratings as "opinions" and "private communications," etc.). Despite the increasing consequentiality of credit ratings, rating agencies were not encumbered by any significant measure of public accountability or oversight.

The rating business grew steadily, and even dramatically, throughout the 19th - century, pausing only during the Civil War and the depression of the 1890s. Ratings were initially used by suppliers and wholesalers to inform the extension of short-term unsecured trade credit to their customers, but the market for information expanded well

beyond New York City suppliers. In large part, demand grew because of the rapid growth in inter-regional trade in the U.S., a trade that involved many new small firms that (almost) no-one had ever heard about before. But as I discuss below, soon many others found the ratings to be useful for a variety of ends.

Exactly how rating agencies transformed and condensed the reams of qualitative information they possessed into a two-dimensional category system is unclear. There is currently no evidence of coding schemes or data-reduction procedures throughout 19th century. It could be that these were extremely well-kept secrets, but given the size of the Mercantile Agency organization, the dispersion of its branch offices throughout the country, and the volume of sensitive materials given over to the Baker Library, it seems highly unlikely that explicit coding schemes were used but left absolutely no trace. Exactly how ratings were calculated remains a mystery, but I suspect it was not done very systematically and that the practice was as much “art” as “science”.

Credit rating was very “successful” in that the market for this information grew rapidly, and the product was developed and refined. Initially, credit ratings were one-dimensional, but then they became two-dimensional. The category systems became more elaborate and finer-grained. However, during 19th-c., there were no rigorous tests of its accuracy as a signal (now there are such statistical tests). Unlike today’s rating agencies, the Mercantile Agency did not provide, for example, information about the default rates of firms according to their credit rating. Nor did anyone else provide systematic evaluations (there were, of course, ad hoc assessments). But the spread of credit rating throughout the country and its widespread use suggest that general business opinion embraced credit rating without being completely clear about its value.

Credit ratings spread geographically, first throughout the U.S., and later internationally. They survived financial crises, recessions, and depressions which surely tested the use-value of the ratings. They also spread sectorally, outside of trade credit. For example, at the end of the 19th-century credit ratings were incorporated directly into credit insurance, as insurance companies used the ratings to assess their risks and price their insurance policies. As banks developed separate credit departments (again, at the end of the 19th-century), they relied upon credit ratings as an additional source of information about potential buyers. Credit rating was explicitly emulated by the bond raters, starting with John Moody. Instead of assessing short-term unsecured credit, Moody’s and Standard and Poor’s evaluated the long-term (and frequently secured) bonds issued by railroads and other large corporations to finance their capital expenditures and long-term borrowing. Such bonds were traded on capital markets, and were an important asset for long-term investors like insurance companies and pension funds. Ratings were also incorporated right into bonds as triggers in bond covenants (for example, if the rating given to a corporate debtor dropped below a certain point, then bond repayments would be accelerated, or other measures taken to protect the lender). Ratings were also incorporated into various kinds of prudential regulation. State regulations frequently restricted the kinds of assets that an insurance company or pension fund could invest in, given that they had long-term obligations. Such regulations often prohibited investment in “below investment grade” securities, where the meaning given to the threshold “investment grade” was set by the rating agencies. Having initially modeled themselves after credit raters like Dun, Moody’s and Standard and Poor’s rated growing numbers of securities issued by growing numbers of debtors: domestic railroads,

domestic corporations, then international firms, and various levels of foreign and domestic governments. In 1975, they were granted an official status by the SEC (as Nationally Recognized Statistical Rating Organizations). World wide, the ability to borrow money, and the interest rate paid, is heavily influenced by the rating agencies headquartered in New York City. Most recently, the model has been adapted to individual consumer credit: individuals are given FICO scores which determine how easily they can acquire credit cards, mortgages, store credit, car loans, and so on. Furthermore, the Basle II agreement for bank regulations incorporated credit ratings into the calculation of capital reserve requirements (lower rated assets require higher reserve requirements).

A small number of powerful credit rating agencies now regulate the flow and price of capital during this period of increased global market integration. They make their money by charging fees to those who wish to be rated (it used to be by charging the consumers of ratings). With a good credit rating, it is much easier and cheaper to borrow money. It is still a mystery how they calculate their ratings (their methods are proprietary), although today's agencies do offer credible statistical evidence that the ratings have predictive value (default rates are higher among lower-rated securities). Rating agencies are answerable to no-one but their shareholders, although their ratings are extremely consequential. The core technology (production of ratings) remains private and proprietary – not subject to public negotiation or oversight.

In undertaking a very specialized activity, credit rating has not been deeply connected to professional labor or to professional jurisdictional interests (the National Association of Credit Men aspired to professional status in the late 19th-century, but never achieved it). Hence, their ability to create and defend their “expertise” has produced little friction or counter-pressure from that direction. Rating systems are readily criticized during dramatic collapses (having failed to anticipate the Asian Financial Crisis, the collapse of Enron, or the recent sub-prime mortgage market meltdown). But despite these failures, credit rating goes on largely unperturbed.

Credit rating easily spread. It is a universal method that can encompass multitudes of ratable debtors through simple expansion. It provides a conventional benchmark for creditworthiness, and may be as useful for retrospective rationalization as for prospective rationality. Certainly, consultation of such information signals that investment decisions were made prudently and appropriately, whether or not they prove to be good decisions. With a rating system in place, it is easy to expand (an apparatus that can rate 1 million firms can rate 2 million). There were no domestic rivals to hinder its spread from the U.S. elsewhere (other countries generally didn't have their own rating systems), and there were no professional jurisdictional interests to compromise its growth.

Corporate Bankruptcy Law

Although enshrined in the U.S. constitution, federal bankruptcy law was in place only on an intermittent basis throughout the 19th century. The typical pattern was passage of a bankruptcy law in the wake of an economic crisis to offer relief to insolvent debtors, followed by its repeal after only a few years (usually at the behest of unhappy creditors). Then there would be no law in place until the next crisis. In this fashion, laws were

passed in 1800, 1841, and 1867, and later repealed. A permanent law was finally passed in 1898, and revised substantially during the Great Depression and then again in 1978.

In the U.S. (and elsewhere), bankruptcy law sets a legal framework for what to do with failed firms; it enforces the hard budget constraints that ostensibly distinguish market from command economies; it regulates the neo-Darwinian process whereby successful firms survive and the uncompetitive fail; it apportions the costs of failure among corporate stakeholders. Such failure is often precipitated when creditors deny additional credit to a firm, or when banks refuse to roll over their loans.

Traditional BR law was largely a mechanism for liquidation and discharge: insolvent businesses would have their assets seized and liquidated, and the proceeds would be paid out to the creditors. But having gone through the process, the business owner's remaining debts would be discharged, and the debtor would get a fresh start. Today's BR laws accommodate two major outcomes: liquidation and reorganization. The latter involves a reconfiguration of the firm's assets, liabilities, operations and employment relations so that revenues go up, costs go down, and the firm can become economically viable again. Reorganization gives failing firms a second chance. Either liquidation or reorganization involves reconciling the conflicting interests of debtors and creditors, employees and owners, secured and unsecured creditors, under circumstances in which economic losses must be distributed. BR is a legally binding distributional mechanism that is invoked under conditions of corporate failure, and which spreads the burden of losses among a set of corporate stakeholders (banks stretch out loan repayments and lower the interest rates, employees take wage cuts, shareholders see the share prices fall, etc). Bankruptcy rules determine what happens in bankruptcy court, after a filing, but they also shape the informal negotiations that occur outside of court, in the so-called "shadow of the law" (e.g., private workouts).

Modern bankruptcy courts depend heavily on accounting information to determine whether and when a firm is "insolvent," the value of the assets it holds, the magnitude of creditors' claims over it, and the viability of any proffered reorganization plan. The conflicting interests that battle in bankruptcy court often fight over "value" so that, for example, secured creditors wish to undervalue the assets that serve as collateral, while other claimants wish to overvalue the same. Bankruptcy courts "consume" the financial information produced by accountants, but they do not do so uncritically, particularly in cases where accountants disagree.

For most of the 20th-century, bankruptcy law reform was something that happened rarely and for the most part independently in different countries. The eastern bloc socialist economies had no need for bankruptcy law, and so countries either didn't have one or kept something on the books as a moribund legacy of capitalism (e.g., Poland). In much of east and south Asia, bankruptcy law was an unused colonial inheritance (in 1997, Indonesia had on its books a Dutch colonial law from 1905). And core capitalist countries altered their laws infrequently. But starting in the 1980s and 1990s, reform of bankruptcy law became increasingly commonplace as more and more countries embraced market economies, a "rule of law" orientation, or adopted neo-liberal policies. Countries also became more mindful of legal developments in other countries. In general, corporate bankruptcy laws shifted away from a strict focus on liquidation as the primary outcome, and instead began to support corporate reorganization. The political attractions of reorganization are obvious: far better to try to salvage some level of employment and

productive capacity than see it all shut down. But to make reorganization a viable alternative means attenuating the rights of creditors since if they seize their collateral the debtor firm is unlikely to recover.

Bankruptcy law rests in the framework of a national legal system, and so from a global perspective bankruptcy happens in a relatively decentralized fashion in separate national legal jurisdictions. But BR law reform has become increasingly centralized and coordinated, with the emergence of global models devised and promulgated by international financial institutions like the IMF, World Bank, regional development banks, and the United Nations Commission on International Trade Law (UNCITRAL). The IMF and World Bank have become increasingly vigorous in pressing developing countries to reform their institutions and improve their legal systems, and have conspicuously included bankruptcy law within their purview of interest. The need for countries in central and Eastern Europe to adopt an institutional framework suitable for a market economy generated a wave of interest in bankruptcy law in the early 1990s. Early adoptions of western commercial legal systems were little more than crude cut-and-paste operations that failed because reformers, and their western advisors, did not sufficiently appreciate the difference between law-on-the-books and law-in-action. In 1997, the Asian Financial Crisis proved to be a useful opportunity to press bankruptcy law reform on the previously high-growth economies of Thailand, Indonesia and South Korea. The IMF has espoused quasi-Weberian arguments about the importance of predictable law for the effective functioning of credit economies, and has tried to reconcile disparate bankruptcy rules. After some harsh experiences, (e.g., some of post-1989 Russia's earliest bankruptcy laws were never implemented, post-1998 Indonesian bankruptcy courts remain ineffectual and easily corrupted) reformers have generally come to appreciate the need for competent courts and sufficient institutional capacity to ensure that legal reform isn't just a formality. The spread of effective bankruptcy rules requires a good deal of local institutional support and local capacity.

The successful development of global models for this kind of law came out of a very political process that occurred in a quasi-legislative setting (UNCITRAL). Unlike credit rating systems, which simply spread through the private sector, bankruptcy laws rest firmly in the legal framework of sovereign countries, and as such the durability of nationhood affects how they spread. As powerful as they can be at times of crisis, the IMF and World Bank have earned a reputation for intruding into the internal political affairs of nations and coercing them into undertaking politically unpopular policies. Furthermore, they have been accused of enforcing a one-size-fits-all type of "market fundamentalism" that isn't even particularly effective.

As various groups began to work on creating and diffusing a global model for bankruptcy law, it became clear that heavy IMF or World Bank "ownership" over the preferred model would be a political liability. And so the process of negotiating such a model was taken up by UNCITRAL, a quasi-legislative body that better represented those numerous, small developing countries whose power to influence IMF or World Bank policy was always slight. A model law coming out of UNCITRAL would possess much more legitimacy than anything the IMF, World Bank, or any of the regional development banks could produce. And in fact, after years of negotiation, UNCITRAL did produce such a global standard.

UNCITRAL's success is remarkable given some the hurdles it had to surmount. To begin with, any country's bankruptcy system is deeply connected to the professional division of labor, and in particular to the jurisdictional interests of lawyers, judges, and accountants. These professionals are heavily involved in bankruptcy work, and so are invested in bankruptcy as a process, not just as an outcome. They care, for example, whether the work is done in a court of law or in an administrative agency. Furthermore, leading capitalist economies (U.S., Britain, Germany, etc) each had an interest in seeing their particular brand of bankruptcy law serve as the starting prototype for the global standard since that would privilege their country in the lucrative provision of international professional services. The appropriateness of legal models is also structured by historically-based relations of similarity and dissimilarity (e.g., common law vs. civil law legal families; colonial legacies, etc) that induce various affinities. Some foreign models just "fit" better than others.

In navigating between different legal families, vested interests, and nationalist sensibilities, UNCITRAL also faced a tradeoff between the development of the specific standard it wanted to produce, and the ease of adoption. Creating a set of abstract principles makes it easier to achieve agreement among countries, but does little to harmonize bankruptcy law since governments are given a wide range to interpret such principles in many different ways. But to set a strict standard in order to maximize harmonization, via a model law for instance, makes it less likely that sovereign governments will adopt the standard. In managing this tradeoff, UNCITRAL developed a Legislative Guide, something that was more concrete than a statement of general principles, but which provided more flexibility than a model law. In many respects, it was like a menu of options: highlighting issues critical for bankruptcy law, and then providing a set of alternative ways to deal with the issue. Many of its elements built on an eclectic borrowing from extant bankruptcy law, in a process akin to "bricolage." Following recent trends, it also gave new prominence to corporate reorganization as an alternative to straight liquidation.

The Legislative Guide was negotiated with considerable input from bankruptcy experts, international professional organizations, and involvement of the major international financial institutions. But UNCITRAL was fundamentally organized as a quasi-legislative institution in which participating delegates represented the country members of the UN General Assembly. This made its deliberations relatively democratic and transparent, and its obvious accountability enhanced the legitimacy of its recommendations.

Two Patterns of Change

Although both play a central role in regulating market activity, and although they affect each other in how they operate, credit rating systems and bankruptcy law systems have spread in quite different ways. Credit rating has partly spread through simple expansion: as a method for the acquisition and production of information, credit ratings systems have been "scaled up" to encompass more and more forms of credit, and more and more debtors. Starting from small business ratings in the northeastern U.S., raters now provide global coverage of both public and private debt. But the informational output remains largely the same: an expert opinion about creditworthiness couched in the

unique idiom of numbers. The portability, universality and self-evidence of numerical outputs has also made possible a second way for credit ratings to spread: internal incorporation. Other sectors and organizations have brought ratings right into their inner workings and used them for their critical decisions and classifications. The difference between investment-grade and non-investment-grade ratings determines how regulators regulate and how institutional investors invest. Ratings affect how insurance companies estimate risk and price their insurance products. And as more groups incorporate the ratings into their core practices, the ratings become increasingly taken-for-granted. Ratings gain the legitimacy of a conventional metric even though few know that the ratings are being used elsewhere (how many bank customers know that their bank's capital reserves are set using credit ratings, or that their own debt obligations may be triggered by rating changes) and even fewer of those who use or incorporate ratings know how they are actually produced (this mystery may be an important source of expert status).

On account of its close connection to the nation-state, bankruptcy law becomes entwined with national interests, legal traditions, and professional jurisdictional concerns that make straightforward adoption of a standard model very unlikely. One cannot take U.S. bankruptcy law, for example, and simply scale it up to give it world-wide jurisdiction. Formal adoption can occur, of course, as when Indonesia accepted the terms of the 1997 IMF bailout and reformed its laws. But without local "ownership" and support, new law looks too much like something illegitimately foisted on Indonesia by foreign powers taking advantage of its temporary vulnerability. Local implementation of the new measure veered far from the law-on-the-books, and the extent of "decoupling" was impossible to ignore. In such a case, no new law, no matter how superior in its formal design, will be effective. Contrast this with credit rating systems, where the ratings given to Indonesian debt instruments are also "foisted" by foreign interests. Local antipathy against such ratings is largely irrelevant: they remain consequential almost no matter what the "locals" think. Fundamentally, bankruptcy law is connected to national sovereignty in a way that credit rating never has been. Hence, it is much less likely that a single method or BR system will dominate world-wide. To the extent that it happens, harmonization of BR law occurs through inclusive negotiations that create none-too-binding standards.

Some of the difference stems from the fact that credit rating began in the private sector, and bankruptcy was done through public courts. The public/private distinction certainly has important implications for oversight and accountability, and for-profit organizations that survive over the long-term are presumptively efficient. However, this alignment is more an historical accident than a matter of necessity. Much bankruptcy work could be done in the private sector (and sometimes is), and credit assessment can be done by a public agency (witness a number of public credit registries currently operating in countries like Portugal, Spain, and Austria). Having started on one side of the public/private divide, these institutions become entrenched and it becomes hard to shift them over to the other side. Bankruptcy law, in particular, is entangled with the rest of the legal system, the nation-states that promulgate law, and the legal professionals that practice law. Developing, reforming, or spreading bankruptcy law usually requires some kind of accommodation with these other interests, a challenge that credit raters do not have to worry about.

Some of the difference also stems from the sheer mobility and universality of numbers. It is true that both bankruptcy courts and credit raters are awash in financial information, but the fact that a bankruptcy court is a procedurally-structured adversarial setting makes numerical valuations contestable objects: debtors and creditors will disagree sharply about the worth of things. And these are very much ad hoc numbers, specific to the bankruptcy filing at hand. Credit raters also follow procedures, but these are virtually opaque to outsiders, and so their ratings are much harder to challenge. The fact that the ratings they produce are directly incorporated into a wide variety of economic, regulatory, and legislative measures and practices magnifies their importance and bolsters their legitimacy. They operate invisibly and pervasively.

Conclusion:

Particular capitalist institutions might move around because a: capitalists move around, and they bring their institutions with them (i.e., they are the bearers of ideas); b: the particular institutions are genuinely advantageous, “efficient” or in some manner “better” (an argument often made by the IMF); c: institutions seem “better” or signal important values defined according to criteria set by critical audiences and stakeholders, and via some neo-institutional process they diffuse; d: a path-dependent economies-of-scale process is unleashed which confers advantage on capitalist institutions not because they are “better” but because they got there first, and in which they function as coordinating mechanisms or conventions that orient action and make complex uncertainties tractable – they give practical answers even if they aren’t the “best” answers – and they spread because it is easier to adhere to a pre-existing convention than to build anew.

While (a) by itself may help explain why double-entry bookkeeping spread from England to colonial America, in studying modern credit rating and bankruptcy I believe some combination of (a), (c) and (d) works best. Ratings organizations have grown and spread, and typically this means that personnel trained in current practices open new branch offices in new countries and bring with them a definite sense of how credit rating is to be done. On the bankruptcy side, reform is always informed by “bankruptcy experts,” a small group of highly experienced well-connected individuals who circulate through multiple deliberative fora, commissions, panels, discussion groups, and advisory boards, bringing with them a finite set of models for how bankruptcy law should work and what is possible.

Where billions of dollars are at stake, and where uncertainty abounds, it is also understandable that many parties would take comfort in ratings that possess the numerical patina of precision, and which publicly signal prudent rationality and due diligence. Credit markets involve serious information asymmetries and so it is always good to look good. However, ratings have been incorporated in many places where there is little visibility and no stage upon which to publicly signal rationality. In such places ratings play a different role: a practical convention that coordinates expectations and action and makes it possible to make decisions and move forward. What is remarkable in such low-profile settings is how mobile numbers are. On the bankruptcy side, it is also possible to signal modernity and rationality by adopting the right law. However, the process of implementation can unmask mere symbolic change, and the discrepancy between law-in-

action and law-on-the-books underscores the necessity of dealing with the many local interests that penetrate through a legal system. A legal reform that doesn't face up to these interests is likely to fail at the implementation stage, and the resulting decoupling between formal structure and actual practice can substantially undermine whatever symbolic benefits were initially generated.

Finally, both credit rating systems and bankruptcy systems reflect the accidental fact of where they originated: credit rating in the private sector, and bankruptcy within the public legal framework. The inheritance of birth enmeshed bankruptcy within extant national legal systems and professional divisions of labor, and encumbered it with a significant measure of public accountability and oversight. This complicated the process of transplantation so that foreign models could not easily be absorbed into a local setting, or imposed unilaterally from outside. Successful transplantation requires adaptation and compromise. Where it functions, however, bankruptcy law resolves economic failure. Credit rating emerged in the for-profit sector where information was produced, commodified, and sold. Long before its veracity could be systematically tested, it became a standardized benchmark that coordinated expectations and guided credit flows. And its simple numerical form allowed it to be translated into new settings, where it could guide a different set of economic and regulatory decisions. The production of ratings, as private opinions, did not confront professional interests or public oversight, and as such could spread easily and quietly.