Small Business and the False Dichotomies of Contract Law

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Abstract

The article explores the classic consumer- merchant dichotomy from the vantage of small businesses. Using empirical data and the psychology, economics, and management literature, it shows that small businesses, treated like large businesses throughout most of contract and commercial law, in fact behave more like consumers. Small businesses lack the financial strength of large businesses. They generally lack the information gathering ability of large businesses. Finally, they generally are more prey to cognitive errors than are large businesses. As a result, small businesses lose in two ways. When they deal with consumers, they are presumed to have the power, information, and cognitive capacity of large firms. The law thus obliges them to grant protections based on asymmetries that may not exist. When they deal with large businesses, the law treats them as essentially equal, even though small businesses may suffer from the same disadvantages that require legal intervention for consumers. The article considers the ways in which the law can deal with this false dichotomy and suggests some solutions, particularly in the way the law treats risk allocation.

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"There may be said to be two classes of people in the world: those who constantly divide the people of the world into two classes, and those who do not."

– Robert Benchley

Law is rife with simplifying divides – law or equity, civil or criminal, public or private, guilty or not guilty. Simplicity has many virtues, as the persistence of these dichotomies and others shows. Still, for each of these we can come up with examples that blur the lines – that fall on both sides, or neither, or that cut across the lines in odd ways. Is assault civil or criminal? Is products liability contract or tort?

Contract law unsurprisingly has its own categories. Some – expectation, reliance, and restitution come to mind – are not dichotomous, but many are. Usually these bins are in the form of X or not-X: thus, unconscionable or not, impracticable or not, breached or not, supported by consideration or not. Even here, though, many have argued that these distinctions hide as much as they reveal. Most notably, they tend to hide intermediate positions. Suppose, for instance, a contract proves burdensome but not quite impracticable. Might it be appropriate for the unexpected risk to be shared between the contracting parties?[1] Indeed, a good many contract doctrines have come about as attempts to bridge the crevasses of the starker dichotomies. Classical consideration doctrine, for instance, is loosened by many supplementary doctrines recognizing that not all promises fall neatly into the bargained-for and the not bargained-for.

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1 *See, e.g.,* John E. Coons, *Approaches to Court Imposed Compromise – The Uses of Doubt and Reason,* 58 NW. U.L. REV. 750 (1964); Sheldon W. Halpern, *Application of the Doctrine of Commercial Impracticability: Searching for "The Wisdom of Solomon,"* 135 U. PA. L. REV. 1123 (1987); Jeffrey L. Harrison, *A Case for Loss Sharing,* 56 S. CAL. L. REV. 573 (1983); A. Mitchell Polinsky, *Risk Sharing Through Breach of Contract Remedies,* 12 J. LEGAL STUD. 427 (1983).

Promissory estoppel[2] and modifications in sales law[3] are merely examples.[4]

Beyond these legal dichotomies are status-driven dichotomies that cut across legal lines. Two such dichotomies important in modern contract law are consumer versus non-consumer and merchant versus non-merchant. These appear throughout the statute books and even, though unsystematically, in the rationes decidendi of the cases. In practice these dichotomies are often melded, putting consumers on one side and merchants on the other. Like the others, these splits are perfectly rational to a point. Consumers differ from non-consumers in many salient areas, as do merchants from non-merchants. In each case, one group is generally considered weaker, less informed, less sophisticated, poorer, less able to reason, less able to bargain. These differences are sufficiently shared that collapsing the two has some merit. In law drafting, these collapsed dichotomies often yield the combination of a loose consumer rule and a stiff non-consumer rule on the theory that non-consumers are by and large merchants who can take care of themselves.[5] For example, the proposed amendments to Article Two of the Uniform Commercial Code at times push non-consumer law toward freedom of contract while reserving or expanding protections for consumers.[6]

This Article's thesis is that these dichotomies – consumer versus non-consumer, merchant versus non-merchant, and, worst of all, consumer versus merchant – are false, because small businesses do not fall cleanly into any of these categories. In many ways, they most resemble consumers and non-merchants in their abilities to deal with risk, whether financially or cognitively, to secure and process information, and to fend for themselves in the market. Nevertheless they are generally – almost invariably – treated like merchants. Small businesses thus get the worst of each dichotomy. In their dealings with consumers, small businesses must give protections based on asymmetries that may not exist. In their dealings with larger businesses, small businesses are treated as though the parties are essentially equal, which will not usually be true save in the most formal sense. By putting small businesses on the wrong side of each dichotomy, the law may thus promote inefficiency, burdening small businesses on the one hand

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[2] RESTATEMENT (SECOND) OF CONTRACTS § 90 (1981).

[3] U.C.C. § 2-209(1) (2001).

[4] For a partial list of others, see RESTATEMENT (SECOND) OF CONTRACTS §§ 82-94 (1981).

[5] *See, e.g.,* William J. Woodward, Jr., *"Sale" of Law and Forum and the Widening Gulf Between "Consumer" and "Nonconsumer" Contracts in the UCC,* 75 WASH. U.L. REV. 243 (1997).

[6] *See, e.g.,* U.C.C. §§ 2-508 (extending cure to revocation for non-consumers, thus codifying one line of cases); 2-710 (subjecting non-consumer buyers to consequential damages liability); 2-716(1) (allowing enforcement of agreements for specific performance in non-consumer contracts); 2-718(1) (taking difficulty of proof of loss into account when enforcing liquidated damages clauses only for non-consumer contracts) (2003).

and failing to protect them on the other.[7] Put otherwise, the law may in a sense subject small businesses to a regulatory tax – a peculiar tax indeed, if small businesses are, as we are told, the driving forces of our economy.[8]

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[7] Others have commented, though with different purposes and using different methods, about the imperfect fit between contract doctrine and small business status. *See, e.g.,* Blake D. Morant, *The Quest for Bargains in an Age of Contractual Formalism: Strategic Initiatives for Small Businesses,* 7 J. SMALL & EMERGING BUS. L. 233 (2003); Janet W. Steverson, *I Mean What I Say, I Think: The Danger to Small Businesses of Entering into Legally Enforceable Agreements That May Not Reflect Their Intentions,* 7 J. SMALL & EMERGING BUS. L. 283 (2003). Without calling into question the conclusions reached in these and similar articles, this article seeks to look closely at the causes of the imperfect fit, thus allowing us to devise more nuanced ways to treat small business in the law of contract.

[8] *See, e.g.,* David B. Audretsch, *The Dynamic Role of Small Firms: Evidence from the U.S.,* 18 SMALL BUS. ECON. 13 (2002) (net employment gain higher for small firms than large; innovation rate higher as well); D. Keith Robbins et al., *An Empirical Assessment of the Contribution of Small Business Employment to U.S. State Economic Performance,* 15 SMALL BUS. ECON. 293 (2000) (state productivity growth, Gross State Product growth, lower wage inflation, and lower unemployment all correlate with higher proportions of small business employment). *See generally* Morant, *supra* note 7, at 240-44 (summarizing literature).

There is something of a debate about the virtues of small business and whether it should get any special legal protection. Professor Pierce, most notably, finds the contributions of small business overblown and its harms – high pollution, poor workplace safety, excessive employment discrimination, and others – very high. Richard J. Pierce, Jr., *Small is Not Beautiful: The Case Against Special Regulatory Treatment of Small Firms,* 50 ADMIN. L. REV. 537 (1998). One might also point to the very high failure rate of small firms, estimated at around half within five years. *See, e.g.,* RICHARD J. BODEN, JR., U.S. SMALL BUS. ADMIN., ANALYSES OF BUSINESS DISSOLUTION BY DEMOGRAPHIC CATEGORY OF BUSINESS OWNERSHIP i (2000), *available at* http://www.sba.gov/advo/research/rs204tot.pdf; Alfred Nucci, *The Demography of Business Closings,* 12 SMALL BUS. ECON. 25 (1999). Each failure carries with it both financial disappointment or disaster and personal tragedy. *See, e.g.,* CLAIRE WHYLEY, RISKY BUSINESS: THE PERSONAL AND FINANCIAL COSTS OF SMALL BUSINESS FAILURE (1998). The problem is broader than business failure. In the 1990s, aggregate household wealth rose in the U.S., but the rise was almost entirely among households owning no small businesses. In other words, households owning small businesses gained less than those that did not. George W. Haynes & Charles Ou, Income and Wealth: How Did Households Owning Small Businesses Fare from 1992 to 1998 (June 17, 2002), *available at* http://opal.msu.montana.edu/ghaynes/research/riw%20paper%201%20with%20tables.pdf. Small wonder, then, that some economists have proposed that small businesses not only should not receive subsidies to start, but their founders should be paid not to start these costly and damaging enterprises. David de Meza & David Webb, *Wealth, Enterprise and Credit Policy,* 109 ECON. J. 153 (1999).

Part I of this Article surveys briefly some instances where these dichotomies appear in the law. Consumer statutes of necessity define consumer to limit their scope. Other statutes have rules that apply to merchants or consumers, though, and some deal with transaction types carried out almost exclusively by one or the other. Part II considers why consumers, on the one hand, and merchants, on the other, are treated specially. In particular, it will focus on risk-spreading, information, and cognition. For each, it places small businesses on the consumer-merchant continuum. Though generalizations are hazardous at best when directed toward as varied a group as small businesses, one can say that many small businesses are more prone to problems with risk-spreading, information cost, and cognitive defect than their larger counterparts, without the self-correcting mechanisms that size can bring. They thus resemble consumers to a great degree, not the larger firms with which they are legally grouped. Part III will look at how the law could deal with small businesses, given their status between consumers and merchants. One possibility is to treat *all* businesses like consumers – put otherwise, use a uniform rule designed primarily for consumers. More moderately, one could merely treat *small* businesses like consumers. Another is to divide the merchant category into small and not-small, with the small merchant treated more like a consumer. Still another is to abandon the bright-line distinctions, save in the easiest cases, and use a market basket of standards to give contracting parties greater or lesser protections case by case. Each of these methods has strengths and weaknesses. A conclusion suggests areas in which these approaches might be useful, taking into account the empirical and theoretical rationales developed earlier.

I. SOME CONTRACTS DICHOTOMIES

What follows is far from a complete list of rules that give either consumers or merchants special status. A complete list would add little if anything to the analysis but much to the length. Those laid out here are at least relatively prominent and, more to the point, show with some clarity

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This Article need not decide whether these points are well taken. Even if they are, at most they speak against treating small businesses especially well because they are small, or entrepreneurs especially well because they are entrepreneurs. They do not generally favor imposing taxes indiscriminately upon small businesses, as these false dichotomies effectively do. I should add that I recognize the force of Professor Pierce's arguments, but think they are overstated and to a degree misdirected – alas, for reasons too extensive to lay out in the margin. *See, e.g.,* David B. Audretsch, *Small Firms and Efficiency, in* ARE SMALL FIRMS IMPORTANT?: THEIR ROLE AND IMPACT 21, 31-33 (Zoltan J. Acs ed., 1999) [hereinafter ARE SMALL FIRMS IMPORTANT?]; Bo Carlsson, *Small Business, Entrepreneurship, and Industrial Dynamics, in* ARE SMALL FIRMS IMPORTANT?, *supra,* at 99, 100-103. Sang V. Nguyen & Seung-Hoon Lee, *Returns to Scale in Small and Large U.S. Manufacturing Establishments: Further Evidence,* 19 SMALL BUS. ECON. 41, 41 (2002). A much more nuanced analysis is C. Steven Bradford, *Does Size Matter? An Economic Analysis of Small Business Exemptions from Regulation,* 8 J. SMALL & EMERGING BUS. L. 1 (2004).

the sorts of policies underlying the dichotomies.[9]

A. Consumer versus non-consumer (usually merchant)

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[9] One other division warrants brief notice. The Uniform Computer Information Transactions Act (UCITA) contains rules applying only to mass-market licenses. *See, e.g.,* UNIF. COMPUTER INFO. TRANS. ACT §§ 112(e)(3)(B), 209, 304(b)(2), & 704(b) & (d) (2000); *see also* UNIF. COMPUTER INFO. TRANS. ACT § 102(a)(44) (2000) (definition of mass-market transaction). At least in principle, these rules provide greater protections for licensees than do the fairly harsh general rules. Mass-market transactions include, but are not limited to, consumer transactions. The added scope is, however, modest. For a non-consumer transaction to qualify as a mass-market transaction, it must surmount a good many obstacles. The transaction must be a retail transaction in a normal retail quantity. UNIF. COMPUTER INFO. TRANS. ACT § 102(a)(44)(B)(ii) (2000). It must not involve a site license. *Id.* § 102(a)(44)(B)(iii)(III). It must be for information directed toward the general public as a whole. *Id.* § 102(a)(44)(B)(iii)(II). Many businesses, especially small ones, buy some of their routine software off the shelf at the local store, but even then they often will depend on software acquired via purchase orders or software that, though marketed widely, is directed mainly at businesses. For more on the mass-market concept in UCITA, see Jean Braucher, *The Failed Promise of the UCITA Mass-Market Concept and its Lessons for Policing of Standard Form Contracts,* 7 J. SMALL & EMERGING BUS. L. 393 (2003).

UCITA is in force in two states, Maryland and Virginia. MD. CODE ANN. COM. LAW §§ 22-101 to 22-816 (Supp. 2002); VA. CODE ANN. §§ 59.1-501.1 to 509.2 (Michie 2001). Its often controversial provisions and drafting history have led four states, Iowa, North Carolina, Vermont, and West Virginia, to enact statutes that render ineffective choice of law clauses that would apply UCITA. IOWA CODE ANN. § 554.D104(4) (West Supp. 2002); N.C. GEN STAT. ANN. § 66-329 (2001); Act of May 29, 2003, No. 44 (to be codified at VT. STAT. ANN. tit. 20, § 2463a), *available at* http://www.leg.state.vt.us/docs/legdoc.cfm?URL=/docs/2004/acts/Act 044.HTM; W. VA. CODE ANN. § 55-8-15 (Supp. 2002). Faced with massive opposition, including a lack of endorsement by the ABA, NCCUSL recently decided not to seek further enactments of UCITA and to discharge its standby committee. Letter of K. King Burnett to Fellow Commissioners (Aug. 1, 2003), *at* http://www.nccusl.org/nccusl/ucita/KKB_UCITA_letter_8103.pdf. Still, as long as UCITA remains the law of at least one jurisdiction, contractual choice of law provisions may put many software licenses not made in "bomb-shelter" states under its aegis. *See, e.g.,* Amelia H. Boss, *The Jurisdiction of Commercial Law: Party Autonomy in Choosing Applicable Law and Forum Under Proposed Revisions to the Uniform Commercial Code,* 32 INT'L LAW. 1067 (1998); Larry T. Garvin, *The Changed (and Changing?) Uniform Commercial Code,* 26 FLA. ST. U. L. REV. 285, 351 (1999) (referring to UCITA's predecessor, Article 2B of the U.C.C.); Larry E. Ribstein & Bruce H. Kobayashi, *State Regulation of Electronic Commerce,* 51 EMORY L.J. 1 (2002); William J. Woodward, Jr., *Contractual Choice of Law: Legislative Choice in an Era of Party Autonomy*, 54 SMU L. REV. 697 (2001).

UCITA also contains purely consumer provisions, using a conventional definition based on the intended use by the licensor. UNIF. COMPUTER INFO. TRANS. ACT § 102(a)(16) (2000).

The distinction is at the root of most consumer law. Though the precise definition of consumer varies, one finds the idea all over federal law. Examples include the Magnuson-Moss Warranty Act,[10] the Truth-in-Lending Act,[11] the Fair Credit Reporting Act,[12] and the Fair Debt Collection Practices Act,[13] to name just a few. The usual definition of consumer transaction is tied to personal, family, or household use.[14] Sometimes this relates to the transaction itself, as in the Consumer Leasing Act,[15] though more often it relates to the normal use of the goods or services in question, as in Magnuson-Moss. At times the definition applies simply to a natural person.[16] In any case, merchant transactions usually are excluded. Corporations and partnerships are not natural people, so they fall out of that set of definitions. They almost always are when the statute focuses on the transaction. Where the focus is on the normal use of the goods or services, then merchants may still be covered if they purchase goods ordinarily bought by consumers.[17] Goods only infrequently used by consumers are, however, outside that definition.[18]

Similar statutes appear in state law. At least some state unfair and deceptive acts and practices statutes apply only to consumer transactions, adopting the usual definition of personal, family, or household use.[19] The Uniform Commercial Code occasionally uses the concept as well. Though current Article 2 does not deal with consumers as such, Amended Article 2 has a good

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[10] 15 U.S.C. §§ 2301-2312 (2000).

[11] 15 U.S.C. §§ 1601-1667e (2000).

[12] 15 U.S.C. §§ 1681-1681t (2000).

[13] 15 U.S.C. §§ 1692-1692o (2000).

[14] *See, e.g.,* 15 U.S.C. §§ 2301(1), (3) (2000) (definitions of "consumer product" and "consumer" in Magnuson-Moss); 15 U.S.C. § 1602(h) (2000) (definition of "consumer" for Truth-in-Lending Act).

[15] 15 U.S.C. § 1667(1) (2000). *See also* UNIF. CONSUMER LEASES ACT §§ 102(a)(2)(B) & 104(a) (2001) (scope of Act limited to consumer leases, which are defined partly in terms of the lessee's intended use for personal, family, or household purposes).

[16] *See, e.g.,* 15 U.S.C. § 1681a(c) (Fair Credit Reporting Act); 15 U.S.C. § 1692a(3) (2000) (Fair Debt Collection Practices Act).

[17] This definition is read broadly. 16 C.F.R. § 700.1(a) (2002).

[18] *See, e.g.,* Louisiana Nat'l Leasing Corp. v. ADF Serv., Inc., 377 So. 2d 92 (La. 1979) (office copying machine not a consumer product).

[19] *See* JONATHAN SHELDON & CAROLYN L. CARTER, UNFAIR AND DECEPTIVE ACTS AND PRACTICES § 2.1.8 (5th ed. 2001).

many consumer provisions or exceptions.[20] Article 2A on leases has a number of provisions that apply only to consumer leases.[21] Article 9 has an unusual arrangement – some provisions, especially in the remedial sections, apply only to non-consumer transactions, but consumer transactions are left unresolved.[22] (This reflects an odd set of political compromises made late in the drafting process.)[23]

B. Merchant versus non-merchant (often consumer)

This is a less common dichotomy, but it is common enough for our purposes. Two major uses bear mention.[24] One is CISG, which does not govern sales of goods bought for personal, family, or household use, save where the seller neither knew nor should have known that the goods were thus bought.[25] Practically speaking, this leaves consumers entirely excluded from its

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20 U.C.C. §§ 2-103(c), 2-108(b), 2-316(2) & (3), 2-502(1)(a), 2-508(1) & (2), 2-710(3), 2-716(1), 2-718(1), 2-725(1) (2003).

21 U.C.C. §§ 2A-106, -108(2), -108(4), -109(2), -221, -309, -406, -407, -504(3)(b), & -516(3)(b) (2001); *see also* U.C.C. § 2A-103(1)(e) (2001) (defining consumer lease).

22 U.C.C. §§ 9-612, -613, & -626 (2001). Article Nine also has rules applying specifically to consumer transactions. *See, e.g.,* U.C.C. §§ 9-108, -403(d), -404(d), -614, & -616 (2001).

23 A more or less official account of these may be found at Steven L. Harris & Charles W. Mooney, Revision of Uniform Commercial Code Article 9 – Secured Transactions, Reporters' Prefatory Comments (August 1998) 12-15, *available at* http://www.law.upenn.edu/bll/ulc/ucc9/ann98pr.htm. For a somewhat more jaundiced view, see Jean Braucher, *Deadlock: Consumer Transactions under Revised Article 9,* 73 AM. BANKR. L.J. 83 (1999).

24 Perhaps one should add that much commercial law applies only to merchants – not because consumers are barred from its rule, but because only merchants do some things. Not many consumers invoke the portions of the Uniform Commercial Code governing letters of credit, warehouse receipts, or bills of lading, for instance. One might compare contracting principles in these areas to those in more homely counterparts to see whether these rules show sterner mercantile standards. Certainly this is not improbable. Even a quick look at Article Five of the U.C.C., governing letters of credit, suggests that it is most unsympathetic to the careless or ignorant, more so than, say, the corresponding provisions of Article Three on negotiable instruments. Developing this thesis goes well beyond the scope of this Article.

25 C.I.S.G. Art. 2(a).

scope. The other is Article 2 of the U.C.C., which has several rules applying only to merchants.[26] These do not have uniform application, as the comments tell us. In particular, the definition as used in the merchantability warranty is relatively narrow, excluding even merchants who lack sufficient expertise with the product.[27] The other senses of the word, however, are more closely linked to ordinary business functions, and should leave out of the scope no serious businesspeople – really, very few people other than consumers.[28] This fits their main effects. The merchant rule in the Article Two Statute of Frauds, for instance, allows a confirmatory letter to satisfy the Statute of Frauds against the recipient if the recipient does not respond with a written objection within ten days.[29] Here the merchant has no particular expertise that makes a sterner rule apt; rather, the merchant is assumed to read and answer her mail regularly, and is treated as though she does so.[30]

II. CONSUMERS, MERCHANTS, AND SMALL BUSINESSES: AN ANALYTICAL FRAMEWORK

Contract law, particularly its statutory component, is thus rife with formal distinctions

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26 U.C.C. §§ 2-103(1)(b), -201(2), -205, -207(2), -209(2), -314, -327(1)(c), -509(3), -603, -605, & -609 (2001); *see also* U.C.C. § 2-104(1) (2001) (defining merchant). Amended Article 2 removes the merchant rules in § 2-207 and 2-509 and creates no new ones.

27 U.C.C. § 2-104 cmt. 2 (2001); *see also, e.g.,* Olson v. U.S. Indus., Inc., 649 F. Supp. 1511 (D. Kan. 1986); Donald v. City Nat'l Bank, 329 So. 2d 92 (Ala. 1976); Zanzig v. H.P.M. Corp., 480 N.E.2d 1204 (Ill. App. Ct. 1985); Gavula v. ARA Servs., Inc., 756 A.2d 17 (Pa. Super. Ct. 2000).

28 This leaves aside the line of cases holding that farmers are not merchants. *See, e.g.,* Loeb & Co. v. Schreiner, 321 So. 2d 199 (Ala. 1975); Cook Grains, Inc. v. Fallis, 395 S.W.2d 555 (Ark. 1965); Harvest States Coops. v. Anderson, 577 N.W.2d 381 (Wis. Ct. App. 1998). *But see, e.g.,* Colo.-Kan. Grain Co. v. Reifschneider, 817 P.2d 637 (Colo. Ct. App. 1991) (farmer a merchant); Campbell v. Yokel, 313 N.E.2d 628 (Ill. App. Ct. 1974) (same); Ohio Grain Co. v. Swisshelm, 318 N.E.2d 428 (Ohio Ct. App. 1973) (same). These are hard to explain, save by a rather quaint notion of the farmer as naïf, not as agribusiness CEO. *But see* Ingrid Michelsen Hillinger, *The Article 2 Merchant Rules: Karl Llewellyn's Attempt to Achieve the Good, the True, the Beautiful in Commercial Law,* 73 GEO. L.J. 1141, 1176-79 (1985) (Karl Llewellyn distinguished farmers from merchants).

29 U.C.C. § 2-201(2) (2001).

30 U.C.C. § 2-104 cmt. 2 (2001) (this section and the other merchant rules in Part 2 of Article 2 "rest on normal business practices which are or ought to be typical of and familiar to any person in business").

between consumers and non-consumers and between merchants and non-merchants. Usually these collapse into distinctions between consumers and merchants. If we start from an assumption of legal equality, though, why draw these distinctions? Leaving aside incompetents and infants, we all presumably can contract freely. True, some of us may be put in positions where free assent is an issue, but doctrines such as duress, mistake, misrepresentation, and non-disclosure can guard against these.[31] Giving special rights to consumers or placing special duties on merchants smacks of a status-driven world, much the sort Sir Henry Maine thought was left behind by legal progress.[32]

Perhaps we can explain the distinctions by considering, if only for a moment, some stereotypes, not to say parodies. A consumer might thus be described as a pitiful wretch, barely able to pull a crumpled wad of greenbacks from his pocket to pay for some meretricious product, lamentably ignorant of the merits of the goods he buys, unable to bargain or even shop – in short, a powerless half-wit whose fundamental incapacity to bargain effectively make him desperately in need of legal protection. From a similar vantage, the merchant counterpart would combine the less savory aspects of Commodore Vanderbilt, Kenneth Lay, and Ebenezer Scrooge. She would command markets from atop huge bags of ill-gotten lucre, cheating, conniving, stealing, and lying for gain or even amusement. Her products would be as shoddy as the market allows, based on her perfect knowledge of how to pinch pennies and cut quality, and her compliance with the law would be grudging at best.

Neither portrait is exactly photographic. Still, both, suitably airbrushed, have some basis in truth. Consumers, normally individuals or, at most, families, cannot be expected to act just like merchants, if we take as a typical merchant a moderately large retailer or manufacturer – what Professor Speidel calls the "strong seller."[33] These differences stem from a few basic causes. First, consumers on average lack the financial resources of merchants. Second, they lack the ability to get and deal with information. Third, they are more prone to cognitive difficulties when they are faced with information potentially pertinent to contracting. These three differences, I contend, explain the consumer-merchant distinction in contract and commercial law. Consumer protections reflect perceived defects in the abilities of consumers to operate in these three realms. Merchant rules reflect perceived skills.

This structure allows us to look analytically at the place of small business in the consumer-merchant continuum. Small businesses are so varied that generalities are necessarily somewhat inaccurate. For that matter, merchants may be prone to some errors that consumers are not. Still, as this section will show, most small businesses fall closer to the consumer side than the merchant side for each of these differences.

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31 It should be noted that these defenses to formation or enforcement themselves may depend on things that correlate with status as merchant or consumer, issues to be discussed later.

32 *See generally* HENRY MAINE, ANCIENT LAW (1861).

33 Richard E. Speidel, *Revising UCC Article 2: A View from the Trenches,* 52 HASTINGS L.J. 607, 617-18 (2001).

A. Resources

To start with the obvious – a typical consumer does not have the resources of a typical business, leaving aside Warren Buffett, Bill Gates, and other especially prosperous folk. This has a few consequences. We may group these by whether they affect market power, financing and risk, or information, each with its own regulatory scheme.

That an individual consumer lacks market power may matter little in a competitive market. In a reasonably responsive market, consumer desires should shortly appear in price or terms. This may not be true in monopoly or oligopoly, though.[34] American antitrust law reflects this in its focus on consumer welfare.[35] Sometimes antitrust notions inform consumer law as well. A notable example is *Henningsen v. Bloomfield Motors,*[36] in which the court used unconscionability to invalidate a remedies limitation, largely because of the inability to secure better terms resulting, it held, from the oligopolistic auto market.[37] To some degree, usury laws and the like may also reflect a concern about exploitation and rent exaction in credit markets.[38]

The consumer also lacks the merchant's ability to spread risk cost-effectively. In particular, self-insurance is not nearly as good an option for an individual as for a business. With

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[34] On the other hand, even a monopolist may be forced to price her goods competitively, whether because of market elasticity, low entry barriers, or the ability of consumers to delay purchases in hopes of securing better prices. *See, e.g.,* Gillian K. Hadfield et al., *Information-Based Principles for Rethinking Consumer Protection Policy,* 21 J. CONSUMER POL'Y 131, 135-37 (1998).

[35] Interestingly, the competition law of EU member states looks much more closely at the effects of monopoly or oligopoly on small business. *See, e.g.,* Jochim Sedemund, *The Impact of Recent Amendments to German Cartel Law, in* 1 INTERNATIONAL ANTI-TRUST LAW: A REVIEW OF NATIONAL LAWS 66, 67 (Julian Maitland-Walker ed., 1984). I am indebted to Russell Weintraub for this observation.

[36] 161 A.2d 69 (N.J. 1960).

[37] *Id.* at 87-94. Since then, of course, bargaining over warranty and to a point remedy has become standard, as durable goods manufacturers realized the huge potential profits from competition (though, at least in the auto industry, not until foreign competition obliged them to act). One could ask whether unbalanced bargaining power is an appropriate basis for unconscionability. *See* Alan Schwartz, *Seller Unequal Bargaining Power and the Judicial Process,* 49 IND. L.J. 367, 385 & n. 41 (1974). For a thorough treatment of the contrary position, see Daniel D. Barnhizer, Inequality of Bargaining Power (July 29, 2004), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=570705.

[38] *See, e.g.,* Eric Posner, *Contract Laws in the Welfare State: A Defense of the Unconscionability Doctrine, Usury Laws, and Related Limitations on the Freedom to Contract,* 24 J. LEGAL STUD. 283 (1995).

fewer transactions, the consumer cannot assume that routine fluctuations will average smoothly. With fewer assets, the consumer cannot assume that she will be able to weather an unusually bad bit of luck well.[39] Consumers can and do buy third-party insurance, as do businesses, but even then the types of insurance and their costs vary greatly. Some consumers are able to contract on favorable terms because their employers or their unions provide the bargaining power, and some get subsidized insurance of some types, mainly for personal injury. For economic loss or property loss, however, subsidies are relatively rare, and businesses may be able to secure superior rates.

Individuals also may be more prone to liquidity crunches. We cannot float our own commercial paper issues or sell stock in ourselves, except in the world of operetta.[40] Nor do many of us have credit lines on which we can draw readily. To be sure, consumers have access to credit cards, which provide potentially huge unsecured credit lines, and home equity loans and the like can increase one's liquidity. Still, the individual bankruptcy rate exceeds the business bankruptcy rate, which follows from the greater susceptibility of consumers to fluctuations in financial status and to risk generally.[41]

This problem is dealt with to some degree by consumer law. Many regulatory statutes focus on consumer credit. Usury laws limit interest rates in some types of loans in order to keep consumers from entering into potentially dangerous financial arrangements, though perhaps at the cost of limiting their liquidity.[42] So too, with less effect, do laws on payday loans and the like.[43] Another strand of consumer law requires that the terms, especially interest rates and repayment terms, be laid out clearly and uniformly.[44] This has a number of causes, some to be discussed later under information. Here, though, plain and readily comparable information should in principle allow consumers to choose soundly among credit providers. Hence as well the current efforts on the part of credit card lenders and others to change the bankruptcy laws in order to make discharge harder.

More important is the relative smallness of the consumer as market participant.

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[39] On the susceptibility of individuals to relatively modest reversals in fortune, see TERESA A. SULLIVAN, ELIZABETH WARREN, & JAY LAWRENCE WESTBROOK, THE FRAGILE MIDDLE CLASS: AMERICANS IN DEBT (2000).

[40] Namely, Gilbert & Sullivan's *Utopia, Limited.*

[41] Thus, for instance, in 2003 there were 1,660,245 individual bankruptcies and only 35,037 business bankruptcies, not in proportion to the people and businesses in the U.S. Administrative Office of the U.S. Courts, *Bankruptcy Filings Up for Calendar Year 2003,* at 1 (Feb. 25, 2004), *available at* http://www.uscourts.gov/Press_Releases/pr02252004.pdf.

[42] *See, e.g.,* RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW 117 (6th ed. 2003).

[43] *See, e.g.,* Creola Johnson, *Payday Loans: Shrewd Business or Predatory Lending?,* 87 MINN. L. REV. 1 (2002).

[44] As in the Federal Truth in Lending Act, 15 U.S.C. §§ 1601 et seq.

Consumers engage in some transactions often, developing expertise with price, quality, and the like. There they stand more or less on par with merchants, and may even be superior (though, of course, the merchants in their non-mercantile capacity are consumers). Other transactions may happen once in a year, a decade, or a lifetime. There is no chance to amortize information costs over a number of transactions. The same goes for legal advice. In contrast, merchants are classically repeat players – indeed, occasional sellers often are not considered merchants.[45] By definition, then, they have more transactions from which they can gather information and over which they can spread the costs of getting information.[46]

From the vantage of resources, small businesses are closer to consumers than large businesses under any normal definition of small businesses. Two observations may anchor this discussion. First, the median business in the U.S. – not just small business – has gross receipts of less than half a million dollars per year.[47] Second, most small businesses are financially entwined with their founders. The founders typically put up most of the money to start the business, taking some combination of equity and debt in exchange.[48] To finance the business, the founders will often mortgage their homes, draw down their savings, and use their personal credit cards.[49] Even should the business borrow from a bank, the bank will often require that the founders guarantee the loan with their personal assets.[50] In short, small businesses resemble in many ways overextended consumers.

This has many consequences. Small firms cannot self-insure as effectively as large businesses, so they cannot spread risk as effectively across their transactions. They can seek to

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45 *See, e.g.,* Acevedo v. Start Plastics, Inc., 834 F. Supp. 808, 812-13 (E.D. Pa. 1993); Frantz v. Cantrell, 711 N.E.2d 856, 859 (Ind. Ct. App. 1999); Dixon v. Roberts, 853 P.2d 235, 238 (Okla. Ct. App. 1993); Fred J. Moore, Inc. v. Schinmann, 700 P.2d 754, 756-57 (Wash. Ct. App. 1985).

46 *See, e.g.,* Bradford, *supra* note 8, at 8-15. Access to information will be developed further below in Part II.B.

47 U.S. Census Bureau, *Statistics about Business Size (including Small Business) from the Census Bureau* at table 3 (Aug. 2004), *available at* http://www.census.gov/epcd/www/smallbus.html (1992 data showing median gross receipts of just over $250,000 per year).

48 *See, e.g.,* JUSTIN G. LONGENECKER ET AL., SMALL BUSINESS MANAGEMENT: AN ENTREPRENEURIAL EMPHASIS 239 (7th ed. 2000) (79% of fastest-growing small firms in the U.S. used personal savings to start their businesses; no other source was used by more than 16%).

49 On credit card use, see, e.g., JONATHAN A. SCOTT ET AL., CREDIT, BANKS AND SMALL BUSINESS – THE NEW CENTURY 27-30 (2003), *available at* http://www.nfib.com/PDFs/sbpoll/NewCentury.pdf.

50 *Id.* at 59.

buy insurance, but they may not be able to get the same rates as larger firms, whether because of greater uncertainty on the part of the insurer or because of the need by the insurer to recover fixed underwriting costs. For those reasons, they may be unable to get some types of insurance, such as product liability insurance, at affordable rates.[51] In addition, they cannot amortize legal, planning, and research costs over as many transactions, lacking economies of scale, so they may not operate on the same level of sophistication as their larger competitors.

Smaller size poses many financial problems as well. Small firms have poorer access to credit markets. Some types of credit, such as commercial paper, are not available to them in part because the costs of an issue are too high for the amount of money it would produce.[52] Much the same is true for the equity market. Public issues are prohibitively expensive for small and even medium-sized firms, even after recent SEC rule changes that ease smaller offerings.[53] In any case, many small firms would prefer to avoid the double taxation that attaches to dividends, which effectively forecloses most equity placements. Nor do other lenders make up the difference. Both theory and practice show that the combination of imperfect information and adverse selection will

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[51] Small wonder, then, that a recent survey of small business owners showed that the cost and availability of insurance was most commonly cited as their single most important problem. *Most Important Problem,* SMALL BUS. ECON. TRENDS (Nat'l Fed'n of Indep. Bus., Washington, D.C.), Sept. 2003, at 15, *available at* http://www.nfib.com/PDFs/sbet/sbet09_2003.pdf. *See also, e.g., Business Insurance,* 2 NAT'L SMALL BUS. POLL 1, 3 (2002) (poll showing that cost is the most important insurance problem facing small business and that many small firms go without insurance), *available at* http://www.nfib.com/PDFs/sbpoll/insurance.pdf.

[52] *See, e.g.,* WILLIAM A. MACPHEE, SHORT-TERM BUSINESS BORROWING: SOURCES, TERMS, AND TECHNIQUES 147, 155 (1984) (usual minimum size $1,000,000); Raghuram Rajan & Andrew Winton, *Covenants and Collateral as Incentives to Monitor,* 50 J. FIN. 1113, 1126 & n.11 (1995) (firms issuing commercial paper much larger on average than firms borrowing from banks). Furthermore, for commercial paper to issue the borrower must establish a credit rating from one of the few agencies that rate paper. This in turn normally requires that the borrower have backup lines of credit or that it be large and reputable, neither of which applies to small and cash-poor firms. *See, e.g.,* MACPHEE, *id.* at 147-48; Charles W. Calomiris, *The Motivations for Loan Commitments Backing Commercial Paper,* 13 J. BANKING & FIN. 271, 271 (1989).

[53] To name two: (1) Short-form registration forms are available for stock issues by businesses with revenues of less than twenty-five million dollars per year. 17 C.F.R. §§ 228.20 et seq., 230.405 (2004). (2) Regulation D, 17 C.F.R. §§ 230.501 et seq. (2004), among other things, exempts small issuers from registration for issues less than one million dollars in any twelve months, and allows for exemption for up to five million dollars where the investor pool and means of solicitation are somewhat restricted. *See generally* 1 THOMAS LEE HAZEN, SECURITIES REGULATION §§ 3.4[4][D], 4.15, 4.17, 4.20-4.22 (4th ed. 2002); Mark A. Sargent, *The New Regulation D: Deregulation, Federalism and the Dynamics of Regulatory Reform,* 68 WASH. U. L.Q. 225 (1990).

cause lenders to ration credit, so that borrowers cannot borrow up to the point that their interest rate equals their expected rate of return.[54] Thus, like consumers, small businesses are especially susceptible to sudden shocks – particularly problems that beset the proprietor, but not necessarily.[55]

B. Information

Here we have two questions – whether information is available at all and what the cost is for the available information. As Herbert Simon has observed, both information and its assimilation are costly, so we must make decisions based on incomplete information. This does not mean that we act irrationally. As Simon put it, we are "*intendedly* rational, but only *limitedly* so."[56] Hence his idea of bounded rationality.[57] In order to make reasonably good decisions, we

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[54] For fuller discussions of credit rationing, see, e.g., Amy C. Bushaw, *Small Business Loan Pools: Testing the Waters,* 2 J. SMALL & EMERGING BUS. L. 197, 207-209 (1998); Larry T. Garvin, *Credit, Information, and Trust in the Law of Sales: The Credit Seller's Right of Reclamation,* 44 UCLA L. REV. 247, 282-94 (1996).

[55] The most comprehensive study of business bankruptcy found that 17% of bankruptcies arose from personal problems of the business owner and another 10% from other calamities. Elizabeth Warren & Jay Lawrence Westbrook, *Financial Characteristics of Businesses in Bankruptcy,* 73 AM. BANKR. L.J. 499, 560-61 (1999). In addition, about half of those who identified business reasons for bankruptcy identified personal problems, calamities, or disputes with specific creditors as joint causes. *Id.* at 558. Studies of credit rationing also suggest that macroeconomic shifts are magnified in rationed credit markets, which makes small businesses especially susceptible to rises in interest rates or perceived increases in risk. *See, e.g.,* Alan S. Blinder, *Credit Rationing and Effective Supply Failures*, 97 ECON. J. 327, 332-36 (1987); Mark Gertler & Simon Gilchrist, *Monetary Policy, Business Cycles, and the Behavior of Small Manufacturing Firms,* 109 Q.J. ECON. 309 (1994); N. Gregory Mankiw, *The Allocation of Credit and Financial Collapse,* 101 Q.J. ECON. 454, 467-69 (1986).

[56] HERBERT A. SIMON, ADMINISTRATIVE BEHAVIOR xxiv (2d ed. 1957) (emphasis in original).

[57] For representative summaries and analyses of Simon's work, see, e.g., HERBERT A. SIMON, MODELS OF BOUNDED RATIONALITY (1982); Herbert A. Simon, *Rationality in Psychology and Economics, in* RATIONAL CHOICE: THE CONTRAST BETWEEN PSYCHOLOGY AND ECONOMICS 25 (Robin M. Hogarth & Melvin W. Reder eds., 1987); Sidney G. Winter, *Satisficing, Selection, and the Innovating Remnant,* 85 Q.J. ECON. 237 (1971).

take cognitive shortcuts that bring us to more or less acceptable results.[58] We cannot expect to reach perfection, except by happenstance, but we can reach results that at least meet some predetermined level of satisfaction – in other words, we satisfice, again to use Simon's term.[59] As a corollary to this, the more costly the information is to acquire or process, the further from perfection will be the level of satisficing. If information is dear and thus scarce, we will economize on it, relying more on these heuristics and increasing the likelihood and magnitude of error.

With bounded rationality in mind, compare consumers and merchants. In general, consumers have less information than merchants. True, Consumer Reports and its Internet counterparts – Epinions and that ilk – provide much information to the moderately savvy consumer buyer. Experience, one's own or that of friends, will add more anecdotal evidence. But much product quality information is difficult to get – some impossible, unless one has access to a testing laboratory. In contrast, a seller will know all about its own products, whether through its own testing or through feedback from its buyers. Merchants who buy products in large quantities will not have quite as much information as will their sellers, but they will still have more than do relatively infrequent buyers. Such information as design problems, failure rate, and magnitude of failure may thus be difficult or impossible for a consumer to assess accurately, though less so for a merchant buyer and still less for a merchant seller. Likewise, consumers may know little of value about the reliability of a retailer. Again, anecdote may help, as will some personal experience. Especially in these days of remote purchasing via the Internet, though, reputation can be difficult to monitor or affect.[60] Despite imperfect information and imperfect assimilation, though, consumers must still consume. This may yield tolerable but imperfect buying choices, and sometimes intolerable ones.

Another area where information becomes relevant is contract terms. In mass-market

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58 *See, e.g.,* Gordon C. Winston, *Imperfectly Rational Choice: Rationality as the Result of a Costly Activity,* 12 J. ECON. BEHAV. & ORG. 67, 67-68 (1989).

59 JAMES G. MARCH & HERBERT A. SIMON, ORGANIZATIONS 140-41 (1958).

60 The latter is important. Much of the point to building a reputation is its effect on potential customers, and the threat of losing a good reputation or of gaining a bad one is a big constraint upon sellers. Indeed, it may be more important than contract law or consumer law, given how rarely consumers bring suit against shady sellers. *Cf., e.g.,* David A. Charny, *Nonlegal Sanctions in Commercial Relationships,* 104 HARV. L. REV. 375 (1992). If a sleazy seller can appear reputable, which is not difficult over the Internet if one has a slick Web site, then one may get away with sharp practice longer than if one tried the same stunts in a storefront. (Incidentally, the effect may be a sort of lemons market in Web-based selling, with bad merchants driving away customers to such a degree that good merchants cannot survive. *See* George A. Akerlof, *The Market for "Lemons": Quality Uncertainty and the Market Mechanism,* 84 Q.J. ECON. 488 (1970).) Again, Epinions, eBay seller ratings, and the like can help, but anecdotal evidence suggests they are manipulable and manipulated.

transactions, these seldom if ever are drafted by the buyer.[61] The terms are often obscurely written. A good many studies of reading levels show that common form contract language is understandable only by those with graduate degrees, not a fair description of most consumers.[62] We thus find that those who enter into these contracts understand little of what they have signed.[63]

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[61] For an amusing counterexample, see the LiabiliT – a T-shirt that bears pro-consumer boilerplate, which presumably becomes part of any transaction entered into between the wearer and a reader. The shirt may be seen at http://www.whynot.net/merchandise. *See also, e.g.,* Cook's Pest Control, Inc. v. Rebar, 852 So. 2d 730 (Ala. 2002) (consumer's handwritten addendum to contract renewal given effect).

[62] In the most thorough recent study, analysis of 49 English-language Canadian financial services agreements and 11 U.S. financial services agreements showed that the great majority of documents required at least college-level education to understand. Judith A. Colbert et al., *Practice: Assessing Financial Documents for Readability, in* CONSUMERS IN THE FINANCIAL SERVICES SECTOR: PRINCIPLES, PRACTICE AND POLICY – THE CANADIAN EXPERIENCE 31, 53-55, 76-85,137-38, 161-65 (Robert R. Kerton ed., 1998), *available at* http://finserv.taskforce.fin.gc.ca/research/pdf/rr8_v1_e.pdf. *See also, e.g.,* Marilyn T. Baker & Harvey A. Taub, *Readability of Informed Consent Forms for Research in a Veterans Administration Medical Center,* 250 JAMA 2646 (1983) (consent forms for medical research required college-level reading skills to understand); Michael E.J. Masson & Mary Anne Waldron, *Comprehension of Legal Contracts by Non-Experts: Effectiveness of Plain Language Redrafting,* 8 APPLIED COGNITIVE PSYCHOL. 67 (1994) (very low comprehensibility of standard contract language); Ellen M. Moore & F. Kelly Shuptrine, *Warranties: Continued Readability Problems After the 1975 Magnuson-Moss Warranty Act,* 27 J. CONS. AFF. 23 (1993) (median readability of product warranties needing some college education, with a good many needing post-graduate reading skills); Gary R. Morrow, *How Readable Are Subject Consent Forms?,* 244 JAMA 56 (1980) (consent forms for cancer research required college level or greater reading ability to understand); Clyde Scott & James Suchan, *Public Sector Collective Bargaining Agreements: How Readable Are They?,* 16 PUB. PERSONNEL MGMT. 15 (1987) (most clauses written at level of academic and scientific journals, normally requiring at least a graduate education to understand); F. Kelly Shuptrine & Ellen M. Moore, *Even After the Magnuson-Moss Act of 1975, Warranties Are Not Easy to Understand,* 14 J. CONS. AFF. 394 (1980) (same as Moore & Shuptrine, *supra*); Dennis P. Stolle & Andrew J. Slain, *Standard Form Contracts and Contract Schemas: A Preliminary Investigation of the Effects of Exculpatory Clauses on Consumers' Propensity to Sue,* 15 BEHAV. SCIS. & L. 83, 88-89, 92 (1997) (frequent difficulty in understanding exculpatory clauses written at 11th-13th grade level); *cf., e.g.,* James Hartley, *Legal Ease and 'Legalese',* 6 PSYCHOL., CRIME & L. 1 (2000) (reviewing studies of, e.g., jury instructions and statutes).

[63] *See, e.g.,* Jeffrey Davis, *Protecting Consumers from Overdisclosure and Gobbledygook: An Empirical Look at the Simplification of Consumer Credit Contracts,* 63 VA. L. REV. 841, 875-80 (1977); Traci Mann, *Informed Consent for Psychological Research: Do*

Nor does it make sense for a consumer to hire a lawyer as interpreter. The cost of a lawyer greatly exceeds the whole value of most consumer transactions, much less the value of whatever a lawyer could bring to the transaction.[64] And, of course, most contracts are performed in full, making a lawyer cost-ineffective even for common or big-ticket consumer contracts, the purchase of a home possibly excepted.[65] A consumer might also wonder whether learning the details of the terms would help her choose a product more wisely. After all, one typically cannot negotiate for better terms with the seller or manufacturer, and one may doubt that a thorough search would yield materially better terms.[66] Indeed, given the costs of reading and the normally modest value of making the effort, it is little wonder that consumers routinely sign contracts unread.[67]

In contrast, a merchant as seller will be able to draft helpful language and can hire a lawyer to do so, spreading its cost over a good many transactions. Thanks to the battle of the forms,[68] the merchant buyer also has incentives to do so. Even apart from these, the merchant may develop internal expertise in contract language. It also may be able to take advantage of relational norms

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Subjects Comprehend Consent Forms and Understand Their Legal Rights?, 5 PSYCHOL. SCI. 140, 142 (1994); Warren Mueller, *Residential Tenants and Their Leases: An Empirical Study,* 69 MICH. L. REV. 247, 260-63 (1970). Most tellingly, one study of automobile warranties showed that a plurality of new car buyers think they have full warranties, even though a solid majority reported that they understood the warranty coverage fairly well to extremely well. F. Kelly Shuptrine, *Warranty Coverage: How Important In Purchasing an Automobile?, in* MARKETING: FOUNDATIONS FOR A CHANGING WORLD 300 (Brian T. Engelland & Denise T. Smart eds., 1995).

[64] E-lawyering has lowered both the cost of legal services and the difficulty of getting them. Justin Leonard, *Cyberlawyering and the Small Business: When Software Makes Hard Law,* 7 J. SMALL & EMERGING BUS. L. 323 (2003). This development likely will help small businesses somewhat, but not consumers; the marginal value of legal services will still be too small to warrant even this relatively cheap lawyering. Besides, these services seem best adapted to providing legal forms more or less tailored to particular circumstances, which a business might need, not review of another's documents.

[65] *See, e.g.,* Melvin Aron Eisenberg, *The Limits of Cognition and the Limits of Contract,* 47 STAN. L. REV. 211, 243 (1995). A study by Shuptrine confirms this; though new car buyers, if prompted, will say that warranties are important, in fact they rank last in a long list of buying criteria when the same buyers are surveyed more closely. Shuptrine, *supra* note 63.

[66] *See, e.g.,* Michael I. Meyerson, *The Efficient Consumer Form Contract: Law and Economics Meets the Real World,* 24 GA. L. REV. 583, 600 (1990).

[67] *See, e.g.,* Melvin Aron Eisenberg, *Text Anxiety,* 59 S. CAL. L. REV. 305, 309-10 (1986); Mueller, *supra* note 63; Michael S. Wogalter et al., *On the Adequacy of Legal Documents: Factors that Influence Informed Consent,* 42 ERGONOMICS 593, 597-98 (1999).

[68] U.C.C. § 2-207 (2001).

to secure reasonable terms that may not be available to single-shot market participants such as consumers, though of course a reputation among consumers for hard dealing may be costly.[69]

Consumer law deals with information cost and quality variously. At the extreme, many agencies maintain minimum standards and prevent the sale of products not meeting them – the Food and Drug Administration, the Federal Trade Commission, the Consumer Product Safety Commission, and so forth.[70] By providing a means of enforcing minimum quality, however imperfect, the most hazardous of market failures can be guarded against with little information cost to the consumer. Other consumer rules try to lower the cost of information, rather than correct for its cost by absolute bans. Plain language statutes do this, particularly for insurance contracts.[71] Other statutes use simplified forms. Article Nine of the U.C.C., for instance, contains safe-harbor forms for creditors giving their debtors notice of a planned disposition of the collateral. The form for non-consumer transactions is more technical and less complete than the form for consumer transactions.[72] Still other statutes require that certain facts or terms be laid out conspicuously, which reduces a consumer's burden in getting the information. In sales law written disclaimers of warranties must be conspicuous.[73] So too must Truth-In-Lending Act disclosures of such things as annual percentage rate and finance charge.[74] Cooling-off statutes also may indirectly help with information.[75] One of their effects is to allow a buyer to look harder at the transaction and gather more facts before committing to it irrevocably. Finally, many regulations require that sellers disclose information ranging from fat content to octane to tire tread

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69 Relatedly, some auto manufacturers have so-called "secret warranties," where defective products are not recalled, but service departments are given authority to repair or replace the defects when customers ask and when they think good will best served by doing so. *See, e.g.,* Jeff Sovern, *Good Will Adjustment Games: An Economic and Legal Analysis of Secret Warranty Regulation,* 60 MO. L. REV. 323 (1995).

70 *See, e.g.,* 15 U.S.C. § 45(b) (2000) (FTC cease-and-desist orders); 21 U.S.C. § 360h(e) (2000) (FDA recall orders for medical devices).

71 For a fairly recent overview, see Michael S. Friman, *Plain English Statutes: Long Overdue or Underdone?,* 7 LOY. CONSUMER L. REP. 103 (1995).

72 Compare U.C.C. §§ 9-613(5) (2001) (non-consumer transaction) *with* U.C.C. § 9-614(3) (2001) (consumer transaction).

73 U.C.C. § 2-316(2) (2001).

74 15 U.S.C. § 1632(a) (2000); 12 C.F.R. § 226.5(a)(1) (2003).

75 *See, e.g.,* 16 C.F.R. § 429 (2002) (FTC Cooling-Off Period Rule); SHELDON & CARTER, *supra* note 19, § 5.8.2.2, at 399 n.2126 (collecting state cooling-off statutes). For a comparative look, see Pamaria Rekaiti & Roger Van den Bergh, *Cooling-Off Periods in the Consumer Laws of the EC Member States: A Comparative Law and Economics Approach,* 23 J. CONSUMER POL'Y 371 (2000).

to casket price.[76] All of these seek to lower the costs of acquiring or processing the most important information, thus raising the quality of the decisions made. Indeed, one could argue that lowering informational asymmetry has been a prime goal of modern consumer law, even more so than the substantive regulation of contract terms.[77]

On the other side, consider, for instance, the harsh formation rules found in CISG, an almost unadulterated last shot approach.[78] These assume that those involved in international transactions read their forms or are willing to live with the consequences. This may be unrealistic, and it may in part be driven by a desire for certainty – after all, it is not the law of most parties to CISG – but it can explained at least in part by this assumption of informed business practice. Additionally, to some degree the U.C.C. implied warranty of merchantability[79] rests on assumptions about information. In part it assumes that the merchant seller has superior information about product defect and so should be obliged to divulge some to the buyer in the form of disclaimers (hence, the merchantability warranty as an information-forcing default rule).[80] In part it assumes that the buyer from a merchant needs the clear signal of something less than a merchantability warranty, and thus provides for disclaimer under some modest constraints.[81]

Once again, small businesses fall somewhere in the middle, but often more closely resemble consumers than large businesses. As noted, a small business cannot amortize its costs of acquiring information over as many transactions as can a large business. Given a competitive market, then, it will face pressure to acquire less information. It also will generate less internally.

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76 *See, e.g.,* 16 C.F.R. § 228 (2003) (tire description disclosure regulations); 16 C.F.R. § 306 (2003) (octane disclosure regulations); 16 C.F.R. § 453.2(b)(2) (2003) (casket price disclosure regulations); 21 C.F.R. § 101.62 (2003) (fat content disclosure regulations).

77 *See, e.g.,* Hadfield et al., *supra* note 34, at 163.

78 CISG Art. 19(1) seems to state the classic common-law last shot approach. Article 19(2), true, contains something like Article Two's material alteration exception, only drafted to remove the ambiguities present in section 2-207(2). But Article 19(3), by defining material alteration broadly, essentially eliminates what content Article 19(2) had.

79 U.C.C. §§ 2-314, 2A-212 (2001).

80 On information-forcing default rules, see Ian Ayres & Robert Gertner, *Filling Gaps in Incomplete Contracts: An Economic Theory of Default Rules,* 99 YALE L.J. 87 (1989).

81 Signaling has long been part of warranty theory. *See, e.g.,* George Priest, *A Theory of the Consumer Product Warranty,* 90 YALE L.J. 1297 (1981); Michael Spence, *Consumer Misperceptions, Product Failure and Producer Liability,* 44 REV. ECON. STUD. 561 (1977). For a recent study summarizing the evidence for warranty as signal, see Lydia J. Price & Niraj Dawar, *The Joint Effects of Brands and Warranties in Signaling New Product Quality,* 23 J. ECON. PSYCHOL. 165 (2002)

Fewer transactions mean less feedback, which may be vital to get information about relatively infrequent events. This is not always true, of course. Some small businesses are small because they do only one thing, but over and over. They would thus develop a great deal of expertise in that one thing. Still other small businesses come about because the founders are very expert in the pertinent field and wish to exploit their special skills. Even then, the small firm may be unable to afford sufficiently sophisticated information about other issues.

Legal issues may be high among those neglected. Given form contracting, the likely ubiquity of boilerplate terms, and the fairly high probability that any particular contract will be performed, it would not make sense for a small merchant to hire a lawyer to scrutinize all contracts. A small merchant might sensibly hire a lawyer to draft its own forms. Still, the proliferation of inexpensive forms on CD-ROM may cause small firms to use these with minimal adaptation. Often these forms, though adequate for general purposes, do not suffice for the uses to which they are put. Nor is it likely that a small merchant will hire the most sophisticated legal counsel when she does seek assistance. Just as with product information or market information, the costs of legal information must be spread across fewer transactions, which justifies lower legal costs and, to the extent the market works, inferior legal advice.

How small businesses assimilate information is also important. If a firm cannot comprehend the information it receives, then it may well be worse off with the information than without. Consider, for example, formal contracting. Many stock contracts are written obscurely, whether on purpose or out of tradition or sloth.[82] Small businesspeople, like consumers, may be unable to understand contract provisions and may not be able to afford lawyers to explain them. Nor are small businesses entirely free from the welter of regulations and reports that flood modern businesses, not all of them drafted with clarity in mind. Demographic studies of small businesspeople show that they are somewhat less well educated than corporate managers – by about two years, in one study,[83] and not too far removed from the population as a whole.[84] Moreover, they tend to hire people less educated than the employees of large firms.[85] These data

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[82] There are plausible reasons to retain even the hoariest forms, though. *See, e.g.,* Claire A. Hill, *Why Contracts Are Written in "Legalese,"* 77 CHI.-KENT L. REV. 59 (2001).

[83] Robert H. Brockhaus & Walter R. Nord, *An Exploration of Factors Affecting the Entrepreneurial Decision: Personal Characteristic vs. Environmental Conditions,* 39 PROC. ANN. MEETING ACAD. MGMT. 364, 366 (1979). *See also* BUREAU OF THE CENSUS, U.S. DEP'T OF COMMERCE, 1992 ECONOMIC CENSUS: CHARACTERISTICS OF BUSINESS OWNERS 72, 74 (1997) (owners of small firms less well educated than owners of large firms).

[84] Though somewhat better educated. *See* 1992 ECONOMIC CENSUS, *supra; see also, e.g.,* George W. Haynes & Charles Ou, A Profile of Owners and Investors of Privately Held Businesses in the United States, 1989-1998 (Apr. 25-26, 2002), *available at* http://www.sba.gov/advo/stats/wkp02co.pdf.

[85] U.S. SMALL BUSINESS ADMINISTRATION, OFFICE OF ADVOCACY, CHARACTERISTICS OF SMALL BUSINESS EMPLOYERS AND OWNERS 1997 6-8 (1998).

paint far too broadly, of course. High-tech firms are hardly the same as gas stations or janitorial firms, either in the typical education of the owner or of the employees. On balance, though, small business owners and their key employees look much more like the general population than do corporate middle managers, and will thus be more prone than larger firms to information problems.

C. Cognition

The section above does not assume perfect rationality, but, as the quote from Simon suggests, it assumes that actors are as rational as they can afford to be. But what if economic actors make systematic errors when dealing with information? Should all actors make the same errors, perhaps there would be little economic result.[86] If some actors make more mistakes than others, though, there is room for market failure, with those less prone to error taking advantage of those more prone.[87] Supplying more information, the usual remedy of consumer law, may thus prove ineffective.[88]

By now cognitive psychology and experimental economics are very well established, as a look at recent Nobel Prizes in economics will show.[89] The experimental literature has shown many departures from conventional expected utility theory – enough to warrant the comment that

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[86] Not necessarily. Even random error can yield systematic error. A relatively famous instance is the "winner's curse." Suppose bidders at an auction err randomly in the value they assign what is auctioned. Assuming that they seek the same profit – that is, that they will underbid by a constant percentage – then the winner will be the bidder who overestimates the value most. Unless one underbids by enough to allow for this sort of error, winning can be worse than losing. This has been demonstrated in a range of contexts, including bids for oil rights. RICHARD H. THALER, THE WINNER'S CURSE 50-62 (1992); *see also, e.g.,* Larry T. Garvin, *Disproportionality and the Law of Consequential Damages: Default Theory and Cognitive Reality,* 59 OHIO ST. L.J. 339, 392-94 (1998) (describing effect of random error on risk pricing).

[87] A point made by a number of authors. *See, e.g.,* Garvin, *supra* note 86, at 394-97; Jon D. Hanson & Douglas A. Kysar, *Taking Behavioralism Seriously: Some Evidence of Market Manipulation,* 112 HARV. L. REV. 1420 (1999) [hereinafter Hanson & Kysar, *Evidence*]; Jon D. Hanson & Douglas A. Kysar, *Taking Behavioralism Seriously: The Problem of Market Manipulation,* 74 N.Y.U. L. REV. 630 (1999) [hereinafter Hanson & Kysar, *Problem*].

[88] *See, e.g.,* Eduardo Engel, *Consumer Protection Policies and Rational Behavior,* 10 REVISTA DE ANÁLISIS ECONÓMICO 183 (1995); Norman I. Silber, *Observing Reasonable Consumers: Cognitive Psychology, Consumer Behavior and Consumer Law,* 2 LOY. CONS. L. RPTR. 69 (1990).

[89] Most recently Daniel Kahneman and Vernon Smith, but before them George Akerlof and Herbert Simon.

if expected utility theory "is an empirical, testable theory, then it is, in any conventional sense, untrue."[90] Though legal academics took a decade or so to begin using their findings at all regularly, for the last ten or fifteen years this has become relatively common, with many books and symposia devoted to both methodological explorations and specific applications.[91] Contract law has not been immune.[92] Nor should it. After all, much of contracting is risk allocation, an area particularly prone to cognitive error. Given the present ubiquity of behavioral law and economics, to use the field's most common name, I shall not rehearse problems of method.[93] For

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[90] PAUL ANAND, FOUNDATIONS OF RATIONAL CHOICE UNDER RISK 19 (1993); *see also, e.g.,* Kenneth J. Arrow, *Risk Perception in Psychology and Economics,* 20 ECON. INQUIRY 1, 1 (1982) ("Hypotheses of rationality have been under attack for empirical falsity almost as long as they have been employed in economics.").

[91] *See, e.g.,* BEHAVIORAL LAW AND ECONOMICS (Cass R. Sunstein ed., 2000); Symposium, *Legal Implications of Human Error,* 59 S. CAL. L. REV. 225 (1986); Symposium, *The Legal Implications of Psychology: Human Behavior, Behavioral Economics, and the Law,* 51 VAND. L. REV. 1499 (1998); Christine Jolls et al., *A Behavioral Approach to Law and Economics,* 50 STAN. L. REV. 1471 (1998); Russell B. Korobkin & Thomas S. Ulen, *Law and Behavioral Science: Removing the Rationality Assumption from Law and Economics,* 88 CAL. L. REV. 1051 (2000).

[92] *See, e.g.,* Eisenberg, *supra* note 65; William N. Eskridge, *One Hundred Years of Ineptitude: The Need for Mortgage Rules Consonant with the Economic and Psychological Dynamics of the Home Sale and Mortgage Transaction,* 70 VA. L. REV. 1083 (1984); Garvin, *supra* note 86; Larry T. Garvin, *Adequate Assurance of Performance: Of Risk, Duress, and Cognition*, 69 U. COLO. L. REV. 71 (1998); Russell Korobkin, *The Status Quo Bias and Contract Default Rules,* 83 CORNELL L. REV. 608 (1998) [hereinafter Korobkin, *Status Quo*]; Russell Korobkin, *Bounded Rationality, Standard Form Contracts, and Unconscionability,* 70 U. CHI. L. REV. 1203 (2003) [hereinafter Korobkin, *Unconscionability*]; Paul Bennett Marrow, *Crafting a Remedy for the Naughtiness of Procedural Unconscionability,* 34 CUMB. L. REV. 11 (2003-2004); Robert Prentice, *Contract-Based Defenses in Securities Fraud Litigation: A Behavioral Analysis,* 2003 U. ILL. L. REV. 337 (2003); Silber, *supra* note 88.

[93] Others have, most importantly Gregory Mitchell. Gregory Mitchell, *Case Studies, Counterfactuals, and Causal Explanations,* 152 U. PA. L. REV. 1517 (2004); Gregory Mitchell, *Taking Behavioralism Too Seriously? The Unwarranted Pessimism of the New Behavioral Analysis of Law,* 43 WM. & MARY L. REV. 1907 (2002) [hereinafter Mitchell, *Pessimism*]; Gregory Mitchell, *Tendencies Versus Boundaries: Levels of Generality in Behavioral Law and Economics,* 56 VAND. L. REV. 1781 (2003); Gregory Mitchell, *Why Law and Economics' Perfect Rationality Should Not Be Traded for Behavioral Law and Economics' Equal Incompetence,* 91 GEO. L.J. 67 (2002) [hereinafter Mitchell, *Rationality*]. *See also, e.g.,* Jennifer Arlen, *Comment: The Future of Behavioral Law and Economics,* 51 VAND. L. REV. 1765 (1998); Ward Edwards & Detlof von Winterfeldt, *Cognitive Illusions and Their Implications for the Law,* 59 S. CAL. L.

the sake of illustration, this Article will mention several of the more common heuristics and biases, along with how they apply to contracting and its regulation, before turning to how consumers and merchants might exhibit them differently.

1. Some pertinent cognitive failings

a. Over-optimism and overconfidence

Over-optimism is one of the more robust cognitive errors. It shows up in many, many populations: investors,[94] investment analysts,[95] entrepreneurs,[96] businesses,[97] and consumers,[98] to

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REV. 225 (1986); Richard A. Posner, *Rational Choice, Behavioral Economics and the Law,* 50 STAN. L. REV. 1551 (1998); Tanina Rostain, *Educating* Homo Economicus*: Cautionary Notes on the New Behavioral Law and Economics Movement,* 34 L. & SOC'Y REV. 973 (2000); Robert E. Scott, *The Limits of Behavioral Theories of Law and Social Norms,* 86 VA. L. REV. 1603, 1639-46 (2000).

In relegating the critiques to a stringcite, I do not wish to brush them aside. Not all the heuristics and biases affect most people; not all populations are equally susceptible to these biases; not all of the effects are especially great; not all of the more robust and widespread effects are immutable. To some extent this Article deals with these critiques, especially the last. In the main, though, the more detailed critiques of method and substance properly belong in discussions of specific proposals for law reform, not in a discussion of a general analytic approach. For now, it is enough to point out the fairly strong evidence for cognitive error over a range of populations and behavioral functions.

94 *See, e.g.,* Michael Hertzel et al., *Long-Run Performance Following Private Placements of Equity,* 57 J. FIN. 2595 (2002) (overoptimism about prospects of firms issuing equity); Don A. Moore et al., *Positive Illusions and Forecasting Errors in Mutual Fund Investment Decisions,* 79 ORG. BEHAV. & HUM. DECISION PROCESSES 95 (1999) (MBA students in simulation); Arnold S. Wood, *Behavioral Risk: Anecdotes and Disturbing Evidence,* J. INVESTING, Spring 1997, at 8.

95 *See, e.g.,* John C. Easterwood & Stacey R. Nutt, *Inefficiency in Analysts' Earnings Forecasts: Systematic Misreaction or Systematic Optimism?,* 54 J. FIN. 1777 (1999).

96 *See, e.g.,* KENNETH R. MACCRIMMON & DONALD A. WEHRUNG, TAKING RISKS 99, 194-95, 260-65 (1986); Leslie E. Palich & D. Ray Bagby, *Using Cognitive Theory to Explain Entrepreneurial Risk-Taking: Challenging Conventional Wisdom,* 10 J. BUS. VENTURING 425 (1995).

97 *See, e.g.,* Richard Z. Gooding et al., *Fixed Versus Variable Reference Points in the Risk-Return Relationship,* 29 J. ECON. BEHAV. & ORG. 331 (1996) (business over-optimism

name but a few.[99] Its effect upon risk allocation is obvious and potentially severe. An over-optimistic consumer may underestimate the likelihood that a product will fail or that a seller will not honor its warranty or otherwise fix the problem. As a result, that consumer may pay too much for the quality part of the goods package. Along the same lines, a borrower may be too optimistic about her chances of paying back a loan, and thus may not worry much about high penalties or strict default covenants.

Closely related is overconfidence. Again, many populations show overconfidence, even those whose expertise should lend immunity.[100] Consumers are certainly in this realm.[101] So are

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about expected returns); Jakob Brøchner Madsen, *Tests of Rationality Versus an"Over Optimist" Bias,* 15 J. ECON. PSYCHOL. 587 (1994) (manufacturing firm over-optimism about anticipated production).

[98] *See, e.g.,* W. KIP VISCUSI & WESLEY A. MAGAT, LEARNING ABOUT RISK 94-95 (1987) (3% of consumers think their homes pose a higher than average risk to a child of poisoning with drain cleaner).

[99] For a few more studies of different populations, see, e.g., K. Patricia Cross, *Not Only Can, But Will College Teaching be Improved?,* 17 NEW DIRS. FOR HIGHER ED. 1 (1977) (94% of college professors think they are better than average); Patricia Delhomme, *Comparing One's Driving with Others': Assessment of Abilities and Frequency of Offences. Evidence for a Superior Conformity of Self-Bias?,* 23 ACCIDENT ANAL. & PREVENTION 493 (1991) (drivers); Neil D. Weinstein, *Unrealistic Optimism About Susceptibility to Health Problems: Conclusions from a Community-Wide Sample,* 10 J. BEHAV. MED. 481 (1987) (general population on susceptibility to health problems); Neil D. Weinstein, *Unrealistic Optimism About Future Life Events,* 39 J. PERSONALITY & SOC. PSYCHOL. 806 (1980) (college students on likelihood of owning homes, divorcing, drinking excessively, and liking their jobs). For a survey of the over-optimism literature, see Neil D. Weinstein, *Optimistic Bias About Personal Risks,* 246 SCIENCE 1232 (1989).

[100] *See, e.g.,* R.M. Cambridge & R.C. Shreckengost, *Are You Sure? The Subjective Probability Assessment Test* (CIA 1978), *described in* Sarah Lichtenstein et al., *Calibration of Probabilities: The State of the Art to 1980, in* JUDGMENT UNDER UNCERTAINTY: HEURISTICS AND BIASES 306, 314 (Daniel Kahneman et al. eds., 1982) [hereinafter JUDGMENT] (CIA analysts); Stuart Oskamp, *Overconfidence in Case-Study Judgments, in* JUDGMENT at 287 (psychologists); Andrea O. Baumann et al., *Overconfidence among Physicians and Nurses: The 'Micro-Certainty, Macro-Uncertainty' Phenomenon,* 32 SOC. SCI. MED. 167 (1991) (physicians and nurses). It should be added that the least able tend to be the most overconfident, which is less than comforting. *See, e.g.,* Justin Kruger & David Dunning, *Unskilled and Unaware of It: How Difficulties in Recognizing One's Own Incompetence Lead to Inflated Self-Assessments,* 77 J. PERSONALITY & SOC. PSYCHOL. 1121 (1999). The evidence for this bias has been challenged as an experimental artifact. Robyn M. Dawes & Matthew Mulford, *The False Confidence Effect and Overconfidence: Flaws in Judgment or Flaws in How We Study Judgment?,* 65 ORG.

investors and businesspeople.[102] Overconfidence can cause over-optimism through a number of mechanisms – possibly by overestimating the probability that one is correct and thus underweighting remote risks, possibly by assigning too low a variance to one's probability distributions and thus taking too few precautions, possibly by overvaluing one's own limited experience and ignoring remote and unfamiliar harms.[103] Whatever the link, overconfidence can also be a problem apart from over-optimism. It can combine with limited information in peculiarly dangerous ways. An overconfident person may assume understanding that isn't actually present. Thus, when faced with incomprehensible form language, an overconfident person may charge ahead imprudently, thinking that the forms grant protections they don't actually provide – a phenomenon shown in studies of contracting behavior. For instance, Pauline Kim has found that most at-will employees think they can be discharged only for cause, employee handbooks and the common law notwithstanding.[104] In another vein, overconfidence may cause

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BEHAV. & HUM. DECISION PROCESSES 201 (1996). The regression effects they point to, though, have been controlled for in at least some studies – for instance, that of Kruger and Dunning, *supra* – and overconfidence remains. *See also, e.g.,* Dale W. Griffin & Carol A. Varey, *Towards a Consensus on Overconfidence,* 65 ORG. BEHAV. & HUM. DECISION PROCESSES 227 (1996) (questioning Dawes & Mulford's analysis).

[101] *See, e.g.,* PETER ASCH, CONSUMER SAFETY REGULATION 76 (1988) (97% of consumers think themselves better than average in ability to avoid bicycle and mower accidents).

[102] *See, e.g.,* Colin Camerer & Dan Lovallo, *Overconfidence and Excess Entry: An Experimental Approach,* 89 AM. ECON. REV. 306 (1999) (business entrants); Pekka Hietala et al., *What is the Price of Hubris? Using Takeover Battles to Infer Overpayments and Synergies,* 32 FIN. MGMT. 5 (2003) (Viacom's takeover of Paramount); Mark Kritzman et al., *Risk, Regimes, and Overconfidence,* 8 J. DERIVATIVES 32 (2001) (global stock and bond returns); J. Edward Russo & Paul J.H. Schoemaker, *Managing Overconfidence,* 33 SLOAN MGMT. REV., Winter 1992, at 7 (corporate managers); James Scott et al., *Overconfidence Bias in International Stock Prices,* 29 J. PORTFOLIO MGMT. 80 (2003) (international stock returns). *But see* Erich Kirchler & Boris Maciejovsky, *Simultaneous Over- and Underconfidence: Evidence from Experimental Asset Markets,* 25 J. RISK & UNCERTAINTY 65 (2002) (finding full range of confidence approaches in experimental markets).

[103] On the relation of overconfidence to over-optimism, see, e.g., Colin F. Camerer, *Individual Decision Making, in* HANDBOOK OF EXPERIMENTAL ECONOMICS 587, 594-95 (John H. Kagel & Alvin E. Roth eds., 1995); Paul Slovic et al., *Facts Versus Fears: Understanding Perceived Risk, in* JUDGMENT, *supra* note 100, at 463, 468-70; Madsen, *supra* note 97, at 589-90; *see also, e.g.,* Hart Blanton et al., *Overconfidence as Dissonance Reduction,* 37 J. EXPT'L SOC. PSYCHOL. 373 (2001) (relating overconfidence to dissonance reduction).

[104] Pauline T. Kim, *Bargaining with Imperfect Information: A Study of Worker Perceptions of Legal Protections in an At-Will World,* 83 CORNELL L. REV. 105 (1997); Pauline

one not to seek out more information, even when more information is available and cheap. It has been suggested that this may favor financial fraud,[105] poor organizational decision making,[106] and inefficient takeover decisions.[107]

b. Availability

Another important bias is availability, the tendency to rely to excess on vivid information, whether pertinent or not. This has a rational basis. If information is costly, we might do well to use all the cheap information we can get. Vivid information also may be vivid because it is important. But much vivid information is largely irrelevant, and much important information is dull – yet we tend to assign greater weight to what is vivid. So, for instance, how we see the frequencies of various hazards correlates with the amount and vividness of newspaper reporting about them more than with their actual frequencies.[108] Similarly, we tend to underestimate the likelihood of drab causes of death like diabetes and overestimate the likelihood of striking causes of death like earthquakes.[109] Turning to the business world, security analysts also give too much weight to vivid information.[110]

Of course, some information about risk is vivid and some is not, as is true of information

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T. Kim, *Norms, Learning, and Law: Exploring the Influences on Workers' Legal Knowledge,* 1999 U. ILL. L. REV. 447; *see also* RICHARD B. FREEMAN & JOEL ROGERS, WHAT WORKERS WANT 118-22 (1999). One could interpret these data otherwise – for instance, as supporting either a cynical view of the world or a realistic one, the latter taking into account internal grievance procedures that grant some rights even to at-will employees. *See* Cynthia L. Estlund, *How Wrong are Employees About Their Rights, and Why Does It Matter?,* 77 N.Y.U. L. REV. 6, 15-19 (2002).

105 Steven Pressman, *On Financial Frauds and Their Causes: Investor Overconfidence,* 57 AM. J. ECON. & SOCIOL. 405 (1998).

106 Paul C. Nutt, *The Formulation Processes and Tactics Used in Organizational Decision Making,* 4 ORG. SCI. 226, 247 (1993).

107 Richard Roll, *The Hubris Hypothesis of Corporate Takeovers,* 59 J. BUS. 197 (1986).

108 Barbara Combs & Paul Slovic, *Newspaper Coverage of Causes of Death,* 56 JOURNALISM Q. 837, 843 (1979).

109 *See, e.g.,* Sarah Lichtenstein et al., *Judged Frequency of Lethal Events,* 4 J. EXPERIMENTAL PSYCHOL.: HUM. LEARNING & MEMORY 551, 551, 553 (1978); Paul Slovic et al., *Facts Versus Fears: Understanding Perceived Risk, in* JUDGMENT, *supra* note 100, 463, 466-67.

110 Werner F.M. De Bondt & Richard H. Thaler, *Do Security Analysts Overreact?,* 80 AM. ECON. REV.: PAPERS & PROC. 52, 52 (1990).

generally about the matter of a contract. Once one has experienced a remote risk, availability suggests it will be overvalued.[111] This suggests that availability may warrant little intervention for relatively common transactions, where consumers are likely to know of and respond to potential harms. In contrast, availability needs some attention where the risk of harm is drab or its frequency low, in light of both the likelihood of the harm and the frequency of the transaction.

c. Cognitive dissonance

Dissonance reduction also has effects on market behavior. When we must choose, we may feel cognitive dissonance, for we may choose wrongly.[112] We can reduce this discomfort by trying to validate our decision. If we made the right choice, this is innocent enough, and even makes us happier and thus better off. If not, though, our attempts to reduce dissonance can make it harder to recognize our errors and thus to change course, yielding bad decision-making and lower utility.[113] We lower dissonance in many ways. Sometimes we overemphasize what is good about our decision and underemphasize what is good about the choice not made. We might also give more weight to bad things about the other choice, while giving little to similar information about our own. There are many other techniques: remembering silly arguments in favor of the rejected choice, searching for information supporting the choice made, finding new virtues in one's choice (or even making vices into virtues), or others still.[114]

Dissonance aversion can have baneful economic consequences. It has been suggested that entrepreneurial overoptimism is caused by dissonance aversion, for once the entrepreneur has made a risky decision, she will avoid the pain of confronting the resulting risk by bolstering her decision after the fact.[115] This will stand in the way of changing course should the initial decision

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[111] *See, e.g.,* Roger G. Noll & James E. Krier, *Some Implications of Cognitive Psychology for Risk Regulation,* 19 J. LEGAL STUD. 747, 769-71 (1990).

[112] The term was coined by its pioneer, Leon Festinger. *See* LEON FESTINGER, A THEORY OF COGNITIVE DISSONANCE (1957). More recent surveys include, e.g., ELLIOT ARONSON, THE SOCIAL ANIMAL 175-245 (7th ed. 1995); COGNITIVE DISSONANCE: PROGRESS ON A PIVOTAL THEORY IN SOCIAL PSYCHOLOGY (Eddie Harmon-Jones & Judson Mills eds., 1999).

[113] *See, e.g.,* George A. Akerlof & William T. Dickens, *The Economic Consequences of Cognitive Dissonance,* 72 AM. ECON. REV.: PAPERS & PROC. 307 (1982); Benjamin Gilad et al., *Cognitive Dissonance and Utility Maximization,* 8 J. ECON. BEHAV. & ORG. 61 (1987); Matthew Rabin, *Cognitive Dissonance and Social Change,* 23 J. ECON. BEHAV. & ORG. 177 (1994).

[114] *See, e.g.,* Linda Simon et al., *Trivialization: The Forgotten Mode of Dissonance Reduction,* 68 J. PERSONALITY & SOC. PSYCHOL. 247 (1995).

[115] Arnold C. Cooper et al., *Entrepreneurs' Perceived Chances for Success,* 3 J. BUS. VENTURING 97, 106 (1988).

prove imprudent, and may even lead to escalating one's commitment inappropriately. Indeed, dissonance aversion starts even before a decision is made. A good many studies have shown that preliminary judgments cause one making a decision to narrow the range of information considered in a way that enhances those early, tentative decisions.[116] Consumers and other market participants may thus be biased by the early introduction of misleading or unbalanced information. Rules requiring, not merely disclosure, but *early* disclosure, may help counteract this behavior.

d. Regret aversion

Regret aversion begins with the unremarkable observation that choosing entails rejection. We judge our decisions in part on their independent success and in part on how the other alternatives would have fared.[117] To avoid regret, we may adjust our preferences to lower the value of the rejected options, even at a high cost.[118] In the classic study, more people chose a certain award of one hundred million francs to a gamble with a ten percent chance of winning five hundred million francs, an eighty-nine percent chance of winning one hundred million francs, and a one percent chance of winning nothing, even though the gamble is worth more than the certainty.[119] One might also see people favor inaction over action, as action is more likely to yield regret.[120] Still others might avoid counterfactual regret – worry about passing up a grand

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[116] *See, e.g.,* J. Edward Russo et al., *Predecisional Distortion of Product Information,* 35 J. MKTNG. RES. 438 (1998); J. Edward Russo et al., *The Distortion of Information During Decisions,* 66 ORG. BEHAV. & HUM. DECISION PROCESSES 102 (1996); *see generally* Aaron L. Brownstein, *Biased Predecision Processing,* 129 PSYCHOL. BULL. 545 (2003) (reviewing literature).

[117] *See, e.g.,* Terry L. Boles & David M. Messick, *A Reverse Outcome Bias: The Influence of Multiple Reference Points on the Evaluation of Outcomes and Decisions,* 61 ORG. BEHAV. & HUM. DECISION PROCESSES 262, 263 (1995); Ilana Ritov, *Probability of Regret: Anticipation of Uncertainty Resolution in Choice,* 66 ORG. BEHAV. & HUM. DECISION PROCESSES 228, 228-29 (1996).

[118] This cognitive bias thus meshes with dissonance avoidance. Regret is among the emotions that gives rise to cognitive dissonance and fuels its avoidance. *See, e.g.,* LEON FESTINGER, CONFLICT, DECISION, & DISSONANCE 97-112 (1964); Thomas Gilovich & Victoria Husted Medvec, *The Experience of Regret: What, When, and Why,* 102 PSYCHOL. REV. 379, 387-88 (1995).

[119] Maurice Allais, *Le Comportement de l'Homme Rationnel devant le Risque: Critique des Postulats et Axiomes de l'Ecole Americaine,* 21 ECONOMETRICA 503, 527 (1953).

[120] *See, e.g.,* Faith Gleicher et al., *The Role of Counterfactual Thinking in Judgments of Affect,* 16 PERSONALITY & SOC. PSYCHOL. BULL. 284 (1990); Daniel Kahneman & Amos Tversky, *The Psychology of Preferences,* SCI. AM., Jan. 1982, at 160, 173. To be sure, people do

opportunity.[121]

Regret aversion, like dissonance aversion, may yield inflexibility; if one has devalued a rejected option, one is less likely to revert to it when the original choice proves bad. In addition, because regret in the short run tends to stem from errant action, regret aversion exerts steady pressure in favor of the status quo. This means that merchants who modify contracts are less likely to see clients leave than is entirely desirable from the client's perspective. Thus, for instance, credit card companies that offer low introductory rates, but raise rates and fees sharply after, are likely to retain a surprising number of their customers.

e. Status quo bias and endowment effect

Next is the status quo bias – our tendency to prefer the way things are to the way they might be.[122] In a wide range of contexts, people will take whatever is described as the current state of affairs over alternatives, even when they might have preferred the alternatives were they starting with a clean slate. One particularly striking example comes from the insurance market. In the early 1980s, New Jersey and Pennsylvania gave drivers the option to purchase low-cost insurance with limited rights of action. In Pennsylvania the default choice was expanded coverage; in New Jersey the default choice was limited coverage. A supermajority of New Jerseyites took limited coverage; most Pennsylvanians took expanded coverage.[123] The same goes

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regret what they didn't do – indeed, some studies have suggested that more people regret inaction than action over their lives. *See, e.g.,* Gilovich & Medvec, *supra* note 118, at 381-83 (collecting studies). Still, studies also show that people feel regret for their acts more strongly than for their silences, at least in the short run – and it is in the short run that we make most consumer decisions. *See, e.g.,* Terry Connolly et al., *Regret and Responsibility in the Evaluation of Decision Outcomes,* 70 ORG. BEHAV. & HUM. DECISION PROCESSES 73, 78 (1997); Daniel Kahneman & Dale T. Miller, *Norm Theory: Comparing Reality to Its Alternatives,* 93 PSYCHOL. REV. 136, 145-46 (1986); Robert A. Prentice & Jonathan J. Koehler, *A Normality Bias in Legal Decision Making,* 83 CORNELL L. REV. 583 (2003); Mark Spranca et al., *Omission and Commission in Judgment and Choice,* 27 J. EXPT'L & SOC. PSYCHOL. 76 (1991).

121 State lotteries are well aware of this phenomenon. *See, e.g.,* Janet Landman & Ross Petty, *"It Could Have Been You": How States Exploit Counterfactual Thought to Market Lotteries,* 17 PSYCHOL. & MKTNG. 299 (2000). On regret aversion generally, see Chris Guthrie, *Better Settle than Sorry: The Regret Aversion Theory of Litigation Behavior,* 1999 U. ILL. L. REV. 43.

122 *See, e.g.,* William F. Samuelson & Richard Zeckhauser, *Status Quo Bias in Decision Making,* 1 J. RISK & UNCERTAINTY 7, 26-33 (1988).

123 Colin F. Camerer, *Prospect Theory in the Wild: Evidence from the Field, in* CHOICES, VALUES, AND FRAMES 288, 294-95 (Daniel Kahneman & Amos Tversky eds., 2000);

for retirement plans,[124] health insurance plans,[125] and corporate mergers.[126]

The endowment effect is a special case of the status quo bias, one focusing on property rights.[127] Under neoclassical theory, whether one owns an object or not should make no difference in the value one sets on it. A plethora of experiments, though, shows that ownership does make a difference. If we own an object, we tend to value it more highly than if we do not. This endowment effect was shown through now-classic experiments involving coffee mugs and lottery tickets. People given coffee mugs value them more highly than those given a roughly equivalent amount of case and the opportunity to buy mugs.[128] Relatedly, in a different experiment some of the subjects were given lottery tickets and others cash. The subjects were then given the chance to sell what they had at a price of what the others had received. The lottery ticket owners usually kept the tickets; the cash holders usually kept the cash. One or the other could be consistent with conventional economic theory, but not both.[129]

The status quo bias and the endowment effect jointly suggest that default rules matter. If parties prefer to stick with the norm, they will not depart from the default even when it is in their best interest to do so.[130] Moreover, starting positions are likely to prove sticky. Just as for regret aversion, contracting parties are likely not to respond fully to the shifts of others. It thus becomes possible for one party to take advantage of the other's predisposition for the status quo.

David Cohen & Jack L. Knetsch, *Judicial Choice and the Disparities Between Measures of Economic Values,* 30 OSGOODE HALL L.J. 737, 747 (1992).

[124] Shlomo Benartzi & Richard H. Thaler, *How Much is Investor Autonomy Worth?* 6 (Mar. 2001), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=294857.

[125] Samuelson & Zeckhauser, *supra* note 122, at 26-33.

[126] James A. Fanto, *Quasi-Rationality in Action: A Study of Psychological Factors in Merger Decision-Making,* 62 OHIO ST. L.J. 1333, 1360-64 (2001).

[127] For the best recent treatment of the endowment effect, see Russell Korobkin, *The Endowment Effect and Legal Analysis,* 97 NW. U.L. REV. 1227 (2003).

[128] *See* Daniel Kahneman et al., *Experimental Tests of the Endowment Effect and the Coase Theorem,* 98 J. POL. ECON. 1325 (1990).

[129] *See* Jack L. Knetsch & J.A. Sinden, *Willingness to Pay and Compensation Demanded: Experimental Evidence of an Unexpected Disparity in Measures of Value,* 99 Q.J. ECON. 507, 512-13 (1984).

[130] *See, e.g.,* Korobkin, *Status Quo, supra* note 92. Thus the status quo bias may be linked to regret aversion, as a number of authors have suggested. *See, e.g.,* Ilana Ritov & Jonathan Baron, *Outcome Knowledge, Regret, and Omission Bias,* 64 ORG. BEHAV. & HUM. DECISION PROCESSES 119 (1995).

f. Anchoring and adjustment

The final bias in this incomplete list is in some ways tied more to bounded rationality than to these other cognitive errors. A great deal of literature suggests that we estimate quantities or probabilities by anchoring on some existing number and adjusting as the evidence requires. This allows us to economize on information by starting with some datum that we already have. Anchoring would not pose any problems if we adjusted enough. The overwhelming evidence, however, shows that we generally do not.[131] For instance, in the classic study subjects were shown a wheel of fortune. The wheel was spun and yielded a number; as the wheel was rigged, unknown to the subjects, it showed either ten or sixty-five. The subjects were asked whether the percentage of African countries in the United Nations was above or below whichever of ten or sixty-five they had seen. They were then asked what the exact percentage was. Presumably their answers should not have been affected by the apparently random number they had just seen produced. But they were. People who had seen ten gave a median estimate of twenty-five percent; people who had seen sixty-five gave a median estimate of forty-five percent.[132] This result holds even for extreme anchors, such as whether the average temperature in San Francisco was greater or less than 558 degrees.[133]

Anchoring is commonly exploited in marketing. One homely example comes in the supermarket aisle. Consumers buy more canned goods in supermarkets when the sign by the goods says "limit twelve" than when it says "limit six" or when it gives no limit at all.[134] They also buy more when the price is put in terms of multiple units (for instance, six for three dollars) than when it is put in terms of a single unit (for instance, fifty cents each).[135] In other words, consumers anchor on the information presented them in the store when they make buying decisions, presumably adjusting insufficiently for their actual need. The same may go for advertised prices – "regularly $15, on sale for $9.99" and the like. We may sense that the regular price is a little high, but if in fact it is wildly high we may adjust our anchor insufficiently and think the sale is much better than it actually is.

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131 *See, e.g.,* RICHARD E. NISBETT & LEE ROSS, SOCIAL INFERENCE: STRATEGIES AND SHORTCOMINGS OF SOCIAL JUDGMENT 172 (1980); SCOTT PLOUS, THE PSYCHOLOGY OF JUDGMENT AND DECISION MAKING 145-52 (1993); Joseph F. Funaro, *An Empirical Analysis of Five Descriptive Models for Cascaded Inference,* 14 ORG. BEHAV. & HUM. PERFORMANCE 186 (1975).

132 *See* Amos Tversky & Daniel Kahneman, *Judgment Under Uncertainty: Heuristics and Biases,* 185 SCI. 1124 (1974).

133 *See* PLOUS, *supra* note 131, at 146.

134 *See* Brian Wansink et al., *An Anchoring and Adjustment Model of Purchase Quantity Decisions,* 35 J. MKTG. RES. 71, 73-74 (1998).

135 *See id.* at 74-76.

2. Cognitive bias and consumer law

These biases are common and potentially disturbing, at least to those who cherish the rational actor model. A good deal of consumer law may be explained, not so much as an attempt to overcome a want of resources or information, but as an attempt to correct for consumer bias. A number of examples appear above. In addition, rules that make bad information vivid, like the welter of warning labels on hazardous products, may dampen overoptimism.[136] Disclosure rules also can be explained in part as attempts to overcome a range of heuristics, most significantly dissonance aversion and anchoring. For the former, a canny seller might exploit dissonance aversion by delaying bad news until late – after the buyer has made some commitment to the purchase and will discount the import of the tardy information.[137] In many cases this might be innocuous, but one can easily imagine that a buyer might get any number of unfavorable terms late in the deal or even after the deal apparently has closed. The form contract presented to the buyer after the main terms are worked out may favor the seller wildly, but the buyer may not much care – or, more to the point, may not care nearly as much as if the terms had been disclosed before he had chosen to buy.[138]

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136 They may do other things as well, such as feed into availability.

137 One study suggests that consumers do not believe in cognitive dissonance, based on a survey intended in part to elicit dissonance effects. Jackie Snell et al., *Intuitive Hedonics: Consumer Beliefs About the Dynamics of Liking,* 4 J. CONSUMER PSYCHOL. 33, 45-46 (1995) (only 15% of respondents believe in dissonance effects). This leaves a large population especially at risk of making undesirable choices because of dissonance avoidance.

It is important to add that dissonance arises even before one actually buys a product – indeed, as early as when one starts narrowing one's choices. Consumers thus are in considerable danger of limiting their cognitive horizons too early, making them especially susceptible to manipulation on the basis of early and misleading information. *See, e.g.,* sources cited *supra* note 116. This may be tied to the confirmation bias – the tendency to evaluate evidence in a way that confirms one's hypothesis. *See, e.g.,* Alexander Chernev, *The Impact of Common Features on Consumer Preferences: A Case of Confirmatory Reasoning,* 27 J. CONSUMER RES. 475 (2001). On the confirmatory bias generally, see, e.g, PLOUS, *supra* note 131, at 231-40; Jonathan J. Koehler, *The Influence of Prior Beliefs on Scientific Judgments of Evidence Quality,* 56 ORG. BEHAV. & HUM. DECISION PROCESSES 28, 47 (1993); Robert A. Prentice, *The Case of the Irrational Auditor: A Behavioral Insight into Securities Fraud Litigation,* 95 NW. U.L. REV. 133, 149 n. 83 (2000).

138 This too may explain the tendency of consumers to overestimate the extent to which form language will protect them. *See, e.g.,* Mueller, *supra* note 63. *Cf.* Kim, *supra* note 104 (overly optimistic beliefs of at-will employees). If they have already made mental commitments to deal, later language that hurts them will likely be discounted.

In the same vein, a consumer might anchor on an appealing first bit of information and adjust insufficiently as the merchant lets loose with less appealing information later. Hence the consumer laws that ensure disclosure up front. Magnuson-Moss, for instance, requires that a consumer product indicate what type of warranty it carries[139] and requires that warranty information be available to the buyer before purchase.[140] The FTC used car rules likewise require that the dealer disclose all warranties in a buyers guide placed on the vehicle.[141] The Truth-in-Lending Act requires that finance charges and interest rates be disclosed before credit is extended[142] and that they be calculated according to a statutory and regulatory formula.[143] The Consumer Leasing Act obliges those who lease to consumers to disclose to the lessee before the lease is consummated such things as total payment amount, fees owed by the lessee, and costs at the end of the lease.[144] Comparative price advertising also must bear some relation to the truth, to avoid manipulation of anchoring and adjustment; thus, a merchant advertising the former price of discounted merchandise must list a price at which it in fact sold the goods.[145]

3. Small business, cognition, and the consumer-merchant dichotomy

We have so far seen that there is substantial evidence that human decision making departs from the ideal of expected utility theory, that this behavior has implications for markets, and that a good deal of the law granting consumers special status against merchants can be explained with resort to cognition. We thus must turn back to small business's location in the consumer-merchant divide, this time from the cognitive vantage. To do so, though, we must look closely at where these cognitive biases will tend to rest.

These biases, and many more like them, are very common among many different populations. Most of the work in this field, to be sure, studies college students in laboratory settings. Some have as a result objected that the results thus obtained may not exist when we look

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[139] 15 U.S.C. § 2303(a) (2000).

[140] 15 U.S.C. §§ 2302(a) (content of warranties), (b)(1)(A) (timing of warranty disclosure) (2000); 16 C.F.R. § 702.3 (2002) (same).

[141] 16 C.F.R. § 455.2 (2002).

[142] *See, e.g.,*15 U.S.C. § 1638(b)(1) (2000) (disclosure for closed-end credit); 12 C.F.R. § 226.17(b) (2003) (same).

[143] *See* 15 U.S.C. § 1605(a) (2000) (defining finance charge); 12 C.F.R. § 226.4 (2003) (same).

[144] *See* 15 U.S.C. § 1667a (2000).

[145] 16 C.F.R. pt. 233 (2004); *see also, e.g.,* SHELDON & CARTER, *supra* note 19, § 4.6.3.1 (collecting cases and state administrative rules).

beyond callow youth, or, on the other hand, may be present to a greater extent when we look to less educated or older populations.[146] Even for this population, one might argue that these effects may not be present at all in real life, where what we decide has real consequences.[147] Others have observed that the effects of real stakes are not so easily summed up, as the added concentration that higher stakes logically would yield might attenuate some biases and exacerbate others.[148]

These methodological objections would need a full article to deal with in the depth they deserve. We do need to address them here, though, because this Article's conclusions rest on the differences among classes of people in very real contexts. First, studies of young people are not illegitimate when we seek to examine consumer behavior. Whatever else they are, college students are consumers, and will continue to be consumers. Certainly they are better educated than many consumers outside the academy, but the steady increase in college degrees makes college students more nearly typical than was true even a decade ago. Their age is potentially pertinent, true. The limited studies of cognition by age are not unequivocal, but it should hardly surprise us to discover that people learn from experience.[149] *What* we learn is a question – after all, we can learn cognitive error.[150] So studies of college students should be taken with moderate caution, but should not be discarded out of hand. Much the same may be said of laboratory studies. Typically these do have modest stakes. Many consumer decisions have similarly modest stakes, though, perhaps neutralizing the objections based on the motivating effect of money.

Moreover, there are plenty of studies for each of these heuristics and biases that use more representative populations or look at behavior in the field. More specifically, a great many studies look at actual consumer behavior and find these heuristics and biases at work. The study of anchoring in supermarkets discussed earlier is an example.[151] We see dissonance aversion in the

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[146] *See, e.g.,* Mitchell, *Rationality, supra* note 93, at 156-60.

[147] *See, e.g.,* Jennifer Arlen, *The Future of Behavioral Law and Economics,* 51 VAND. L. REV. 1765, 1768-69 (1998).

[148] *See, e.g.,* Colin F. Camerer & Robin M. Hogarth, *The Effects of Financial Incentives in Experiments: A Review and Capital-Labor-Production Framework,* 19 J. RISK & UNCERTAINTY 7 (1999); Anton Kühberger et al., *Framing Decisions: Hypothetical and Real,* 89 ORG. BEHAV. & HUM. DECISION PROCESSES 1162 (2002); Mitchell, *Rationality, supra* note 93, at 114-19.

[149] *See, e.g.,* Katya Tentori et al., *Wisdom and Aging: Irrational Patterns in College Students but not Older Adults,* 81 COGNITION B87 (2001).

[150] On the tendency of self-serving biases to increase with age, see, e.g., Paul A. Klaczynski & Billi Robinson, *Personal Theories, Intellectual Ability, and Epistemological Beliefs: Adult Age Differences in Everyday Reasoning Biases,* 15 PSYCHOL. & AGING 400 (2000).

[151] Wansink et al., *supra* note 134.

tendency of new car buyers to look at more ads for the cars they bought and fewer for the cars they decided against.[152] Some studies have already been discussed, and more are in the margin.[153]

The same can be said for merchants. Investors in mutual funds hang onto weak-performing funds in order to avoid recognizing a bad decision, showing perhaps a mix of regret aversion and dissonance aversion.[154] To turn to another heuristic, real estate agents show underadjustment when setting real estate prices,[155] and auditors show anchoring to the preliminary numbers given them by clients.[156] A plethora of analyses of investor action cited earlier show a

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[152] Danuta Ehrlich et al., *Postdecision Exposure to Relevant Information,* 54 J. ABNORMAL & SOC. PSYCHOL. 98 (1957).

[153] *See, e.g.,* Camerer, *Prospect Theory in the Wild, in* CHOICES, VALUES, AND FRAMES, *supra* note 123 (prospect theory and status quo bias); William H. Cummings & M. Venkatesan, *Cognitive Dissonance and Consumer Behavior: A Review of the Evidence,* 13 J. MKTG. RES. 303 (1976) (dissonance avoidance); James L. Ginter, *An Experimental Investigation of Attitude Change and Choice of a New Brand,* 11 J. MKTG. RES. 30, 38-39 (1974) (cognitive dissonance in product choice); Robert A. Hillman & Jeffrey J. Rachlinski, *Standard-Form Contracting in the Electronic Age,* 77 N.Y.U. L. REV. 429, 450 n.114 (2002) (suggesting link between regret aversion and cooling-off periods). Robert E. Knox & James A. Inkster, *Postdecision Dissonance at Posttime,* 18 J. PERSONALITY & SOC. PSYCHOL. 319 (1968) (cognitive dissonance in betting at racetracks); Anne M. McCarthy et al., *Reinvestment Decisions by Entrepreneurs: Rational Decision-Making or Escalation of Commitment?,* 8 J. BUS. VENTURING 9 (1993) (escalation bias among entrepreneurs); Allen R. McConnell et al., *What If I Find It Cheaper Someplace Else?: Role of Prefactual Thinking and Anticipated Regret in Consumer Behavior,* 17 PSYCHOL. & MKTG. 281 (2000) (regret aversion and consumer search); Itmar Simonson, *The Influence of Anticipating Regret and Responsibility on Purchase Decisions,* 19 J. CONSUMER RES. 105 (1992) (regret aversion); David M. Sanbonmatsu et al., *Overestimating the Importance of the Given Information in Multiattribute Consumer Judgment,* 13 J. CONSUMER PSYCHOL. 289 (2003) (availability); Richard A. Stevick et al., *Importance of Decision and Postdecision Dissonance: A Return to the Racetrack,* 69 PSYCHOL. REP. 420 (1991) (cognitive dissonance in betting at racetracks); Orit E. Tykocinski & Thane S. Pittman, *Product Aversion Following a Missed Opportunity: Price Contrast or Avoidance of Anticipated Regret?,* 23 BASIC & APPLIED SOC. PSYCHOL. 149 (2001) (regret aversion).

[154] William N. Goetzmann & Nadav Peles, *Cognitive Dissonance and Mutual Fund Investors,* 20 J. FIN. RES. 145 (1997).

[155] *See* Gregory B. Northcraft & Margaret A. Neale, *Experts, Amateurs, and Real Estate: An Anchoring-and-Adjustment Perspective on Property Pricing Decisions,* 39 ORG. BEHAV. & HUM. DECISION PROFESSES 84 (1987).

[156] *See, e.g.,* Robert A. Prentice, *The Case of the Irrational Auditor: A Behavioral Insight into Securities Fraud Litigation,* 95 NW. U.L. REV. 133, 164-65 (2000) (collecting

range of these biases.[157] Many others do as well, both simulations and field studies.[158] Perhaps this should not surprise us; merchants are consumers when they are off-duty, and in any case

studies).

[157] *See, e.g.,* sources cited *supra* notes 94-95, 102, 110; *see also, e.g.,* Nicholas Barberis et al., *Prospect Theory and Asset Prices,* 116 Q.J. ECON. 1 (2001) (prospect theory shown in securities markets); Shlomo Benartzi & Richard H. Thaler, *Risk Aversion or Myopia? Choices in Repeated Gambles and Retirement Investments,* 45 MGMT. SCI. 364 (1999) (myopic loss aversion among retirement fund investors); Kent Daniel et al., *Investor Psychology and Security Market Under- and Overreactions,* 53 J. FIN. 1839 (1998) (overconfidence and self-attribution errors among investors); Kenneth L. Fisher & Meir Statman, *Cognitive Biases in Market Forecasts,* 27 J. PORTFOLIO MGMT. 72 (2000) (overconfidence, confirmation, representativeness, anchoring, and hindsight biases among market analysts); Terrance Odean, *Are Investors Reluctant to Realize Their Losses?,* 53 J. FIN. 1775 (1998) (regret aversion among investors). For reviews of the literature, see Kent Daniel et al., *Investor Psychology in Capital Markets: Evidence and Policy Implications,* 49 J. MONETARY ECON. 139 (2002); David Hirshleifer, *Investor Psychology and Asset Pricing,* 56 J. FIN. 1533 (2001).

[158] *See, e.g.,* Adam Butler & Scott Highhouse, *Deciding to Sell: The Effect of Prior Action and Offer Source,* 21 J. ECON. PSYCHOL. 223 (2000) (inaction inertia among businesspeople); Madsen, *supra* note 97; Odean, *supra* note 157; Prentice, *supra* note 137, at 145-181 (collecting studies of cognitive errors by auditors); Christopher P. Puto, *The Framing of Buying Decisions,* 14 J. CONSUMER RES. 301 (1987) (framing effects among commercial buyers); William J. Qualls & Christopher P. Puto, *Organizational Climate and Decision Framing: An Integrated Approach to Analyzing Industrial Buying Decisions,* 26 J. MARKETING RES. 179 (1989) (same); Michael J. Roszkowski & Glenn E. Snelbecker, *Effects of "Framing" on Measures of Risk Tolerance: Financial Planners Are Not Immune,* 19 J. BEHAVIORAL ECON. 237 (1990); Barry M. Staw et al., *Escalation at the Credit Window: A Longitudinal Study of Bank Executives' Recognition and Write-Off of Problem Loans,* 82 J. APPLIED PSYCHOL. 130 (1997) (escalation and dissonance aversion among bank managers); Benn Steil, *Corporate Foreign Exchange Risk Management: A Study in Decision Making Under Uncertainty,* 6 J. BEHAV. DECISION MAKING 1 (1993) (prospect theory validated among foreign exchange managers); Robert M. Wiseman & Anthony H. Catanach, Jr., *A Longitudinal Disaggregation of Operation al Risk Under Changing Regulations: Evidence from the Savings and Loan Industry,* 40 ACAD. MGMT. J. 799 (1997) (prospect theory and savings and loan risk behavior). *See generally* Charles R. Schwenk, *Information, Cognitive Bias, and Commitment to a Course of Action,* 11 ACAD. MGMT. J. 298 (1986) (applying many heuristics and biases to business management). Some effects may, however, be artifacts of the method of analysis. *See, e.g.,* Michael P. Keane & David E. Runkle, *Are Financial Analysts' Forecasts of Corporate Profits Rational?,* 106 J. POL. ECON. 768 (1998) (irrationality of analysts' forecasts disappears when intra-industry correlations and discretionary asset write-downs are taken into account).

presumably are raised as we all are and wired as we all are.[159]

If these biases are found in both consumers and merchants, why should we care? Won't they cancel out? Sometimes they might. The endowment effect may be an example. If both parties to a potential bargain overvalue what they have, perhaps a buyer will be a little reluctant to deal, but ultimately the need for goods and services will win out. There would be no particular harm that would befall that buyer, in any case. But what about overoptimism? If both sellers and buyers are overoptimistic, both will undervalue the risk of product failure. As a result the seller will price her goods too high, thinking them better than they are, and the buyer will be willing to pay that price for the same reason. The seller would hence be paid for a risk she had not assumed. Even more worrying, what if these biases are unevenly distributed between consumers and merchants – in particular, what if merchants are less prone to them than consumers? Then merchants will be able to take advantage of their superior cognitive position more or less systematically.[160] In fact, there is a good deal of evidence to suggest that consumers do differ from merchants, speaking very generally, despite every merchant's dual role as consumer. A look at three ways to reduce cognitive error – selection, learning, and group decision-making – shows why this is so. More important for us, these three ways to mitigate bias do not ordinarily align small businesses with large businesses. We thus derive support – qualified support, delimited support, but support all the same – for the notion that small businesses may be treated inefficiently by the consumer-merchant divide.

a. Selection

We should start by remembering that even the most nearly ubiquitous biases are not found in everyone, and that those who display these biases do not do so to an equal degree. It thus may be possible for businesses to select managers who are less prone to these biases and who will thus tend not to show them to the degree that consumers, by definition an unselected population, would.[161] This is especially likely if some identifiable groups are less prone to these biases than others, which would make selecting these cognitive whizzes relatively easy.[162]

There is some evidence that, intentionally or not, larger businesses tend to choose from among the cognitive elect. For instance, economics majors are less prone to many of these biases

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159 For a suggestion that cognitive biases may have their roots in evolutionary psychology, see Owen D. Jones, *Time-Shifted Rationality and the Law of Law's Leverage: Behavioral Economics Meets Behavioral Biology,* 95 NW. U.L. REV. 1141 (2001).

160 *See supra* note 87 and accompanying text.

161 Or that people not prone to cognitive bias will choose jobs where unbiased behavior is rewarded. *See* Posner, *supra* note 93, at 1570-71.

162 One can imagine that businesses might administer a battery of tests designed to elicit a range of heuristics and biases as part of their hiring, but as far as I know this is not done.

than are students in other majors.[163] MBA students, though not as free from biases as economics majors, generally come nearer the Bayesian ideal than do their less seasoned colleagues.[164] This may reflect greater statistical training than is common, for statistical training has been shown to decrease the likelihood of a number of types of cognitive bias.[165] Furthermore, business schools have taken serious account of behavioral teachings. Some books are devoted entirely to bringing the heuristics and biases literature to bear on business decisions, generally with some discussion about how these biases can be overcome.[166] Other books, though dealing with decision making more generally, consider this literature and debiasing methods.[167] Even the quickest look through

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163 *See, e.g.,* Richard P. Larrick et al., *Teaching the Use of Cost-Benefit Reasoning in Everyday Life,* 1 PSYCHOL. SCI. 362 (1990).

164 *See, e.g.,* William Remus, *Will Behavioral Research on Managerial Decision Making Generalize to Managers?,* 17 MANAGERIAL & DECIS. ECON. 93 (1996). Not all business students are the same, though. Entrepreneurship students show inclinations toward risk-taking behavior not shared by their colleagues. *See, e.g.,* Donald L. Sexton & Nancy B. Bowman, *Validation of a Personality Index: Comparative Psychological Characteristics Analysis of Female Entrepreneurs, Managers, Entrepreneurship Students and Business Students, in* FRONTIERS OF ENTREPRENEURIAL RESEARCH 40 (Robert Ronstadt et al. eds., 1986); Donald L. Sexton & Nancy B. Bowman, *Comparative Entrepreneurship Characteristics of Students: Preliminary Results, in* FRONTIERS OF ENTREPRENEURIAL RESEARCH 213 (John A. Hornaday et al. eds., 1983). And it should be remembered that MBA students are the guinea pigs in many of the experimental studies of cognitive bias in business settings, so they are in no sense free from bias.

It should be noted that most MBA programs require a certain amount of work experience, so research involving MBA students more directly examines business behavior than does research involving Psychology 101 students.

165 *See, e.g.,* Richard E. Nisbett et al., *The Use of Statistical Heuristics in Everyday Inductive Reasoning,* 90 PSYCHOL. REV. 339 (1983). For a survey of this area, see Mitchell, *Rationality, supra* note 93, at 87-94.

166 *See, e.g.,* MARGARET A. NEALE & MAX H. BAZERMAN, COGNITION AND RATIONALITY IN NEGOTIATION (1991); J. EDWARD RUSSO & PAUL J.H. SCHOEMAKER, WINNING DECISIONS (2002); HUGH SCHWARTZ, RATIONALITY GONE AWRY? (1998); HERSH SHEFRIN, BEYOND GREED AND FEAR (2002); ROBERT J. SHILLER, IRRATIONAL EXUBERANCE (2000).

167 *See, e.g.,* MAX H. BAZERMAN, JUDGMENT IN MANAGERIAL DECISION MAKING (5th ed. 2002); LAWRENCE A. CUNNINGHAM, OUTSMARTING THE SMART MONEY (2002); JOHN S. HAMMOND ET AL., SMART CHOICES: A PRACTICAL GUIDE TO MAKING BETTER DECISIONS (1998); PAUL C. NUTT, WHY DECISIONS FAIL (2002) .

business school syllabi shows plentiful discussion of how to make decisions with less error.[168] These methods are relatively new to the curriculum, so we would not expect to see them fully integrated in managerial decision making.[169] To the extent they do affect how people behave, though, whom will they affect most? Large businesses tend to look to these pools when hiring managers, MBAs in particular, so we would expect to see fewer biases in their policymakers than in the rest of the world – that is, than in the consumer world. Other methods of education yield similar results. Large firms train their employees, at least those with decision-making responsibility, in the techniques of group decision-making and problem-solving.[170]

Small businesses fall between these categories, but especially in their early stages are much nearer consumers. The typical small business, after all, has very few employees, and probably the owners are the only real managers in the firm.[171] Some company founders will have been trained in business, of course. Still, small business owners are on average not as well educated as corporate middle managers.[172] Eventually a growing firm will need managers who stand between the company's principals and its workers, and these managers will likely have business training. Early on, though, the typical small firm generally will not have the sort of

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168 For a random sample, see, e.g., http://gsbwww.uchicago.edu/fac/reid.hastie/teaching/BUS38002/BUS38002Win04syllabus.pdf; http://bear.cba.ufl.edu/brenner/Geb6930/syllabus.html; http://www.newschool.edu/milano/course/sp04/4328/syllabus.pdf; http://www.kellogg.nwu.edu/faculty/murnighan/htm/decisionmaking_syllabus.htm; http://www.decisionistics.com/DSC8130Syllabus.htm.

169 Moreover, we should remember that there is a large gap between the classroom and the factory. Students may dutifully learn the material but remain skeptical about its merit. They may simply not learn it, or may not remember it when they have started work, or may misremember it and misapply it. On the other hand, any number of management firms will happily be paid to teach these methods, and doubtless some firms, probably larger ones, take them up on their offers. In any event, studies on the effects of education have not uniformly been positive. *Compare* Hal R. Arkes & Catherine Blumer, *The Psychology of Sunk Cost,* 35 ORG. BEHAV. & HUM. DECISION PROCESSES 124 (1985) (economics courses do not inoculate against sunk cost fallacy) *with* Darrin R. Lehman et al., *The Effects of Graduate Training on Reasoning,* 43 AM. PSYCHOLOGIST 431 (1988) (appropriate graduate training diminishes cognitive biases). As Arkes elsewhere suggests, though, relatively specific training may be more beneficial than general training in reasoning methods. Hal R. Arkes, *Costs and Benefits of Judgment Errors: Implications for Debiasing,* 110 PSYCHOL. BULL. 486, 496 (1991).

170 *See, e.g.,* EDWARD E. LAWLER ET AL., CREATING HIGH PERFORMANCE ORGANIZATIONS 16 (1995).

171 *See supra* note 47 and accompanying text.

172 *See supra* notes 83 - 85 and accompanying text.

managerial staff whose training may insulate it from cognitive error.[173] Furthermore, when small firms hire MBAs, they may well favor those with an entrepreneurial bent, thus bringing on especially overconfident workers in precisely those management positions where their larger counterparts have more nearly unbiased workers.[174]

Moreover, if we look directly at corporate middle managers, we see some evidence that in fact they do not exhibit these biases to the same degree as the general population. For example, corporate managers are less risk-seeking than are people as a whole, and significantly less so than entrepreneurs.[175] This is not to say that corporate managers are free from bias. Various studies of

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173 It is important not to overstate this point. As we shall see below, expertise can create or exacerbate a number of these biases, so hiring the relatively expert might not always be a prudent cognitive strategy. *See infra* Part II.C.3.b.

174 One thing may either moderate or strengthen this conclusion. David Dunning has shown that overconfidence increases as ability decreases. *See, e.g.,* Kruger & Dunning, *supra* note 100. One might thus expect overconfidence to increase as class standing decreases. Who, then, hires at the top of the class, and who at the bottom? One cannot be sure. When venture capital was hot, the whiz kids tended, at least by anecdote, to go to the dot.coms and the start-ups, leaving their less gifted colleagues to labor at Fortune 500 companies. Since the dot.com bust, though, large, staid firms have, again by anecdote, seemed more attractive. And neither was ever likely to draw heavily from the bottom of the class. Very possibly those students went to smallish, unexciting firms, though this is pure speculation. If so, then the relation between overconfidence and incompetence might hurt smaller firms more than larger ones across the board; the high-growth firms will hire the able and overconfident entrepreneurs, and the low-growth firms will hire the inferior and thus overconfident, whether entrepreneurs or not. As I have noted, though, shifts in hiring patterns may affect this conclusion at the top, and in any case it is largely speculative, the Dunning study aside.

175 For a summary of these studies and a meta-analysis of their results, see Wayne H. Stewart Jr., & Philip L. Roth, *Risk Propensity Differences Between Entrepreneurs and Managers: A Meta-Analytic View,* 86 J. APPLIED PSYCHOL. 145 (2001). *But see* Robert H. Brockhaus, *Risk Taking Propensity of Entrepreneurs,* 23 ACAD. MGMT. J. 509 (1980) (no difference between entrepreneurs and managers). Stewart & Roth's recent meta-analysis shows this study to be an outlier. Since this study the authors, responding to criticism, have slightly refined their analysis. The result is the same, though it is less robust. *Compare* Wayne H. Stewart, Jr. & Philip L. Roth, *Data Quality Affects Meta-Analytic Conclusions: A Response to Miner and Raju (2004) Concerning Entrepreneurial Risk Propensity,* 89 J. APPLIED PSYCHOL. 14 (2004) *with* John B. Miner & Nambury S. Raju, *Risk Propensity Differences Between Managers and Entrepreneurs and Between Low- and High-Growth Entrepreneurs: A Reply in a More Conservative Vein,* 89 J. APPLIED PSYCHOL. 3 (2004).

risk behavior on the part of managers show frequent departures from the Bayesian ideal.[176] For example, they show a degree of loss aversion or regret aversion that departs from the norm.[177] Still, as a group they do rather better than the average.[178] Middle managers also are less influenced by personality style than are top managers and react less vigorously to risk data.[179] The dominant personality type among middle managers thus seems somewhat less prone to bias than many.[180]

In contrast, entrepreneurs differ in many ways from other businesspeople.[181] A number of studies have shown that entrepreneurs are more confident than non-entrepreneurs.[182] They show

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176 Thus, for example, managers tend to see risk as more under their control than is entirely warranted, itself rather a dangerous bias. *See, e.g.,* MACCRIMMON & WEHRUNG, *supra* note 96, at 227; ZUR SHAPIRA, RISK TAKING: A MANAGERIAL PERSPECTIVE 73-78 (1995); James G. March & Zur Shapira, *Managerial Perspectives on Risk and Risk Taking,* 33 MGMT. SCI. 1404 (1987). *Cf., e.g.,* John D. Sterman, *Modeling Managerial Behavior: Misperceptions of Feedback in a Dynamic Decision Making Experiment,* 35 MGMT. SCI. 321 (1989) (anchoring and adjustment shown in management experiment with managers and management students as subjects).

177 *See, e.g.,* March & Shapira, *supra* note 176. This risk aversion tends to decrease at higher management levels, perhaps because very senior managers are rewarded more for success and lower-ranking managers for avoiding failure. *Id.* at 1408-09; *see also, e.g.,* MACCRIMMON & WEHRUNG, *supra* note 96, at 255-59.

178 Even their biases may ultimately prove efficient. Daniel Kahneman and Dan Lovallo have suggested that managers may compensate for overly optimistic forecasts by overly risk-averse decisions, yielding a more nearly efficient result than would either standing alone. Daniel Kahneman & Dan Lovallo, *Timid Choices and Bold Forecasts: A Cognitive Perspective on Risk-Taking,* 39 MGMT. SCI. 17 (1993).

179 Paul C. Nutt, *Strategic Decisions Made by Top Executives and Middle Managers with Data and Process Dominant Styles,* 27 J. MGMT. STUD. 173 (1990).

180 One has to speak of dominant type rather than universal type. As Philip Tetlock has shown in a study of middle managers, different personality types yield different patterns of biases. Philip E. Tetlock, *Cognitive Biases and Organizational Correctives: Do Both Disease and Cure Depend on the Politics of the Beholder?,* 45 ADMIN. SCI. Q. 293 (2000).

181 For a conceptual overview of the entrepreneurial personality, see Robert A. Baron, *Cognitive Mechanisms in Entrepreneurship: Why and When Entrepreneurs Think Differently Than Other People,* 13 J. BUS. VENTURING 275 (1998).

182 *See, e.g.,* Lowell W. Busenitz & Jay B. Barney, *Differences Between Entrepreneurs and Managers in Large Organizations: Biases and Heuristics in Strategic Decision-Making,* 12 J. BUS. VENTURING 9 (1997); Cooper et al., *supra* note 115; Charlene

greater propensity toward risk.[183] They see less risk in ambiguous situations.[184] They display greater overconfidence and a greater tendency toward representativeness.[185] They tend to favor intuition and speculation over fact-driven analysis.[186] These attributes are not without danger. Imprudence and overconfidence can yield reckless and costly decisions. Still, it is so difficult to launch a business and sustain it through the perilous early phase that overconfidence and risk-seeking may be essential.[187] The careful weighing of options may retard decisions that must be made quickly.[188] More fundamentally, successful entrepreneurs may need the sort of unequivocal belief in their ideas that ordinary prudence would forestall.[189] These attributes may well lead to

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Zietsma, *Opportunity Knocks – Or Does it Hide? An Examination of the Role of Opportunity Recognition in Entrepreneurship, in* FRONTIERS IN ENTREPRENEURSHIP RESEARCH 242 (Paul D. Reynolds et al. eds., 1999).

183 *See supra* note 175. *Cf.* David Forlani & John W. Mullins, *Perceived Risks and Choices in Entrepreneur's New Venture Decisions,* 15 J. BUS. VENTURING 305 (2000) (entrepreneurs are willing to accept great potential risk, but they tend to avoid high levels of uncertainty).

184 *See, e.g.,* Palich & Bagby, *supra* note 96; Mark Simon et al., *Cognitive Biases, Risk Perception, and Venture Formation: How Individuals Decide to Start Companies,* 15 J. BUS. VENTURING 113 (1999).

185 *See, e.g.,* Busenitz & Barney, *supra* note 182; Lowell W. Busenitz & Chung-Ming Lau, *A Cross-Cultural Cognitive Model of New Venture Creation,* 20 ENTREPRENEURSHIP THEORY & PRACTICE 25 (1996).

186 William L. Gardner & Mark J. Martinko, *Using the Myers-Briggs Type Indicator to Study Managers: A Literature Review and Research Agenda,* 22 J. MGMT. 45, 64 (1996) (high-ranking executives tend to be N types, while low-level managers tend to be S types); Jonathan C. Huefner et al., *A Comparison of Four Scales Predicting Entrepreneurship,* 1 ACAD. ENTREPRENEURSHIP J. 56 (1996), *at* http://www.alliedacademies.org/archive/aej/aej1-2.pdf (same).

187 *See, e.g.,* Simon et al., *supra* note 184.

188 *See, e.g.,* Busenitz & Barney, *supra* note 182.

189 *See, e.g.,* Gerald E. Hills & Rodney C. Shrader, *Successful Entrepreneurs' Insights into Opportunity Recognition, in* FRONTIERS OF ENTREPRENEURIAL RESEARCH 30 (Paul D. Reynolds et al. eds, 1998). To this end, entrepreneurs tend to do much less counterfactual thinking than do those who have never started a business, and feel much less negative affect as a result of the counterfactual thought they do conduct. Robert A. Baron, *Counterfactual Thinking and Venture Formation: The Potential Effects of Thinking About "What Might Have Been",* 15 J. BUS. VENTURING 79 (2000).

entrepreneurial success, so the economy may on balance be better off if they are encouraged.[190] Given the high rate of entrepreneurial failure, though, perhaps the costs associated with them should be mitigated.[191]

Additionally, larger firms may select through internal controls. How principals control their agents has provoked a huge literature.[192] That they need to is fairly certain: agents, left unconstrained, are likely to act in their own interests, not necessarily the interests of the firm. Thus businesses seek to align the interests of the firm and the individual – for instance, by issuing stock options, or tying compensation to corporate profit.[193] They may also police behavior that suggests an inappropriate focus. For instance, they can bar executives from owning stock in competitors, suppliers, or customers. Some of these constraints seek to prevent managers from acting irrationally from the business's vantage, and thus may effectively police cognitive error. Strategic planning might help mitigate some errors, in particular escalation. But small firms tend

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190 It has also been suggested that entrepreneurs may be irrational, but that their irrationality is best for society as a whole because their overconfident explorations provide information to others better able to take advantage of it. Antonio E. Bernardo & Ivo Welch, *On the Evolution of Overconfidence and Entrepreneurs,* 10 J. ECON. & MGMT. STRATEGY 301 (2001); Simon et al., *supra* note 184, at 127-28.

191 It is important to note that not all small businesses are entrepreneurial. Relatively few studies compare non-entrepreneurial and entrepreneurial small businesses, and fewer still add corporate managers to the mix. The studies we have, though, generally suggest that non-entrepreneurial small business owners are less risk-seeking than entrepreneurs but more risk-seeking than corporate managers. *See, e.g.,* Thomas Begley & David Boyd, *A Comparison of Entrepreneurs and Managers of Small Business Firms,* 13 J. MGMT. 99 (1987); James W. Carland et al., *Differentiating Small Business Owners from Entrepreneurs,* 9 ACAD. MGMT. REV. 354 (1984); James W. Carland et al., *Risk Taking Propensity Among Entrepreneurs, Small Business Owners, and Managers,* 7 J. BUS. & ENTREPRENEURSHIP 15 (1995); R.K. Schwer & Ugur Yucelt, *A Study of Risk-Taking Propensities Among Small Business Entrepreneurs and Managers: An Empirical Evaluation,* 8 AM. J. SMALL BUS. 31 (1984); Wayne H. Stewart, Jr. et al., *A Proclivity for Entrepreneurship: A Comparison of Entrepreneurs, Small Business Owners, and Corporate Managers,* 14 J. BUS. VENTURING 189 (1999); *see also* sources cited *supra* note 175.

192 The classic study remains Michael C. Jensen & William H. Meckling, *Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure,* 3 J. FIN. ECON. 305 (1976). For more recent reviews, see, e.g., Trond E. Olsen, *Agency Costs and the Limits of Integration,* 27 RAND J. ECON. 479 (1996); Andrei Shleifer & Robert W. Vishny, *A Survey of Corporate Governance,* 52 J. FIN. 737 (1997).

193 *See, e.g.,* David E.M. Sappington, *Incentives in Principal-Agent Relationships,* 5 J. ECON. PERSP. 45 (1991).

not to plan strategically, certainly not to the degree that large firms do.[194] Similarly, careful quantitative analysis can reduce the likelihood that one will use an inaccurate heuristic. Again, though, small firms rely more on intuitive, rather than analytical, approaches to decision making, which makes them more prone to heuristic errors.[195]

Consumers can put internal controls in place. One way to increase savings is through payroll deductions, for example. These effectively subordinate our spending selves to our savings selves.[196] Still, it is not easy to police one's self. Sometimes institutions offer to help, at least for a price. As Richard Thaler has observed, buying a package deal for exercise or education encourages one to make use of the pre-purchased opportunities, though perhaps in ways heedless of the sunk cost fallacy.[197] To some extent as well, consumers are not necessarily individuals. Many of us live in buying units – a family, a cooperative, a sorority. In those, important decisions are to a degree collective, and in theory can be made under internal constraints. Whether they are likely to is more speculative. As we will see below, group decisions may be less sensible than individual decisions.[198] More to the point, it is hard to use internal controls to select in favor of or against certain types of decisions or decision-makers. The latter is impossible for a family and difficult, reality television aside, in the others. Any of these groups can in principle give decision-making power to the most rational members. This happens in families, very few of which hand major decisions over to seven-year-old children.[199] It may well happen in other groups as well, though in a cooperative or other such group the choice of leader may be made without regard to

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194 *See, e.g.,* Charles R. Schwenk & Charles B. Shrader, *Effects of Formal Strategic Planning on Financial Performance in Small Firms: A Meta-Analysis,* ENTREPRENEURSHIP: THEORY & PRACTICE, Spr. 1993, at 53, 55-56.

195 *See, e.g.,* Keith D. Brouthers et al., *Driving Blind: Strategic Decision-Making in Small Companies,* 31 LONG RANGE PLANNING 130, 133-34 (1998). For a summary of decision-making weaknesses in small firms, see Martha Mador, *Strategic Decision Making Process Research: Are Entrepreneur and Owner Managed Firms Different?,* 2 J. RES. MKTG. & ENTREPRENEURSHIP 215, 218-19 (2000).

196 Richard H. Thaler & Hersh M. Shefrin, *An Economic Theory of Self-Control,* 89 J. POL. ECON. 392 (1981). Interestingly, Thaler and Shefrin analogized methods of self-control to the principal-agent problem in business, citing to Jensen and Meckling's work in their discussion.

197 Richard H. Thaler, *Toward a Positive Theory of Consumer Choice,* 1 J. ECON. BEHAV. & ORG. 39 (1980). On sunk cost in the consumer context, see, e.g., Arkes & Blumer, *supra* note 169.

198 *See infra* Part II.C.3.c.

199 Though the most rational member of the family may well get that honor *faute de mieux.*

the potential leaders' pure Bayesian rationality.

Small businesses again more closely resemble consumers, at least until the businesses grow large enough to require internal policing. As long as the owner controls the firm, agency cost issues may not be as significant as in publicly-held firms. What's good for Ma and Pa, Inc., is good for Ma and Pa, so there should be less of a need to align their interests by contract.[200] Once ownership becomes more diffuse, though, the interests of principal and agent may diverge further.[201] So too might they diverge when Ma and Pa hire an outsider to run some aspect of the business.[202] Until the owners and the managers separate so greatly that the former must police the latter, though, the small business probably will not develop the limits that the large business must. Again, the small firm rests nearer the consumer than to the large firm.[203]

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[200] This at least has been the usual assumption, going back to Jensen & Meckling. *See also, e.g.,* William S. Schulze et al., *Agency Relationships in Family Firms,* 12 ORG. SCI. 99 (2001). Family-controlled and operated firms do use non-economic ties such as loyalty and altruism to accomplish what contracts and monitoring do in firms with dispersed ownership. Still, they also use conventional incentive pay and the like. *See, e.g.,* William S. Schulze et al., *Toward a Theory of Agency and Altruism in Family Firms,* 18 J. BUS. VENTURING 473 (2003). The extent to which one or the other is used will depend on many factors, given the possible inefficiencies of family ownership. *See, e.g.,* Harvey S. James Jr., *What Can the Family Contribute to Business? Examining Contractual Relationships,* 12 FAMILY BUS. REV. 61 (1999); Harvey S. James, Jr., *Owner as Manager, Extended Horizons and the Family Firm,* 6 INT'L J. ECON. BUS. 41 (1999); William S. Schulze et al., *Altruism, Agency, and the Competitiveness of Family Firms,* 23 MANAGERIAL & DECIS. ECON. 247 (2002); James J. Chrisman et al., Current Trends and Future Directions in Family Business Management Studies: Toward a Theory of the Family Firm 14-20 (2003), *available at* http://www.usabe.org/knowledge/whitepapers/chrisman2003.pdf.

[201] This may also be a problem if family members may take advantage of family ties to shirk or loaf, perhaps a problem as a family-owned business matures and the younger generations feel less attachment to the firm. Internal diffusion can thus be a problem as well, though perhaps not as pervasively as the sort endemic when the owners are not the workers.

[202] Small business managers, like their large firm counterparts, tend to see more risk in ambiguous scenarios than do entrepreneurs. This derives from studies using the Myers-Briggs Type Indicator to categorize personality types. Small business managers disproportionately fall in the ST subgroup. Frank Hoy & Don Hellriegel, *The Kellman and Herden Model for Organizational Effectiveness Criteria for Small Business Managers,* 25 ACAD. MGMT. J. 308, 316 (1982). As Paul Nutt has found, the ST group sees the highest risk in ambiguous scenarios. Nutt, *supra* note 106.

[203] *See, e.g.,* Mark Simon et al., *Out of the Frying Pan . . . ? Why Small Business Managers Introduce High-Risk Products,* 18 J. BUS. VENTURING 419, 427 (2003).

b. Individual learning

First, the obvious: People can and do learn to avoid many types of cognitive error. Though not all types of error have shown themselves readily susceptible to elimination or, in the term of art, debiasing, most that have been studied can at least be reduced.[204] *That* people learn is hardly surprising, whether one is inside or outside the academy.[205] *When* and *under what circumstances* they learn is not as obvious, though, and merits our attention. If learning can readily be perfect, then we need not worry about cognition, other than to arrange the law so that people will have incentives to learn.[206] Moreover, if consumers and merchants should learn in the same way and at the same rate, then the behavioral case for intervening on behalf of the consumer is weaker. To be sure, we might still see individual differences that could require policing, and subgroups of consumers might merit intervention. For example, there is evidence that some, at least, of the heuristics and biases are linked to general intelligence, which might suggest some need to protect

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204 For representative studies, see, e.g., Hal R. Arkes et al., *Two Methods of Reducing Overconfidence,* 39 ORG. BEHAV. & HUM. DECISION PROCESSES 133 (1987) (overconfidence); Geoffrey T. Fong et al., *The Effects of Statistical Training on Thinking about Everyday Problems,* 18 COGNITIVE PSYCHOL. 253 (1986) (statistical reasoning); Adam D. Galinsky & Thomas Mussweiler, *First Offers as Anchors: The Role of Perspective-Taking and Negotiator Focus,* 81 J. PERSONALITY & SOC. PSYCHOL. 657 (2001) (anchoring); Stephen J. Hoch, *Counterfactual Reasoning and Accuracy In Predicting Personal Events,* 11 J. EXPERIMENTAL PSYCHOL.: LEARNING, MEMORY, & COGNITION 719 (1985) (overoptimism); Asher Koriat et al., *Reasons for Confidence,* 6 J. EXPERIMENTAL PSYCHOL.: LEARNING, MEMORY, & COGNITION 107 (1980) (overconfidence); Sarah Lichtenstein & Baruch Fischhoff, *Training for Calibration,* 26 ORG. BEHAV. & HUM. PERFORMANCE 149 (1980) (probability assessments). Some biases have proved largely resistant. *See, e.g.,* Peter Foreman & J. Keith Murnighan, *Learning to Avoid the Winner's Curse,* 67 ORG. BEHAV. & HUM. DECISION PROCESSES 170 (1992). *See also, e.g.,* Neil D. Weinstein & William M. Klein, *Resistance of Personal Risk Perceptions to Debiasing Interventions, in* HEURISTICS AND BIASES: THE PSYCHOLOGY OF INTUITIVE JUDGMENT 313 (Thomas Gilovich et al. eds., 2002) (showing that overoptimism may not always yield to debiasing).

205 As Howard Latin put it, "People can learn to improve some kinds of decisions in some kinds of circumstances; otherwise teachers would be out of work." Howard Latin, *"Good" Warnings, Bad Products, and Cognitive Limitations,* 41 UCLA L. REV. 1193, 1252 (1994).

206 *See, e.g.,* Richard E. Nisbett et al., *The Use of Statistical Heuristics in Everyday Inductive Reasoning,* 90 PSYCHOL. REV. 339, 340 (1983); Posner, *supra* note 93, at 1575; Alan Schwartz, *Proposals for Products Liability Reform: A Theoretical Synthesis,* 97 YALE L.J. 353, 381-82 (1988).

the less bright.[207] For that matter, if relatively savvy merchants could easily capitalize on the cognitive errors of relatively biased consumers but not the reverse, then the market might not wash out the errors and again the law might properly intervene. These caveats aside, though, we must look at the relative abilities of consumers and merchants to learn in order that we may situate small businesses with regard to them.

A good place to start is the mechanics of learning. This would seem unfruitful at first glance. After all, individuals learn, not businesses. Insofar as businesses learn, they learn through their workers. Why should workers in their mercantile capacities behave differently than workers in their individual capacities? In fact, though, there are a number of reasons that firms may acquire and use information differently than individuals. Some have to do with collective concerns that will be discussed below.[208] Others, though, have to do with the means by which we learn. If large businesses make learning easier than it is for consumers, they might be expected to take advantage of the fact; after all, there is at least mild economic pressure to behave rationally. Students of learning have pointed to several factors that are especially important.[209] By looking at these in turn, we can see whether they favor the sort of learning that takes place within large firms and thus whether large firms are better able to learn to avoid cognitively dubious behavior.

i. Feedback

First, learning requires feedback. Not just any feedback will do. The feedback must be accurate, of course, or any learning will be warped. It must also be close enough to the event that the person receiving feedback will associate the feedback with the behavior producing the feedback.[210] Where decision-makers cannot readily trace history, they tend not to learn well when faced with feedback delays.[211] We thus see that weather forecasters, who receive accurate and

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[207] *See, e.g.,* Keith E. Stanovich & Richard F. West, *Individual Differences in Reasoning: Implications for the Rationality Debate?,* 23 BEHAV. & BRAIN SCI. 645 (2000). *But see, e.g.,* Sarah Lichtenstein & Baruch Fischhoff, *Do Those Who Know More Also Know More about How Much They Know?,* 20 ORG. BEHAV. & HUM. DECISION PROCESSES 159 (1977) (finding no relation between calibration and intelligence).

[208] *See supra* Part II.C.3.c.

[209] *See, e.g.,* Amos Tversky & Daniel Kahneman, *Rational Choice and the Framing of Decisions, in* RATIONAL CHOICE: THE CONTRAST BETWEEN PSYCHOLOGY AND ECONOMICS 69, 90-91 (Robin M. Hogarth & Melvin W. Reder eds., 1986); Hillel J. Einhorn & Robin M. Hogarth, *Confidence in Judgment: Persistence of the Illusion of Validity,* 85 PSYCHOL. REV. 395, 407-15 (1978).

[210] *Id.*

[211] *See, e.g.,* Faison P. Gibson, *Feedback Delays: How Can Decision Makers Learn Not to Buy a New Car Every Time the Garage is Empty?,* 83 ORG. BEHAV. & HUM. DECISION

immediate feedback daily and even hourly, are almost devoid of probabilistic error.[212] But feedback may hinder those who receive it. Many heuristics and biases are learned. Overconfidence may arise from a self-attribution bias reinforced by apparent successes.[213] Risk aversion may be a response to negative feedback.[214] Information, if filtered through a bias, may thus do considerable cognitive harm. We thus have two questions: first, who is likely to get potentially useful information, and second, who is likely to use it helpfully or harmfully.

Consumers and large merchants differ materially in their access to feedback. Large merchants have so high a volume of transactions that they have the capacity to get useful feedback for all but quite infrequent decisions or quite unlikely outcomes.[215] They are also likely to gather much information routinely, and very often they will seek it out and analyze it in sophisticated ways. Multivariate analysis and the like allow one to tease out particular causes for complex phenomena, provided one has enough data to make the analysis fruitful. Though complex data analysis can be time-consuming, routine analysis can be very rapid indeed. Consumers also get feedback, but that feedback may not always be plentiful. Many consumer transactions are infrequent. Even the more frequent ones may not provide useful feedback. Evidence of product

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PROCESSES 141 (2000).

[212] *See, e.g.,* Allan H. Murphy & Robert L. Winkler, *The Use of Credible Intervals in Temperature Forecasting: Some Experimental Results, in* DECISION MAKING AND CHANGE IN HUM. AFFAIRS 45 (Helmut Jungermann & Gerard de Zeeuw eds., 1977); Allan H. Murphy & Robert L. Winkler, *Subjective Probability Forecasting Experiments in Meteorology: Some Preliminary Results,* 55 BULL. AM. METEOROLOGICAL SOC'Y 1206 (1974). This is not to say that weather forecasters are immune from other types of error, such as the hindsight bias. *See, e.g.,* Neville Nicholls, *Cognitive Illusions, Heuristics, and Climate Prediction,* 80 BULL. AM. METEOROLOGICAL SOC'Y 1385 (1999).

[213] *See, e.g.,* Brad M. Barber & Terrance Odean, *Online Investors: Do the Slow Die First?,* 15 REV. FIN. STUD. 455 (2002); Simon Gervais & Terrance Odean, *Learning to be Overconfident,* 14 REV. FIN. STUD. 1 (2001); Stuart Oskamp, *Overconfidence in Case-Study Judgments,* 29 J. CONSULTING PSYCHOL. 261 (1965).

[214] *See, e.g.,* James G. March, *Learning to be Risk Averse,* 103 PSYCHOL. REV. 309 (1996). *Cf., e.g.,* Mikhail Myagkov & Charles R. Plott, *Exchange Economies and Loss Exposure: Experiments Exploring Prospect Theory and Competitive Equilibria in Market Environments,* 87 AM. ECON. REV. 801, 820-21 (1997) (finding some experimental evidence that over time risk-seeking behavior becomes risk-neutral or risk-averse behavior).

[215] They may choose not to gather the information, though. Furthermore, in a large enough organization it is possible that one unit may hold information valuable to another without realizing that the information is valuable and should be transmitted. Finally, internal rivalries may cause one unit to withhold information from another. These caveats aside, the large firm should have access to more information than would smaller fry.

failure, for example, may come about months or years from the purchase. By then, the consumer may not be able to tell whether the product failed because it was badly designed, badly manufactured, badly installed, or badly used. The resulting feedback may be inaccurate and will likely be ambiguous.[216] Information is also more costly to secure and, per unit of information, to process, as the economies of scale available to the large business are not as readily available to the consumer. Some are – *Consumer Reports* and the like – but much information useful to consumers is proprietary. Still other information is difficult to gather, in part because of the number of variables involved. Many consumer goods differ across many characteristics, making multivariate comparisons difficult.

For the most part, small businesses fall in the middle. They may lack the economies of scale of large firms, making detailed feedback too dear and, for relatively infrequent events, too slow to amass. Smaller firms may also lack the skill in analyzing complex data that large firms can keep on tap. On the other hand, a small business may be able to assemble information more quickly than can a large, diffuse firm. A narrowly focused small business may also gather enough information to gain feedback about even infrequent events for its oft-repeated transactions. And a small firm composed of analytic adepts may match, if not better, its larger competitors in analyzing data, in large part because the small firm places fewer layers between the data and its analysts. One cannot generalize readily as a result. Still, though a small firm may get accurate and rapid feedback better than a large one, that may well not be true for relatively uncommon events – the sort that can make a great difference in running a business. Here, at least, small businesses probably resemble large ones more closely than they do consumers, though with wide variation in similarity.

The second issue, whether the feedback will prove helpful or harmful, shows similar scatter. Possibly, as I have suggested, consumers are likely to display various biases more than businesses, especially large ones. If so, these biases may cause consumers to use feedback to strengthen these biases or develop others. Much depends on the particular bias and the particular feedback, though, making abstract discussion largely unhelpful. Much may also depend upon the form of the feedback, as, for instance, negative feedback and positive feedback for the same task may have greatly different effects on learning.[217]

Looking at one important bias, overconfidence, may render this more concrete. Related to this is the illusion of control. To the extent market participants incorrectly believe they control their own fates, they will interpret favorable actions as due to their own skills and increase their overconfidence. If our populations differ in their senses of control, then, we would expect positive feedback to increase, not decrease, overconfidence. In general, businesspeople, entrepreneurs in particular, do show an unwarranted sense of control over their surroundings.[218]

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[216] The ambiguity may yield ambiguity aversion, which, allied to dissonance aversion, could cause any useful negative feedback to be downplayed.

[217] *See, e.g.,* Robin M. Hogarth et al., *Learning from Feedback: Exactingness and Incentives,* 17 J. EXPERIMENTAL PSYCHOL.: LEARNING, MEMORY, & COGNITION 734 (1991).

[218] *See, e.g.,* SHAPIRA, *supra* note 176, at 73-74.

To the extent this is true, favorable feedback might lead to still more inflated overconfidence.[219] In contrast, consumers, though as a group hardly free from overconfidence, may not have the same sense of control over their surroundings. One might cautiously suggest, then, that entrepreneurs might need some degree of sheltering from the baneful effects of overly favorable feedback, at least to a greater degree than either consumers, on the one hand, or managers of large firms, on the other.[220]

We are left, then, with no simple answer for feedback. The most straightforward feedback effects generally favor large firms over small. So too may some of the less straightforward effects, such as the negative mix of self-attribution and positive feedback. To be more helpful one would have to look closely at a particular situation and examine the types of feedback likely to be used, who would act upon the feedback, and the quantity, quality, and timing of the information. At present, one can safely say only that we cannot lump large and small businesses together with comfort, and that small businesses stand closer to consumers, and thus closer to a need for consumer protections, than do large businesses. How much closer, and how much protection, must be left to more detailed analyses.

ii. Debiasing

Leaving aside feedback effects, students of cognitive biases have developed a number of special ways to reduce biased behavior. Compelling people to set forth counterfactual scenarios, for instance, can lower their degree of confirmation bias.[221] In much the same manner, people who must consider the effects of an opposite decision often bring their ultimate decision closer to a rational ideal.[222] Overconfidence may be combated by reframing decisions, which avoids narrowing one's search through adherence to one's preconceived notions.[223] One may also learn

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219 As shown by on-line traders. Barber & Odean, *supra* note 213.

220 Though there is some evidence that entrepreneurial overconfidence may be adaptive and even profitable. *See, e.g.,* Bernardo & Welch, *supra* note 190; Michael Manove, Entrepreneurs, Optimism and the Competitive Edge (Nov. 2000), *available at* http://econ.bu.edu/manove/opt.pdf.

221 *See, e.g.,* Arkes, *supra* note 169, at 494; Adam D. Galinsky and Gordon B. Moskowitz, *Counterfactuals as Behavioral Primes: Priming the Simulation Heuristic and Consideration of Alternatives,* 36 J. EXPERIMENTAL SOC. PSYCHOL. 257 (2000).

222 *See, e.g.,* Charles G. Lord et al., *Considering the Opposite: A Corrective Strategy for Social Judgment,* 47 J. PERSONALITY & SOC. PSYCHOL. 1231 (1984); Thomas Mussweiler et al., *Overcoming the Inevitable Anchoring Effect: Considering the Opposite Compensates for Selective Accessibility,* 26 PERSONALITY & SOC. PSYCHOL. BULL. 1142 (2000).

223 Nutt, *supra* note 106.

to avoid predecisional distortion of information gathering by setting values on attributes before choice begins.[224] Some such strategies have been developed to improve success in making decisions.[225] To the extent these debiasing techniques are commonly used, they may mitigate, or at least limit appropriately, the use of heuristics and biases.

They are not in any sense infallible, of course. Some methods may even increase error.[226] Eliciting alternative outcomes, for instance, may increase the hindsight bias if one tries to elicit too many alternatives. We find it difficult to set forth too many alternatives, and thus often conclude that there were very few ways the event could have turned out.[227] Nor should we be entirely sanguine about the prospects for debiasing. Many of these biases are likely deep-rooted; even leaving aside evolutionary psychology, it has been suggested that cognitive biases stem from, or at least are inextricably intertwined with, the values of the biased person.[228]

More important from our vantage, not every person is equally likely to perform these debiasing maneuvers. Some may well come naturally, but the persistence of error in a range of settings suggests that they may not be entirely common. If one learns these techniques, though,

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[224] Thus, for example, students in a wine evaluation course were not prone to predecisional distortion for those attributes of wine they had studied, but were for those they had not. Kurt A. Carlson & Lisa Klein Pearo, *Limiting Predecisional Distortion by Prior Valuation of Attribute Components,* 94 ORG. BEHAV. & HUM. DECISION PROCESSES 48 (2004).

[225] For reviews of this literature, see, e.g., BAZERMAN, *supra* note 167, at 152-67; Arkes, *supra* note 169; Baruch Fischhoff, *Debiasing, in* JUDGMENT UNDER UNCERTAINTY, *supra* note 100, at 422; Timothy D. Wilson & Nancy Brekke, *Mental Contamination and Mental Correction: Unwanted Influences on Judgments and Evaluations,* 116 PSYCHOL. BULL. 117, 130-33 (1994); *see also* sources cited *supra* note 204.

[226] Furthermore, incomplete debiasing may lower performance. At times heuristics and biases may cancel out, leaving the person doubly afflicted with sound results reached by unsound means. Should only one bias be removed, the remaining bias, hitherto counteracted, will dominate, yielding a worse result. Gregory Besharov, Second-Best Considerations with Correcting Cognitive Biases (Nov. 2002), *available at* http://papers.ssrn.com/http://papers.ssrn.com/sol3/papers.cfm?abstract_id=381300.

[227] Lawrence J. Sanna et al., *When Debiasing Backfires: Accessible Content and Accessibility Experiences in Debiasing Hindsight,* 28 J. EXPERIMENTAL PSYCHOL.: LEARNING, MEMORY, & COGNITION 497 (2002). Similarly, reading information on multiple scenarios has been found not to lower overconfidence in the resulting forecasts – in fact, *any* scenario information increased confidence, very likely because the most convenient parts of the scenarios are used to bolster one's own conclusion. Kristine M. Kuhn & Janet A. Sniezek, *Confidence and Uncertainty in Judgmental Forecasting: Differential Effects of Scenario Presentation,* 9 J. BEHAVIORAL DECISION MAKING 231 (1996).

[228] Tetlock, *supra* note 180.

where does one learn them? As we have seen, business schools and business texts have taken cognition to heart.[229] These books and courses stress both diagnosis and cure; not just whether a person or a firm may prove susceptible to biased or inadequate decisions, but how to counter this susceptibility. Furthermore, debiasing is most likely to appeal to those who sense their potential bias. The excessively self-assured would be more likely to spurn such debiasing techniques as counterfactual thinking as contrary to their obviously successful way of operating. Thus, for example, we see that entrepreneurs tend not to engage in counterfactual thinking.[230] Again, we are likely to see our sliding scale, with large firms most likely to use debiasing techniques, small firms less, and consumers least of all.

iii. Incentives

Incentives may also affect learning. Initially one might think that the greater the incentive, the greater the learning. One presumably takes greater pains when a lot rests on one's decision than when a little rests on it. The results are not nearly so clear. Two recent reviews of the literature conclude that usually incentives bring experimental results closer to the optimum.[231] This result seems clearest when the tasks involved are relatively simple, especially in judgment and decision making.[232] Incentives can sometime worsen performance in more complex tasks, though, as additional thought pulls one away from more or less efficient instinct or habit.[233] Furthermore, some heuristics may arise precisely because a lot rests on decisions. Regret aversion, for instance, depends critically on the magnitude of the potential regret.[234] One might

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229 *See supra* notes 166-168 and accompanying text.

230 Baron, *supra* note 189.

231 Colin F. Camerer & Robin M. Hogarth, *The Effects of Financial Incentives in Experiments: A Review and Capital-Labor-Production Framework,* 19 J. RISK & UNCERTAINTY 7 (1999); Ralph Hertwig & Andreas Ortmann, *Experimental Practices in Economics: A Methodological Challenge for Psychologists?,* 24 BEHAV. & BRAIN SCI. 383 (2001); *see also, e.g.,* Vernon L. Smith & James M. Walker, *Monetary Rewards and Decision Cost in Experimental Economics,* 31 ECON. INQUIRY 245 (1993).

232 There is, however, considerable evidence that incentives do not entirely abate heuristics and biases. *See, e.g.,* David B. Wiseman & Irwin P. Levin, *Comparing Risky Decision Making Under Conditions of Real and Hypothetical Consequences,* 66 ORG. BEHAV. & HUM. DECISION PROCESSES 241 (1996).

233 *See, e.g.,* Camerer & Hogarth, *supra* note 231, at 34.

234 *See, e.g.,* Richard P. Larrick & Terry L. Boles, *Avoiding Regret in Decisions with Feedback: A Negotiation Example,* 63 ORG. BEHAV. & HUM. DECISION PROCESSES 87 (1995);

expect to see incentives increase the degree of regret aversion – in essence, a learned bias, and one that is learned fastest when the stakes are highest. Finally, we should again remember the many *in vivo* studies of heuristics and biases. If stock traders, foreign exchange managers, and corporate buyers display a range of cognitive errors when using real money, their own and their employers', then we should take these biases seriously even if they can be mitigated by incentives in the laboratory. After all, business history teems with tales of organizations oblivious to the lessons of experience – or, perhaps worse, of organizations that learned the wrong lessons.[235]

It is thus difficult to say what effect the presence of incentives might have on consumers, small businesses, or large businesses without careful attention to the type of decision potentially affected by the incentives. Nor is it always clear in which of these groups incentives might be greatest. Large firms have the potential to enter into larger transactions than typical individuals or small firms. Their transactions are not necessarily larger, though. More important, their transactions as a percentage of size may usually be smaller. Small firms are less likely to diversify than large ones, making each decision potentially more important. Moreover, in large firms the gap between good performance and reward probably will be greater than for small firms or consumers. If a purchasing manager saves Wal-Mart a million dollars a year she is unlikely to get much of a reward, beyond perhaps a modest bonus and an infinitesimal rise in the value of her Wal-Mart stock. Nor is even that reward likely to be automatic or rapid. If an owner of a small firm or a consumer saves a hundred dollars, it goes directly into her pocket – a much more vivid reward and a much more direct one.[236]

Adding further to our difficulty is the clarity with which an incentive is set forth. Ordinarily laboratory experiments make the incentives quite clear – a prize goes to the best performer, or one gets paid more for completing a task more quickly, or the like. Real-life incentives are not always that clear. How do you know whether your actions are prudent or imprudent? Here incentives merge with feedback. Even if a lot of money rests on the outcome of a decision, that outcome may be affected by more than the quality of your decision. The effect of the incentive may thus be blunted – and, if one is prone to the attribution bias, blunted greatly – by these complications.[237]

Where does this leave us? Regrettably, somewhat in mid-air. The main use of the incentives literature may well be in how it makes us look at laboratory findings. This is altogether appropriate, and we should be cautious when we extrapolate too carelessly from *in vitro* studies to *in vivo* policies. To the extent that incentives mitigate biased behavior – clearly a considerable

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Marcel Zeelenberg et al., *Consequences of Regret Aversion: Effects of Expected Feedback on Risky Decision Making,* 65 ORG. BEHAV. & HUM. DECISION PROCESSES 148 (1996).

[235] For a collection of case studies, see NUTT, *supra* note 167.

[236] Put otherwise, large firms may lack the success of small ones or of individuals in aligning the interests of principals and agents. (Indeed, individuals and many small firms lack a division between principal and agent and thus need not worry about incentives.)

[237] *See supra* Part II.C.3.b.i.

extent for some biases – we should be less inclined to change the law to deal with the biases that remain. On the other hand, plenty of field studies show robust heuristics and biases, many of them very costly indeed, despite all the incentives in the world. Those who argue that legal intervention commonly stands in the way of rationality by removing incentives to learn thus might also wish to temper their fervor.

iv. Expertise

One aspect of learning that may affect small and large businesses differently is expertise. One would think that expertise would carry with it great accuracy. Obviously expertise has some value, or the market would long since have diminished its worth. This point has been verified often. For example, professional traders are more nearly Bayesian than are MBA students, as shown in market simulations.[238] More knowledgeable managers show fewer framing effects than less knowledgeable managers.[239] One should also recall the Kruger and Dunning study which showed that the less able tend to be more overconfident than the more able.[240] In light of these studies, one would be tempted to say that expertise and bias avoidance are closely linked, and thus focus on when small businesses would show more or less expertise than large businesses.[241]

The issue is important, but not entirely for that reason. A great many studies have shown, rather depressingly, that experts are prone to the same biases in their fields of expertise as they are outside. Many of the field studies of business practice discussed above look at the actions of seasoned and presumably expert businesspeople.[242] Still other studies have looked closely at experts in a wide range of fields.[243] In sum, experts not uncommonly display overconfidence in

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[238] Matthew J. Anderson & Shyam Sunder, *Professional Traders as Intuitive Bayesians,* 64 ORG. BEHAV. & HUM. DECISION PROCESSES 185 (1995).

[239] John T. Hazer & Scott Highhouse, *Factors Influencing Managers' Reactions to Utility Analysis: Effects of SD_y Method, Information Frame, and Focal Intervention,* 82 J. APPLIED PSYCHOL. 104 (1997).

[240] Kruger & Dunning, *supra* note 100.

[241] *Cf.* McCarthy et al., *supra* note 153, at 22 (proposing that entrepreneurs' tendency toward escalation bias be counteracted by bringing in independent experts).

[242] *See, e.g., supra* notes 153, 157-158 and accompanying text.

[243] *See, e.g.,* Colin F. Camerer & Eric J. Johnson, *The Process-Performance Paradox in Expert Judgment: How Can Experts Know So Much and Predict So Badly?, in* RESEARCH ON JUDGMENT AND DECISION MAKING 342 (William M. Goldstein & Robin M. Hogarth eds., 1997) (collecting studies); *see also supra* notes 100 & 213 and accompanying text.

their judgment.[244] They can find it difficult to place themselves in the position of those less expert, perhaps because they have developed different methods of analyzing problems and can no longer go back to their earlier, inexpert selves.[245] They often neglect the base rate of an event, possibly reflecting overuse of subjective probabilities.[246] Most dismaying, the general conclusion most of these studies make is that expertise often proves inferior to rather simple actuarial models, and that experts do not consistently perform better than relative novices with a modest amount of training.[247] These studies suggest that experts rely too heavily on ill-developed heuristics arising from their experience.[248]

What, then, to make of these assorted results? Just as it was tempting to say that expertise would eliminate heuristics and biases, so too is it tempting to say that the studies are inconclusive and thus expertise may safely be ignored, at least once one gets beyond the novice stage. Certainly the research is more complex than the first statement would have it, but the added complexity does not prevent us from making some judgments, albeit tentative ones. If expertise eliminates some biases and exacerbates others, we might look for situations in which the pertinent biases fall in one bin or another. We might also look at the extent and nature of the expertise to be found in consumers, large firms, and small firms. Not all expert judgment is biased, as the range of studies suggests, and possibly some of our groups will have less biased expertise than others. Finally, we should be careful not to conclude that the presence of a bias is necessarily

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[244] *See, e.g.,* Jayashree Mahajan, *The Overconfidence Effect in Marketing Management Predictions,* 29 J. MARKETING RES. 329 (1992). These studies may seem inconsistent with the findings of Kruger and Dunning, supra note 100. They can be reconciled. As Kruger and Dunning point out, the underconfidence their experts showed may have been due to a false consensus effect – the assumption that because they had done so well, their colleagues must also have done so. Kruger & Dunning, *id.* at 1131. Presumably experts who are used to consorting only with other experts will not be prey to this effect and will express a more conventional degree of overconfidence.

[245] *See, e.g.,* Colin Camerer et al., *The Curse of Knowledge in Economic Settings,* 97 J. POL. ECON. 1232 (1989); Pamela J. Hinds, *The Curse of Expertise: The Effects of Expertise and Debiasing Methods on Predictions of Novice Performance,* 5 J. EXPERIMENTAL PSYCHOL.: APPLIED 205 (1999).

[246] Derek J. Koehler et al., *The Calibration of Expert Judgment: Heuristics and Biases Beyond the Laboratory, in* HEURISTICS AND BIASES, *supra* note 204, at 686.

[247] *See, e.g.,* Camerer & Johnson, *in* RESEARCH ON JUDGMENT AND DECISION MAKING, *supra* note 243; Robyn M. Dawes et al., *Clinical versus Actuarial Judgment, in* HEURISTICS AND BIASES, *supra* note 204, at 716; William M. Grove et al., *Clinical vs. Mechanical Prediction: A Meta-Analysis,* 12 PSYCH. ASSESSMENT 19 (2000).

[248] On why experts may fail to learn from their experience, see, e.g., Berndt Brehmer, *In One Word: Not From Experience,* 45 ACTA PSYCHOLOGICA 223 (1980).

harmful. Even if expertise can yield overconfidence, for example, overconfidence can be adaptive, as in the case of entrepreneurs.[249]

This is too complex a task to complete in the scope of one article, or probably one lifetime.[250] A few observations may be in order, though. First, all parties involved in this article – consumers, small firms, and large firms – will likely show some degree of expertise. Large firms may develop expertise and may buy it, but they should at least have access to expertise in virtually every aspect of their business activities. Small firms may be less uniformly expert. They may have less skilled outside experts in accounting, law, and the like. They may also be less expert internally, though this is less certain. Small firms are small in part because they engage in fewer transactions than their larger counterparts, and from repetition can come expertise. Repetition may have diminishing marginal utility, though, and may even encourage the formation of shortcuts that will yield biased behavior as the price of efficiency. Moreover, small firms may be small, not because they engage in few transactions, but because they engage in few lines of business. A highly specialized small firm may be quite expert in what it does. Likewise, we should not generalize too far from the lower educational level of small business owners, as compared with middle managers.[251] This is not irrelevant globally, but may mask some important subcategories. Task expertise may come from experience, rather than education. Moreover, as noted above, some small businesses are very expert indeed, as they are often created by experts seeking to forge out on their own. Finally, consumers seldom are trained formally in sound consumer behavior, the odd home economics course aside.[252] Still, consumers learn by doing, and do some tasks over and over again. We may not often shop for cars or houses, but we often shop for clothes. At least in principle, we can develop expertise in basic consumer tasks.[253] So no group is entirely inexpert, though large firms likely have more consistent expertise than either small firms or consumers.

Second, the nature of the expertise may make a difference. It seems possible that the expertise of small firms and consumers may derive more heavily from experience, and perhaps

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[249] *See supra* note 220 and accompanying text.

[250] For a particularly sensitive analysis along these lines, see Mark Seidenfeld, *Cognitive Loafing, Social Conformity, and Judicial Review of Agency Rulemaking,* 87 CORNELL L. REV. 486, 494-507(2002).

[251] *See supra* notes 83-85 and accompanying text.

[252] Though one class of at-risk consumers – those who have gone bankrupt – may be encouraged to attend consumer training classes, apparently with some salutary effects. *See, e.g.,* Susan Block-Lieb et al., *Lessons from the Trenches: Debtor Education in Theory and Practice,* 7 FORDHAM J. CORP. & FIN. L. 503 (2002).

[253] Provided, of course, that the prerequisites for learning are present. As noted above, many consumer tasks do not easily permit learning, whether because of the extremely modest amounts at stake or because of the fuzzy feedback.

more limited experience, than that of large firms. This may create problems for the consumer and small firm. To the extent that formal training can constrain inefficient behavior, the less well trained will not act as efficiently as the better trained. This can be shown, oddly enough, by some of the studies that call expert judgment most into question. Though experts may not do much better in exercising judgment than novices given some basic training and an actuarially-based algorithm, they usually do not do much worse – and, importantly, they will do better than those with neither large amounts of experience nor the algorithm.[254]

Finally, consider the nature of problems dealt with by contract and commercial law. Problems arising from anchoring may be solved in part by expertise, as an experienced person may use an internal anchor derived from practice rather than a biased anchor suggested by the other party. Rules regulating the validity of comparison prices in advertising, to take one example, may thus be most important for relatively inexperienced consumers than for relatively experienced merchants, whether small or large. In contrast, problems arising from overconfidence might be worsened by certain types of expertise. A good example might be the disclosure of potential risks in a transaction. The inexperienced may take these disclosed risks seriously. The experienced may think they know better and brush by them. We might thus be more concerned about methods of bringing risks home beyond mere disclosure when dealing with the expert, at least insofar as other aspects of their behavior will not limit the damage.

c. Group behavior

The final cognitive effect that may distinguish among consumers, small businesses, and large businesses is how collective action alters behavior. Much, perhaps most, economic behavior results from decisions made by more than one person. These decisions may arise from elaborate committee analysis, or from a hurried consultation on the factory floor, or from a chat over breakfast. Along with the many contexts come many methods of reaching these collective decisions. Almost never, though, are they made by a simple vote with no prior discussion. Whatever the nature of the deliberation, it is reasonable to conclude that it has some effect on the decision that results.

As one may imagine, just what this effect might be is complex. One scarcely needs research to suspect as much. Consider these complementary apothegms: "Two heads are better than one" and "Too many cooks spoil the broth." No surprise, then, that much research has considered exactly when and how group activity may depart from individual activity, either for the better or for the worse. As John Payne has observed, "individual decision behavior is *not* a sufficient basis for describing how organizations arrive at decisions."[255] Bringing all this literature

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[254] On the general problem, see, e.g., Lewis R. Goldberg, *The Effectiveness of Clinicians' Judgments: The Diagnosis of Organic Brain Damage from the Bender-Gestalt Test,* 23 J. CONSULTING PSYCHOL. 25 (1959).

[255] John W. Payne, *The Scarecrow's Search: A Cognitive Psychologist's Perspective on Organizational Decision Making, in* ORGANIZATIONAL DECISION MAKING 353, 354 (Zur

to bear on our problem would tax the capacities of both reader and writer.[256] We can, however, consider some of the more important themes of this field and see how they might help or hinder the decisions that consumers and businesses make.[257]

Before we can do this, we should reflect briefly on how group behavior affects our three populations – consumers, merchants, and small businesses. The first is the easiest. A great deal of consumer behavior is individual. Often, though, consumer decisions are at some level collective, at the level of family or household. Personal reflection suggests that very few come at the end of committee meetings with a carefully managed deliberative process.[258] This is not to say that the decisions will be careless. Normally they will be as deliberate and careful as time and information costs permit, and especially important decisions will get quite a lot of attention. Moreover, they result from fairly stable, and, teen rebellion aside, cohesive groups. But the goals may not always be clear, and family members have clear incentives to sway group judgments in their favor, even if the result does not maximize the family's welfare.

Large firms decide more things, and more important things, in groups. The board of directors at the top is merely the highest-ranking of the many groups that a firm of any size uses.[259] Certainly individual agents still make decisions, but typically those decisions are constrained in order to align the interests of the agent and those of the firm. Low-level employees thus have limited scope to commit their employer. As one moves up the organizational chart, discretion

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Shapira ed., 1997) (emphasis in original).

[256] An accessible recent overview is ROBERT S. BARON & NORBERT L. KERR, GROUP PROCESS, GROUP DECISION, GROUP ACTION (2d ed. 2003). For a less formal discussion of group behavior as applied to investment activity, see John Payne & Arnold Wood, *Individual Decision Making and Group Decision Processes,* 3 J. PSYCHOL. & FIN. MKTS. 94 (2002).

[257] This Article thus will not address another major theme of the group literature: whether groups are more or less effective than individuals at performing tasks, as distinct from making decisions. This area is economically important, but little of interest in contract law rests on it. For recent reviews, see, e.g., BARON & KERR, *supra* note 256, at 36-67; Norbert L. Kerr & R. Scott Tindale, *Group Performance and Decision Making,* 55 ANN. REV. PSYCHOL. 623, 625-32 (2004). For two legal applications, see Stephen M. Bainbridge, *Why a Board? Group Decisionmaking in Corporate Governance,* 55 VAND. L. REV. 1, 12-42 (2002); Seidenfeld, *supra* note 250, at 530-43.

[258] *But see* FRANK B. GILBRETH, JR. & ERNESTINE GILBRETH CAREY, CHEAPER BY THE DOZEN (1949). The Gilbreth family, presided over by two efficiency experts, may, however, be that rare exception that proves the rule.

[259] Recent behavioral work on boards of directors includes Bainbridge, *supra* note 257, and Erica Beecher-Monas, *Corporate Governance in the Wake of Enron: An Examination of the Audit Committee Solution to Corporate Fraud,* 55 ADMIN. L. REV. 357 (2003).

may increase, but so do work groups and committee meetings.[260] At the top, the president may ultimately make many important decisions, but often on the basis of options developed by committees below.

Small businesses do use groups, but not as fully as large businesses.[261] Moreover, within the realm of small business, sole proprietorships and partnerships – the dominant form for the smaller of small businesses – use groups still less often to make decisions and develop options.[262] This comes as no surprise. Usually small firms are run directly by their owners, who normally retain authority. Unlike purely salaried managers, manager-owners quite directly affect their financial well-being with each decision.[263] Many small firms also have only one person with the authority to make important decisions – the owner. Though the owner may consult with employees before making a decision, it is likely that the owner would do so for confirmation or to seek information, rather than as part of real deliberation.[264] Moreover, when a small firm does use a group, that group is usually smaller than it would be in a larger firm.[265] The small firm thus lacks some of the advantages of large group deliberation found more routinely in larger firms.[266]

i. Heuristics and biases in group behavior

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[260] Thus, for instance, one study found that almost all Fortune 1000 firms used problem-solving groups, and the great majority used work teams. LAWLER ET AL., *supra* note 170, at 27-28. Moreover, the trend was steeply positive over a fairly short time, suggesting that the percentages are materially higher now.

[261] *See, e.g.,* Dennis J. Devine et al., *Teams in Organizations: Prevalence, Characteristics, and Effectiveness,* 30 SMALL GROUP RES. 678 (1999).

[262] *Id.*

[263] Of course this is an overstatement. Even a salaried manager wishes the firm to remain in business, and most managerial employees own stock in their employers. On the other side, manager-owners may have personal reasons for making decisions that are not necessarily in the best interest of the firm. Still, the observation seems broadly true.

[264] *See, e.g.,* Brouthers et al., *supra* note 195, at 130.

[265] *Id.* at 134; *see also, e.g.,* Catherine M. Daily & Dan R. Dalton, *Board of Directors Leadership and Structure: Control and Performance Implications,* ENTREPRENEURSHIP: THEORY & PRACTICE, Spr. 1993, at 65, 73 (*Inc.* 100 firms average just six members on their boards of directors); Joseph Rosenstein, *The Board and Strategy: Venture Capital and High Technology,* 3 J. BUS. VENTURING 159, 161, 164 (1988) (small businesses tend to have small boards).

[266] There are costs as well, of course, just as there are costs to middle management. *See infra* Parts II.C.3.c.ii-iv.

We start by looking at heuristics and biases found among individuals and asking whether groups are more or less prone to them. The results are equivocal. As one thorough review put it, "close inspection . . . does not suggest a simple or coherent picture of the effects of group discussion on biases of judgment."[267] Groups usually do attenuate individual biases. For instance, a group can effectively average the views of its members. If a decision has a range of answers, then, simple averaging should lower variance and increase accuracy, smoothing over random errors or errors that, though not individually random, are balanced for the group as a whole.[268] Groups thus show less variability than do assortments of individuals.[269] Groups may also be less prone to the availability heuristic, as more information is likely to be vivid to at least one group member.[270] Under some circumstances, they may also show less hindsight bias than individuals.[271] On the other hand, groups appear to make some biases worse. At least in some

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[267] Norbert L. Kerr et al., *Bias in Judgment: Comparing Individuals and Groups,* 103 PSYCHOL. REV. 687, 693 (1996).

[268] *See, e.g.,* Daniel Gigone & Reid Hastie, *Proper Analysis of the Accuracy of Group Judgments,* 121 PSYCHOL. BULL. 149 (1997); Robert B. Zajonc, *A Note on Group Judgment and Group Size,* 15 HUM. REL. 177 (1962). *But cf., e.g.,* John Bone et al., *Are Groups More (or Less) Consistent Than Individuals?,* 8 J. RISK & UNCERTAINTY 63 (1999) (pairs no more consistent than individuals as to common-ratio inconsistencies). And averaging is not necessarily a good representation of group activity. Weighted averaging may fit better, with added weight given those closer to the initial majority. *See* Yohsuke Ohtsubo et al., *Majority Influence Process in Group Judgment: Test of the Social Judgment Scheme Model in a Group Polzarization Context,* 5 GROUP PROCS. & INTERGROUP RELS. 249 (2002). There is also some evidence that group judgments can be *better* than the mean or median of the individual judgments of those taking part. *See, e.g.,* Janet A. Sniezek & Rebecca A. Henry, *Accuracy and Confidence in Group Judgment,* 43 ORG. BEHAV. & HUM. DECISION PROCESSES 1 (1989). This literature will be discussed more fully under group polarization. *See* Part II.C.3.c.iii.

[269] *See, e.g.,* Hillel J. Einhorn et al., *Quality of Group Judgment,* 84 PSYCHOL. BULL. 158 (1977); Verlin Hinsz et al., *The Emerging Conceptualization of Groups as Information Processors,* 121 PSYCHOL. BULL. 43, 53 (1997).

[270] *See, e.g.,* Mark F. Stasson et al., *Group Consensus Processes on Cognitive Decision Tasks: A Social Decision Scheme Approach,* 30 JAPANESE PSYCHOL. RES. 68, 75 (1988) (results significant, but only at p=0.1).

[271] Dagmar Stahlberg et al., *We Knew It All Along: Hindsight Bias in Groups,* 63 ORG. BEHAV. & HUM. DECISION PROCESSES 46 (1995). In particular, groups are superior to individuals when specifically asked to recall their past decisions and when not constrained by time. *Id.* at 54-55.

settings, groups may also be more prone to framing effects.[272] Group cohesion may yield underestimated risk and, relatedly, overoptimism, though not necessarily more than that shown in individuals.[273] And some biases may either be heightened or diminished by groups. The base-rate fallacy, for instance, may be higher for groups when the object of the inquiry resembles a member of a category, but lower when it does not.[274] Whether we see the escalation bias in groups depends in part on whether the group's members had considered the problem before they met as a group. If they did, then one study showed a greater tendency to escalate with existing projects, thus displaying the sunk cost fallacy.[275] Dissonance aversion is another example. One way to reduce dissonance is to seek out information that supports one's decision, even a tentative decision, over information that conflicts with it. This confirmation bias exists for individuals, as already discussed.[276] It exists as well for groups.[277] Significantly, homogeneous groups show a more pronounced confirmation bias than individuals, though heterogeneous groups show less.[278]

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272 Glen Whyte, *Escalating Commitment in Individual and Group Decision Making: A Prospect Theory Approach,* 54 ORG. BEHAV. & HUM. DECISION PROCESSES 430 (1993).

273 *See infra* Part II.C.3.c.ii.; Daniel Kahneman & Dan Lovallo, *Timid Choices and Bold Forecasts: A Cognitive Perspective on Risk Taking,* 39 MGMT. SCI. 17, 27-28 (1993) (overoptimism). In part, though, groups may merely be more optimistic than individuals, not more overoptimistic. Indeed, one study suggests that the increased optimism of groups is explained by their better performance; though they may remain overoptimistic, they are less so than individuals. Janet A. Sniezek, *Groups under Uncertainty: An Examination of Confidence in Group Decision Making,* 52 ORG. BEHAV. & HUM. DECISION PROCESSES 124, 149 (1992).

274 Linda Argote et al., *The Base-Rate Fallacy: Contrasting Processes and Outcomes of Group and Individual Judgment,* 46 ORG. BEHAV. & HUM. DECISION PROCESSES 296 (1990). The base-rate fallacy is closely related to the representativeness heuristic – the tendency to gauge probabilities of uncertain events by how closely the events fit a parent population – which may be exacerbated by group decision making. *See, e.g.,* Stasson et al., *supra* note 270, at 75 (showing increase, but not statistically significant).

275 Henry Moon et al., *Group Decision Process and Incrementalism in Organizational Decision Making,* 92 ORG. BEHAV. & HUM. DECISION PROCESSES 67 (2003). Consistent with this finding, one study in which the participants reviewed materials and made individual decisions before meeting found an increased sunk cost effect. Whyte, *supra* note 272.

276 *See supra* Part II.C.2.c.

277 *See, e.g.,* Stefan Schulz-Hardt et al., *Biased Information Search in Group Decision Making,* 78 J. PERSONALITY & SOC. PSYCHOL. 655 (2000).

278 *Id.* at 658; *see also* Blake McKimmie et al., *I'm a Hypocrite, But So Is Everyone Else: Group Support and the Reduction of Cognitive Dissonance,* 7 GROUP DYNAMICS: THEORY, RES., & PRACTICE 214 (2003) (when dissonance arises from group membership, dissonance

More generally, it has been suggested that relatively common biases are exaggerated by groups, but relatively uncommon ones are attentuated by them, perhaps by a combination of averaging and dissonance aversion.[279]

All these almosts and sort-ofs do not invite certainty. Nor have analysts succeeded in reconciling them, at least not usefully.[280] We might thus simply throw up our hands at this welter of results and conclude that it provides nothing useful for policymakers trying to distinguish between group and individual behavior, or, even more perilous, between one type of group and another. This pessimism may be warranted if we try to draw policy conclusions based on a possible difference between individuals and groups in a single heuristic. Nor are these studies sufficiently coherent to admit sweeping policy changes of any sort.

Nevertheless, some aspects of this work are sufficiently coherent and robust to allow for modest conclusions. In particular, with appropriate qualifications, one may say that most studies for most biases show that group behavior attenuates biases, rather than exacerbates them. The counterexamples, framing and overoptimism, are fairly common and might be attributed to special group phenomena such as group polarization or groupthink.[281] More often, groups override minority error, if only by simple majority vote,[282] and other times may overpower it through an averaging function. For many biases, then, we would see some benefits to collective decision making

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reduction in part takes the form of greater attitude change).

[279] Hinsz et al., *supra* note 269, at 49-50; *see also* William P. Bottom et al., *Propagation of Individual Bias through Group Judgment: Error in the Treatment of Asymmetrically Informative Signals,* 25 J. RISK & UNCERTAINTY 147 (2002) (groups tend to propagate individual bias when faced with extreme probabilities and hard to process information).

[280] Norbert Kerr and his colleagues have made the most valiant attempt to do so, using social decision theory to explain when and in what direction group decisions might depart from the ideal. Kerr et al., *supra* note 267. Where their method can be studied cleanly, it has been confirmed. *See, e.g.,* Norbert L. Kerr et al., *Bias in Jurors vs. Bias in Juries: New Evidence from the SDS Perspective,* 80 ORG. BEHAV. & HUM. DECISION PROCESSES 70 (1999). Regrettably, their method depends heavily on precise models of decision-making and accurate estimates of probabilities, and is therefore all but impossible to use in real-life decisions.

[281] *See infra* Parts II.C.3.c.i-ii .

[282] An observation long ago made by Condorcet in his Jury Theorem. More precisely, when those making a decision are probably correct, the larger the group making the decision, the greater the likelihood that the group's decision will be correct when the majority rules. *See, e.g.,* David Austin-Smith & Jeffery S. Banks, *Information Aggregation, Rationality, and the Condorcet Jury Theorem,* 90 AM. POL. SCI. REV. 34, 34 (1996); Saul Levmore, *Ruling Majorities and Reasoning Pluralities,* 3 THEORETICAL INQUIRIES L. 87, 88-90 (2002).

But, as we have seen, small businesses use groups much less than do large businesses. Nor are their groups as likely to avoid error. One way to avoid propagating or enlarging an error is to be aware that it might exist and make decisions with that prospect in mind. Just as training in individual problem solving can improve the quality of decisions, it can also improve the quality of group performance.[283] Thus, modern business schools incorporate the study of heuristics and biases in their curricula.[284] These courses also discuss how groups decide, how their decisions can go wrong, and how these potential errors can be avoided. Large firms are more likely to have business-school-trained managers than small firms, which commonly lack the middle managers who might be more aware of these pitfalls.[285]

Small businesses thus are less likely to take advantage of the ameliorative effects of group decision making than are large ones, thus making them more susceptible to losses because of the more baneful effects of heuristics and biases. But there are group pathologies that can impede these gains and even create losses. Groupthink, group polarization, imperfect information sharing, and imperfect information search all are either peculiar to groups or are enhanced by groups robustly, and all are potentially significant sources of bias and loss. If groups cause these, then perhaps small firms are better off after all. But, if we look more closely, we may find that subsets of groups are especially prone to these, and possibly some of those subsets are more likely to be found among small firms. In any event, it is to those group pathologies that we must turn.

ii. Groupthink

In studying a number of high-level policy blunders, Irving Janis noted a tendency of group members to suppress their objections to the emerging collective wisdom. As a result, Janis hypothesized, groups would reach a false and premature consensus. They would fail to consider alternatives adequately. They would assess risks and costs in a biased manner. They would undervalue the likelihood or potential magnitude of failure. They would fail to search for useful information. They would make inadequate contingency plans because they would not allow sufficiently for the prospect of failure. Janis coined the term *groupthink* for this assortment of decision-making pathologies.[286] He argued that groupthink was most likely to arise in cohesive groups with similar ideology and background. Other important symptoms of groupthink were facing a sense of crisis, insulation from critics, group leadership that tends to direct outcomes,

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283 *See, e.g.,* Preston C. Bottger & Philip W. Yetton, *Improving Group Performance by Training in Individual Problem Solving,* 72 J. APPLIED PSYCHOL. 651 (1987).

284 *See supra* notes 166-168 and accompanying text.

285 As noted earlier, small business owners are on average less well educated than corporate middle managers. *See supra* notes 83-85 and accompanying text. This generalization is not always true, of course, especially for high-tech start-ups.

286 IRVING L. JANIS, GROUPTHINK (2d ed. 1982).

external threat, and low self-esteem as a result of recent lack of success.

This model has a great deal of popular currency. Indeed, it was recently invoked by the Senate Select Committee on Intelligence as one of the causes of intelligence failure before the Iraq war.[287] Still, much of the evidence for it consists of historical case studies.[288] Laboratory studies of groupthink have proved equivocal.[289] In particular, attempts to tease out group cohesion as a factor have shown little if any groupthink effect.[290] It has been suggested that groupthink occurs only when multiple factors are present, making experiments that isolate these factors irrelevant.[291] On the other hand, the concept may also be overbroad, as some of groupthink's symptoms may result from a subset of its causes and others may result from other, distinct subsets.[292] When one looks at the corpus of evidence, experimental and historical, one is left with results that are at best equivocal.[293]

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287 U.S. SENATE SELECT COMM. ON INTELLIGENCE, 108TH CONG., REPORT ON THE U.S. INTELLIGENCE COMMUNITY'S PREWAR INTELLIGENCE ASSESSMENTS ON IRAQ 18-22 (2004).

288 For reviews, see James K. Esser, *Alive and Well After 25 Years: A Review of Group Think Research,* 73 ORG. BEHAV. & HUM. DECISION PROCESSES 116 (1998); Christopher P. Neck & Gregory Moorhead, *Groupthink Remodeled: The Importance of Leadership, Time Pressure, and Methodical Decision-Making Procedures,* 48 HUM. REL. 537 (1995).

289 *See, e.g.,* Annette R. Flippen, *Understanding Groupthink from a Self-Regulatory Perspective,* 30 SMALL GROUP RES. 139, 140-42 (1999); Brian Mullen et al., *Group Cohesiveness and Quality of Decision Making: An Integration of Tests of the Groupthink Hypothesis,* 25 SMALL GROUP RES. 189 (1994); Won-Woo Park, *A Comprehensive Empirical Investigation of the Relationships among Variables of the Groupthink Model,* 21 J. ORG. BEHAV. 873 (2000).

290 *See, e.g.,* Matie L. Flowers, *A Laboratory Test of Some of the Implications of Janis's Groupthink Hypothesis,* 35 J. PERSONALITY & SOC. PSYCHOL. 888 (1977); Clark McCauley, *The Nature of Social Influence in Groupthink: Compliance and Internalization,* 57 J. PERSONALITY & SOC. PSYCHOL. 250 (1989); Mullen et al., *supra* note 289; Philip Tetlock et al., *Assessing Political Group Dynamics: A Test of the Groupthink Model,* 63 J. PERSONALITY & SOC. PSYCHOL. 403 (1992).

291 *See, e.g.,* Mullen et al., *supra* note 289.

292 Thus, homogeneity, group cohesion, and insulation may increase pressures toward conformity, while high stress, low self-esteem, and time pressure may yield overconfidence and closed-mindedness. Neck & Moorhead, *supra* note 288.

293 *See, e.g.,* Norbert L. Kerr & R. Scott Tinsdale, *Group Performance and Decision Making,* 55 ANN. REV. PSYCHOL. 623, 640-41 (2004); Marlene E. Turner & Anthony R. Pratkanis, *Twenty-Five Years of Groupthink Theory and Research: Lessons from the Evaluation of a Theory,* 73 ORG. BEHAVIOR & HUM. DECISION PROCESSES 105, 109 (1998). Some would

This is true in business contexts as well. Thus, for instance, the work of Christopher Neck and his colleagues on self-managing teams supports some key elements of groupthink, such as group cohesion, responsibility, high stress from external threats, homogeneity,[294] and low self-esteem.[295] Looking at the other end of the hierarchy, Randall Peterson and his collaborators looked at the top management teams of seven *Fortune 500* companies at points of success and failure, examining in part whether groupthink was associated with less successful decision-making.[296] The results supported groupthink, but only in part. In favor, the study found that group process and outcome were related, and that groupthink was much more closely associated with negative outcome than with positive. On the other hand, some important attributes of groupthink were more associated with positive outcomes than with negative outcomes. For example, unsuccessful groups showed less cohesion, less rigidity, and greater optimism than the groupthink model posits.[297] Indeed, of the behavioral models studied, groupthink did not provide

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say less than equivocal – indeed, two scholars reviewing the literature have argued that "continued attention to groupthink is unfortunate and misguided." Sally Riggs Fuller & Ramon J. Aldag, *Organizational Tonypandy: Lessons from a Quarter Century of the Groupthink Phenomenon,* 73 ORG. BEHAVIOR & HUM. DECISION PROCESSES 163, 163 (1998). For a summary of methodological objections, see Paul E. Jones & Peter H.M.P. Roelofsma, *The Potential for Social Contextual and Group Biases in Team Decision-Making: Biases, Conditions and Psychological Mechanisms,* 43 ERGONOMICS 1129, 1140-44 (2000).

294 Another study of supervisors and managers found heterogeneity correlated with superior group performance, though the relationship was not overwhelming. Roger J. Volkema & Ronald H. Gorman, *The Influence of Cognitive-Based Group Composition on Decision-Making Process and Outcome,* 35 J. MGMT. STUD. 105 (1998).

295 *See, e.g.,* Charles C. Manz & Christopher P. Neck, *Teamthink: Beyond the Groupthink Syndrome in Self-Managing Teams,* 10 J. MANAGERIAL PSYCHOL. 7 (1995); Charles C. Manz & Henry P. Sims, Jr., *The Potential for Groupthink in Autonomous Work Groups,* 35 HUM. RELATIONS 773 (1982); Christopher P. Neck & Charles C. Manz, *From Groupthink to Teamthink: Toward the Creation of Constructive Thought Patterns in Self-Managing Work Teams,* 47 HUM. RELATIONS 929 (1994). For a review of the literature, see Gregory Moorhead et al., *The Tendency toward Defective Decision Making within Self-Managing Teams: The Relevance of Groupthink for the 21st Century,* 73 ORG. BEHAVIOR & HUM. DECISION PROCESSES 327 (1998).

296 Randall S. Peterson et al., *Group Dynamics in Top Management Teams: Groupthink, Vigilance, and Alternative Models of Organizational Failure and Success,* 73 ORG. BEHAVIOR & HUM. DECISION PROCESSES 272 (1998).

297 Significantly, a study of business teams found that group cohesiveness correlated *positively* with performance. Jin Nam Choi & Myung Un Kim, *The Organizational Application of Groupthink and Its Limitations in Organizations,* 84 J. APPLIED PSYCHOL. 297 (1999). The

the closest fit for any of the unsuccessful cases. The "absolutist cult" model described unsuccessful groups consistently better. This model centers on a strong leader, with authority and power concentrated in one person who personifies the organization's identity and future. It thus overlaps with groupthink by stressing a strong leader and a cohesive group, but differs from it by showing greater flexibility, greater sense of control, and greater risk taking.[298] Furthermore, successful groups showed stronger leaders, more centralized authority, greater rigidity, greater risk-taking, greater optimism, and less legalism than groupthink hypothesizes. Groupthink's ideal method of decision making was the best fit for only one of the seven successful firms.

In light of these ambiguous results, we should look somewhat gingerly at groupthink when considering how collective behavior might affect the quality of decision making by consumers, large firms, and small firms. Recall that groupthink requires group cohesion, homogeneity, insulation, strong leadership, external threat, crisis, and low self-esteem. Insofar as consumers act collectively, they fit this model quite imperfectly. We might expect to see cohesion and insulation, and possibly strong leadership, but seldom external threat, crisis, or low self-esteem. Homogeneity might exist when the group is spouses or partners, but perhaps not when the family is broadened to include children. Large firms fit the groupthink model variably. We might expect to see considerable cohesion and homogeneity, at least within any management level. Groupthink at the highest level seems not unlikely, given the tendency of boards of directors to follow the CEO who usually chose them. Hence Professor Bainbridge's comment that "[b]oardroom culture emphasizes groupthink."[299] Strong leadership will vary with the leader and the group.[300] A middle-management group may not have a clear leader. On the other hand, a group may have a senior member and more junior members, for which groupthink would seem to be a greater threat. Insulation is likewise equivocal. Very often large firms form compartments – divisions, working teams, subsidiaries – that may be insulated from the rest of the firm. Still, large firms are relatively likely to have internal policing mechanisms, such as audits, quality control checks, and legal analysis, that subject proposed decisions to scrutiny. For routine decisions one would not anticipate external threat or crisis, but businesses are not immune from these. Nor is low self-esteem entirely uncommon, at least among middle-managers. More hubristic CEOs might not display this often, but their hubris is part of the problem in the groupthink model.

Small businesses, speaking broadly, may satisfy the groupthink antecedents more often

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authors do not conclude from this that group cohesion is an unalloyed good. Rather, they suggest the possibility of a U-shaped curve, so that there are gains as one moves from low cohesion to moderate cohesion and losses as one continues toward high cohesion. *Id.* at 303.

298 Peterson et al., *supra* note 296, at 291; *see also* Tetlock et al., *supra* note 290.

299 Bainbridge, *supra* note 257, at 32.

300 As Peterson et al.'s work has shown. *See, e.g.,* Randall S. Peterson et al., *The Impact of Chief Executive Officer Personality on Top Management Team Dynamics: One Mechanism by Which Leadership Affects Organizational Performance,* 88 J. APPLIED PSYCHOL. 795 (2003); Peterson et al., *supra* note 296.

and more closely than do large businesses. Critically, they lack a developed middle management. Important decisions are likely to involve the owner or owners. If the decisions are made collectively by the owners, then they may well show no leader, unless the firm has a principal owner or an owner who leads as well as owns. More typically, though, small firms have one owner or main owner and a collection of lower-ranking employees. The owner may consult the employees when making decisions, but the consultation is not likely to be in the spirit of free and open debate. Small firms are also likely to show considerable cohesion, especially in the early stages. They probably will lack developed internal checks of the sort large firms require, and they are not likely to consult others – accountants, lawyers, consultants – much as they make decisions. Their boards tend to have fewer outsiders, who might be able to break down homogeneity and prevent excessive cohesion.[301] Finally, threat and the like are probably more the lot of small firms than larger ones. Small firms fail much more often than large ones,[302] and in their early stages face any number of dangers ranging from undercapitalization to unexpectedly high competition.

The groupthink model is far from robust, and it seems not to have been tested using small firms. Furthermore, as some studies have shown, the elements of groupthink may well be virtues if not taken to excess. Group cohesion avoids squabbling and promotes common effort, which should yield superior results – and, as we have seen, often does. Still, insofar as it has value, there is some reason to believe that it is more likely to appear in small business decision making than in large business decision making. An equivocal result, to be sure, but necessarily equivocal in light of the evidence.[303]

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[301] *See, e.g.,* Bainbridge, *supra* note 257, at 42-43; Daily & Dalton, *supra* note 265, at 74 (founder-managed firms have relatively few outsiders on their boards of directors).

This statement needs some qualifying. Outsiders can play an important role in small firms precisely because those firms lack middle managers and a full-time professional staff. As Forbes and Milliken have pointed out, bankers, lawyers, and accountants on the small firm's board can provide the professional and external vantage otherwise lacking. Furthermore, they suggest that if the small business's board consists largely of investors, the board will likely take more of a role in making policy than in larger firms and may be less inclined toward lockstep behavior and groupthink. Daniel P. Forbes & Frances J. Milliken, *Cognition and Corporate Governance: Understanding Boards of Directors as Strategic Decision-Making Groups,* 24 ACAD. MGMT. REV. 489, 501 (1999). One may ask, though, whether a board consisting mainly of investors might not be *especially* prone to groupthink, given its homogeneity and sense of external threat and crisis. Without more empirical evidence, this point remains uncertain.

[302] *See supra* note 8.

[303] It is possible that, if more fully developed, another model might show more marked differences. The absolutist cult model used by Peterson and his colleagues and discussed above is particularly promising. Small firms led by their founders look more like absolutist cults than do larger, more bureaucratic organizations. Until the two groups are compared empirically, though, this is merely surmise.

iii. Group polarization

One might think that group discussion would yield compromise, with extremists at one end or the other giving way in part in order to reach common ground with more moderate colleagues. Social psychologists have long observed, though, that group discussion can have a polarizing effect.[304] More precisely, where members of a group show some disposition to a certain behavior, group discussion tends to move the group from the mean of the individual dispositions of the group members to an extreme.[305] Originally psychologists found that groups produced riskier decisions than the individuals composing them. Later studies have shown group polarization for a wide range of attitudes, not just attitudes toward risk, including views on under-age drinking, pacifism, and the guilt or innocence of a defendant.[306] The effect persists across studies, as shown by an early meta-analysis and by subsequent work.[307]

In economic realms the results have been similar. Consider one study in which tax professionals – tax partners and managers at major accounting firms – were given ambiguous

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304 For a review of the early literature, see Kenneth L. Dion et al., *Why Do Groups Make Riskier Decisions than Individuals?,* 5 ADVANCES IN EXPERIMENTAL SOC. PSYCHOL. 305 (1970).

305 There is a distinction to be made between group polarization and choice shift. In the former, individuals shift their positions to greater extremes as a result of group discussion. In the latter, the group takes a position that is more extreme than the mean of the individual views before the group met. The two terms are often used interchangeably, and generally they will be here. There are differences, though, because group polarization is individual and choice shift is collective. Thus, for instance, one might see choice shift with no group polarization if members of a group agree on something that departs from their unchanged pre-group preferences. For our purposes, though, the difference usually is not material. On the distinction, see, e.g., Noah Friedkin, *Choice Shift and Group Polarization,* 64 AM. SOC. REV. 856, 857 (1999); Verlin B. Hinsz & James H. Davis, *Persuasive Arguments Theory, Group Polarization, and Choice Shifts,* 10 PERSONALITY & SOC. PSYCHOL. BULL. 260, 260-62 (1984); Ohtsubo et al., *supra* note 268, at 250.

306 *See, e.g.,* Kenneth L. Bettenhausen, *Five Years of Group Research: What We Have Learned and What Needs to Be Addressed,* 17 J. MGMT. 345, 356-59 (1991) (reviewing studies); David G. Myers & Helmut Lamm, *The Group Polarization Phenomenon,* 83 PSYCHOL. BULL. 602 (1976) (same).

307 The meta-analysis is Daniel J. Isenberg, *Group Polarization: A Critical Review and Meta-Analysis,* 50 J. PERSONALITY & SOC. PSYCHOL. 1141 (1986). Besides the studies cited to elsewhere, studies of jury behavior have proven fertile. *See, e.g.,* David Schkade et al., *Deliberating about Dollars,* 100 COLUM. L. REV. 1139 (2000).

scenarios in which the professionals would be asked whether they would support a client's position. In some scenarios, the position, though not free from challenge, was highly defensible; in others, the position, though not entirely dismissible, was unlikely to prevail. The professionals were asked their views before and after group discussion. For all three scenarios with a high probability of supporting the client's position, groups shifted toward the taxpayer. For two of the three scenarios with a low probability of supporting the client's position, groups shifted toward the IRS.[308] Similarly, auditors showed polarization when preparing time budgets for audits; where individual auditors had set short budgets, group discussion shortened them still further, while auditors with longer budgets, when assembled, lengthened them.[309]

That group polarization often occurs is fairly well established. *Why* it occurs is quite as important, for not all groups are equally likely to polarize, or likely to do so to the same degree. A close look at causes may allow us to distinguish among the groups likely to be formed by different classes of economic actors. Though posited causes for group polarization burgeon, two or three seem dominant. One, competitive social comparison theory, rests on the belief that groups have internal norms that affect the decisions they make. Members of the group do not wish to lag in their adherence to the norm, and thus will try to show that they adhere to that norm at least as much as average. These norms cannot be measured exactly, though, so the members will compete in the perceived direction of the group. Thus, for instance, if the group values risk, then group members, after getting a sense that this is true, will compete to increase their stated risk preferences.[310] The principal alternative is persuasive arguments theory. This derives from the force and quantity of arguments that are made in the course of discussion. A group that leans in one direction will produce more arguments in that direction. These in turn will strengthen the adherence of each predisposed person, and may also sway those more lightly committed in the other direction – who will, after all, gain little support from discussion.[311] Meta-analysis suggests that both play a role, with that of persuasive arguments somewhat the greater.[312] Other studies are consistent with varying aspects of these models. For instance, arguments that favor increased risk

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308 Gregory A. Carnes et al., *A Comparison of Tax Professionals' Individual and Group Decisions When Resolving Ambiguous Tax Questions,* 18 J. AM. TAXATION ASS'N 1 (1996).

309 Dale E. Marxsen, *A Behavioral Investigation of Time Budget Preparation in a Competitive Audit Environment,* ACCT'G HORIZONS, June 1990, at 47.

310 *See, e.g.,* BARON & KERR, *supra* note 256, at 99-100; Glenn S. Sanders & Robert S. Baron, *Is Social Comparison Irrelevant for Producing Choice Shifts?,* 13 J. EXPERIMENTAL SOC. PSYCHOL. 303 (1977).

311 *See, e.g.,* Eugene Burnstein & Amiram Vinokur, *Persuasive Argumentation and Social Compromise as Determinants of Attitude Polarization,* 13 J. EXPERIMENTAL SOC. PSYCHOL. 315 (1977); Hinsz & Davis, *supra* note 305, at 261.

312 Isenberg, *supra* note 307, at 1148-49.

have been found more influential, and those who favor risk tend to take the lead in making decisions.[313] These findings both support and extend the persuasive arguments model, in that arguments given greater weight by group members will have the same biasing effect as arguments heard more often. Likewise, studies have shown that unanimous groups show greater polarization than non-unanimous groups.[314] This is consistent with either leading model; as unanimous groups might more clearly set a norm than majority groups and unanimous groups might produce more, and more persuasive, arguments than majority groups.

Group polarization potentially exacerbates existing individual errors in risk assessment and in judgment. By turning a gentle lean into a crazy tilt, a group may produce a harmful judgment that no individual in it would initially have espoused. It may also increase the size of individual biases, particularly those that relate to risk.[315] Group polarization may thus, for example, magnify escalation bias, over-optimism, and overconfidence.[316] On the other hand, not all shifts from a statistical mean are baneful. Timid individual judgments may point in the correct direction, but insufficiently so, making a less repressed collective judgment superior.[317] As Cass Sunstein has pointed out, people tend to avoid extremes when acting alone, but may, when supported by others, allow their real judgments to emerge.[318] We thus must consider, not just whether this economic actor or that is likely to see group polarization, but whether its groups are likely to polarize helpfully or harmfully.

As with groupthink, some of the conditions giving rise to group polarization are more likely to be found in small business groups than in large business groups, just as they are in consumers. In particular, small business groups are more often homogeneous, which increases the

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313 Daan van Knippenberg et al., *Who Takes the Lead in Risky Decision Making?: Effects of Group Members' Risk Preferences and Prototypicality,* 83 ORG. BEHAV. & HUM. DECISION PROCESSES 213 (2000); Donald G. Marquis, *Individual Responsibility and Group Decisions Involving Risk,* 3 INDUS. MGMT. REV., Spr. 1962, at 8, 20-21.

314 *See, e.g.,* Steve Williams & Robert J. Taormina, *Unanimous Versus Majority Influences on Group Polarization in Business Decision Making,* 133 J. SOC. PSYCHOL. 199 (2001).

315 *See, e.g.,* Sanders & Baron, *supra* note 310, at 304.

316 *See, e.g.,* Scott E. Seibert & Sonia M. Goltz, *Comparison of Allocations by Individuals and Interacting Groups in an Escalation of Commitment Situation,* 31 J. APPLIED SOC. PSYCHOL. 134 (2001).

317 *See, e.g.,* Janet A. Sniezek & Rebecca A. Henry, *Revision, Weighting, and Commitment in Consensus Group Judgment,* 45 ORG. BEHAV. & HUM. DECISION PROCESSES 66, 78 (1990); Sniezek & Henry, *supra* note 268.

318 Cass R. Sunstein, *The Law of Group Polarization,* 10 J. POL. PHIL. 175, 179-80 (2002).

magnitude of group polarization. Moreover, small business groups are likely to be presided over by the entrepreneur. Social influence figures greatly in business group discussions, so one would expect the entrepreneur's views to get especial weight.[319] Entrepreneurs tend to be overconfident, over-optimistic risk-takers, prone to escalation and heedless to peril.[320] With a risk-taker as leader, one would expect a risky norm, on the one hand, and risky arguments, on the other, that should yield group polarization. Moreover, to the extent the entrepreneur is excessively risk-seeking, group polarization may create even a less economically desirable level of risk. Consumers, almost by definition, are not unusually risk-prone, even if the family is in many respects homogenous.[321] To be sure, risk-seeking is not inherently pathological. Indeed, in a sampling of large firms, risk-seeking by the CEO was at least weakly correlated with business performance.[322] Possibly this correlation continues for the still more buccaneering entrepreneur. As noted earlier, perhaps entrepreneurs need their exuberance to overcome the real perils of entrepreneurship. But with this potential virtue is a potential harm when the entrepreneur works collectively, a harm more likely to emerge as the small business grows and matures.

Whatever the overall merits of Candide as entrepreneur, though, it seems that Candide as the chair of a meeting is likely to produce a particularly biased result – and the small firm is more likely to have a Candide as chair than the more Eeyoreish middle manager, to shift genres rather abruptly. The consumer is more likely to fall in the middle, given the huge range of consumer behavior. Where small businesses make group decisions, then, they are relatively likely to fall prey to group polarization, and that polarization is less likely to be helpful than harmful. Again, though as always a bit tentatively, cognition suggests some increased susceptibility on the part of small business.

iv. Shared and unshared information

Finally, one of the virtues of groups is their ability to pool information. In principle, the members of a group can assemble all their information and consider it fully before reaching a decision. The resulting decision would thus be better informed and less prone to error than would the individual decisions of group members. To some degree, this happens. Members of groups do pool information, and that information is considered to some extent. Given the value of time, incomplete pooling is no surprise. Still, the information that *is* pooled does not properly represent the available information, which can yield skewed decisions.

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319 *See, e.g.,* D. Donald Kent et al., *Effect of Selected Psychological Characteristics upon Choice Shift Patterns Found within Hierarchical Groups of Public Accountants,* 91 PSYCHOL. REP. 85 (2002); Marxsen, *supra* note 309.

320 *See supra* notes 181-189 and accompanying text.

321 A debatable proposition in light of teen rebellion.

322 Peterson et al., *supra* note 296, at 803.

Research here starts with the much-replicated finding that groups give greater weight to information held in common by the group's members than by information held uniquely by a member of the group.[323] The group spends more time discussing the common information and, perhaps surprisingly, ends up giving *greater* weight to the common information as a result of discussion than would the individuals left to themselves. Unshared arguments often go unexpressed, and shared arguments are better remembered by the participants.[324] Shared information also is brought up much earlier than unshared information, thereby influencing initial views more strongly.[325] The result is more extreme opinions.[326] Beyond that, the self-limited pool of information and the reiterated discussion of what is shared lead groups to overconfidence through inflated consensus.[327] Relatedly, biased information pooling exacerbates the small numbers bias – the tendency to attach excessive weight to unrepresentative information, ignoring information that puts the small sample in context. This is particularly troubling for decisions involving risk. Unlikely events, by definition, seldom occur, so limited experience tends to underweight them; as a result, the small numbers bias leads to underestimated risk.[328]

To some degree these effects can be overcome. Training in methods of information sharing increases both the amount of information shared and the speed with which it enters

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[323] For a review of the literature by its progenitors, see Garold Stasser & William Titus, *Hidden Profiles: A Brief History,* 14 PSYCHOL. INQUIRY 304 (2003); *see also, e.g.,* BARON & KERR, *supra* note 256, at 104-107; Dennis J. Devine, *Effects of Cognitive Ability, Task Knowledge, Information Sharing, and Conflict on Group Decision-Making Effectiveness,* 30 SMALL GROUP RES. 608, 609-12 (1999).

[324] *See, e.g.,* Garold Stasser et al., *Information Sampling in Structured and Unstructured Discussions of Three- and Six-Person Groups,* 48 J. PERSONALITY & SOC. PSYCHOL. 67 (1989); Garold Stasser & William Titus, *Effects of Information Load and Percentage of Shared Information on the Dissemination of Unshared Information during Group Discussion,* 53 J. PERSONALITY & SOC. PSYCHOL. 81 (1987).

[325] *See, e.g.,* James R. Larson, Jr., et al., *Diagnosing Groups: Charting the Flow of Information in Medical Decision Making Teams,* 71 J. PERSONALITY & SOC. PSYCHOL. 315 (1996).

[326] Biased information sampling has thus been proposed as a cause of group polarization. Schulz-Hardt et al., *supra* note 277; Stasser & Titus, *supra* note 323, at 305-06.

[327] *See, e.g.,* Jones & Roelofsma, *supra* note 293; Janet A. Sniezek, *Groups under Uncertainty: An Examination of Confidence in Groups Decision Making,* 52 ORG. BEHAV. & HUM. DECISION PROCESSES 124, 134 (1992).

[328] Susan M. Houghton et al., *No Safety in Numbers: Persistence of Biases and their Effects on Team Risk Perception and Team Decision Making,* 25 GROUP & ORG. MGMT. 325 (2000); *see also, e.g.,* Argote et al., *supra* note 274.

discussions, though shared information still dominates.[329] So, for example, a group organized with a critical thinking norm will use more unique information than one based on consensus.[330] Furthermore, the more diverse the group's views, the greater the degree of information pooling.[331] Relatedly, a group that has worked together or has members with a great deal of task experience will tend to share information less, perhaps because they overvalue their common experience.[332] Status also counts. Higher-ranking members of groups are more likely to bring up unique facts, particularly late in discussion, than are lower-ranking members.[333] Finally, so does expertise; when group members are experts or at least are introduced as experts, they are more likely to repeat unique information, and the information they repeat is more likely to be remembered by members of the group.[334]

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[329] James R. Larson et al., *Discussion of Shared and Unshared Information in Decision-Making Groups,* 67 J. PERSONALITY & SOC. PSYCHOL. 446 (1994).

[330] Tom Postmes et al., *Quality of Decision Making and Group Norms,* 80 J. PERSONALITY & SOC. PSYCHOL. 918 (2001); *see also, e.g.,* Adam D. Galinsky & Laura J. Kray, *From Thinking About What Might Have Been to Sharing What We Know: The Role of Counterfactual Mind-Sets in Information Sharing in Groups,* 40 J. EXPT'L SOC. PSYCHOL 608 (2004) (groups primed with counterfactual scenarios produced significantly better results on a task requiring that unique information be shared and acted upon).

[331] Felix C. Brodbeck et al., *The Dissemination of Critical, Unshared Information in Decision-Making Groups: The Effects of Pre-Decision Dissent,* 32 EUR. J. SOC. PSYCHOL. 35 (2002) (minority dissent increases the consideration of unshared information); Craig D. Parks & Nicole L. Nelson, *Discussion and Decision: The Interrelationship between Initial Preference Distribution and Group Discussion Content,* 80 ORG. BEHAV. & HUM. DECISION PROCESSES 87 (1999); Schulz-Hardt et al., *supra* note 277. There is some evidence, however, that this effect is true only to a point. Too much variety also may prove an obstacle to problem solving. *See, e.g.,* Terri L. Griffith & Margaret A. Neale, *Information Processing in Traditional, Hybrid, and Virtual Teams: From Nascent Knowledge to Transactive Memory,* 23 RES. ORG. BEHAV. 379, 392-93 (2001).

[332] Peter H. Kim, *When What You Know* Can *Hurt You: A Study of Experiential Effects on Group Discussion and Performance,* 69 ORG. BEHAV. & HUM. DECISION PROCESSES 165 (1997). Significantly, even when the information was ultimately shared it lacked weight, as shown by lowered team performance.

[333] *See, e.g.,* Larson et al., *supra* note 325.

[334] *See, e.g.,* James R. Larson, Jr., et al., *Leadership Style and the Discussion of Shared and Unshared Information in Decision-Making Groups,* 25 PERSONALITY & SOC. PSYCHOL. BULL. 482 (1998); Dennis D. Stewart & Garold Stasser, *Expert Role Assignment and Information Sampling during Collective Recall and Decision Making,* 69 J. PERSONALITY & SOC.

Which groups, then, are most likely to conduct biased information search, with all that entails? Groups that are too homogenous or heterogenous; groups without training in information sharing; groups without experts; groups without high-ranking members; and groups that have worked together frequently. Consumer groups meet almost all of these categories, save perhaps lacking high-ranking members (and often a family group has a clear leader, at least for certain classes of decisions). Small and large businesses do not fall cleanly on either side of a cognitive divide. Possibly small business groups, where they exist, will be more homogenous, but they will also be more likely to have a clear leader. Larger firms, for the reasons discussed earlier, are somewhat more likely to have trained members.[335] It is not at all clear whether large or small businesses are more likely to use groups that have worked together or that have a great deal of task experience. One may speculate that small businesses are somewhat more likely to do so, if only because fewer managerial employees means fewer potential committee members. On the other hand, fewer potential committee members may mean that the members are less likely to have expertise in the task before them.

Biased information search thus does not provide a reason to distinguish large firms from small, at least not from the rather general perspective of contract law. The effect is too broadly present, and distinctions between large and small firms are likely to evade generalization and thus regulation. Rather, problems with information search are more likely important as added reasons to police in general, with other heuristics and biases providing the basis to distinguish between large and small firms.[336] An example might be the law of small numbers, to which entrepreneurs

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PSYCHOL. 619 (1995); Gwen M. Wittenbaum, *The Bias Toward Discussing Shared Information: Why Are High-Status Group Members Immune?,* 27 COMMUNICATION RES. 379 (2000); Gwen M. Wittenbaum, *Information Sampling in Decision-Making Groups: The Impact of Members' Task-Relevant Status,* 29 SMALL GROUP RES. 57 (1998). These effects are not usually robust, though. *See, e.g.,* Garold Stasser et al., *Pooling Unshared Information: The Benefits of Knowing How Access to Information is Distributed Among Members,* 82 ORG. BEHAV. & HUM. DECISION PROCESSES 102 (2000) (assigning expert role increased the percentage of unshared information discussed from 29% to 34%).

It should be added that those who have and share common information are viewed better, and view themselves better, than those who have unique information. *See, e.g.,* Gwen M. Wittenbaum et al., *Mutual Enhancement: Toward an Understanding of the Collective Preference for Shared Information,* 77 J. PERSONALITY & SOC. PSYCHOL. 967 (1999). This may reflect dissonance aversion or related biases. Whatever the cause, though, it suggests that those who are not already experts or recognized as experts face substantial costs if they bring up unique information, and may choose neither to incur them nor to take the chance that they will be unable to establish their expertise.

335 *Cf.* Baron, *supra* note 189 (entrepreneurs tend not to think counterfactually).

336 The greater problems faced by consumers might be addressed by some disclosure rules that oblige consumers to act on a broader pool of information.

are especially prone.[337] This is exacerbated by biased information search. To the extent one not prone to this bias could take advantage of it systematically, there might thus be a role for contract law to correct for this error.

Summing all this up is both necessary and impossible. Necessary, because there are so many potential differences among large firms, small firms, and consumers; impossible, because these differences do not all point in the same directions. Put most broadly, which may do for the purposes of this survey, large businesses and consumers differ on a great many attributes relevant to contracting. Large firms are wealthier, which allows them to spread risk and contract more cheaply for insurance. Their size also allows them to weather moderate adversity more easily, which can, among other things, give them a powerful tool in disputes.[338] Large firms gather more information and can process it more cheaply, allowing them to rely less on approximate and inaccurate rules of thumb and more on methodical, fact-driven analysis. Finally, large firms have many cognitive advantages over consumers, though not all the heuristics and biases cut unequivocally in their favor. Those based on group decision making are especially equivocal. Still, on balance cognitive concerns potentially justify the special treatment vouchsafed consumers in the law.

Small business complicates matters. At the most general level, most of these heuristics and biases are present for small businesses, more so than for large businesses but less so than for consumers. That level may, however, be too general for policy making. Closer in one finds fewer generalizations that are both sweeping and valid. Thus, for instance, we have seen that small businesses owners may generally be less well educated than corporate middle managers, but there are plenty of small firms run by the cognitive elite. Small firms may have problems amortizing the cost of information over enough transactions to make its acquisition profitable, but they may develop concentrated expertise that exceeds that of generalist larger firms. Perhaps most important, small firm owners come in very different types, and the different types are prone to different heuristics and biases in greatly varying degrees.

This is messy, and suggests that a one-size-fits-all approach to treating small business in contract and commercial law will fail. We can make some cautious suggestions here, though, on

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337 Simon et al., *supra* note 184.

338 As Stewart Macaulay has observed:

> [W]hen relational concerns do not matter, many large corporations and their law firms do not efficiently breach. They do not seek to buy their way out of contracts for anything like the other party's expectation damages. They just breach, at best offer an insulting token settlement, and practice scorched earth litigation tactics, taken out of that unpublished but very real text, Discovery Abuse for Fun and Profit.

Stewart Macaulay, *Relational Contracts Floating on a Sea of Custom? Thoughts About the Ideas of Ian Macneil and Lisa Bernstein,* 94 NW. U.L. REV. 775, 782 (2000).

the use of the heuristics and biases literature in this realm. First, there are effects that sharply distinguish small businesses from large. Overoptimism, escalation, expertise, incentives, and others show some real disadvantages for small firms. Second, even when small business's heterogeneity blurs clear distinctions, we may see different cognitive failings pointing to similar results. A high-tech start-up may be more prone to overconfidence than a Ma and Pa party store. The Ma and Pa store may, however, be more prone to availability. These biases can both yield a tendency to overreact to vivid but misleading information – the former because the information may induce too confident a decision, given the existing propensity toward overconfidence, the latter because the vivid information will induce too strong a reaction from someone not ordinarily inclined toward extreme judgments. A common cure, such as restricting the supply of certain types of dangerous information or requiring that it be presented in less inflammatory settings, would address both difficulties.[339] Third, and last, where the effects are not clear-cut the answer may not be abandoning the job as futile, but rather crafting careful boundaries and cautious outcomes. Contract covers a wild array of relations, and its principles must as a result be rather general. But many areas within contract have their own special rules, and in those a close look at particular relations among consumers, small businesses, and large businesses may prove fruitful, and indeed already have. Even within contract some doctrines have become sensitive to context, and in these one might cautiously expand the pertinent contexts with profit.

III. HOW SHOULD SMALL BUSINESSES BE TREATED?

In one article, however long, it would be impossible to catalog every consumer or merchant rule and discuss how small businesses might best fit under it. Instead, we shall consider more generally how the law might deal with small businesses. Should all contracting parties, consumer, small business, and large business alike, be treated like consumers? Should all small businesses be treated like consumers? Should small businesses be treated specially, with some sort of intermediate rule? Should contract and commercial law move toward standards, the better to make finer distinctions among types of market participants? These shall be addressed in turn.

A. Treat all businesses like consumers

The simplest solution is to apply consumer rules to everyone. To the extent that even large firms must pay for information and then do not process it ideally, the consumer rules that lower costs and increase clarity may be useful. So too would rules that reduce cognitive error. Still, using consumer rules generally would be overkill. Consumer rules often are not appropriate for

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[339] It has been suggested that controlling exposure is one way to avoid mental contamination, even where the information that would be unavailable has some potential value. The rules of evidence and the practice in most disciplines of blind article evaluation are examples. Wilson & Brekke, *supra* note 225, at 134-36.

ordinary business transactions. To take an extreme example, for most commercial transactions cooling-off periods would impair contractual stability with no substantial gain. Even relatively innocent provisions like plain language laws have their pitfalls. Purely commercial contracts may be difficult to read, but if they are read only by experts then we may not care much about tortured but precise legal syntax. Moreover, the costs of redrafting commercial lending agreements, purchase agreements, and the like may exceed whatever benefit comes of having them laid out in simple language. Drafting is costly – not just because the drafters will demand compensation, but because even good drafters may introduce ambiguities or errors that will be disputed and perhaps litigated.[340]

In addition, some consumer rules do justice at the expense of certainty. Statutes allowing only reasonable periods for repair or a reasonable number of attempts before refund leave open the meaning of reasonable.[341] Very often certainty is the only thing commerce asks of law. The parties will write their own contract and handle their own informal justice, using the contract as backdrop.[342] Contract law is the fallback in case of dispute, rather than the flexible guide to performance.[343] Given that, most businesses would prefer certain law with predictable, low-cost answers to a more flexible, less certain rule that would provoke litigation.[344]

More fundamentally, we should use some caution in using behavioral data to make such sweeping changes in the law. Cognitive psychology and experimental economics do not want for equivocal studies and shifting paradigms, or for users who are unwary of methodological limits.[345] Not all of the heuristics and biases have been demonstrated in commercially realistic scenarios, a concern when factors tending to mitigate these biases would likely be present in real life. The effects shown by even the best of these studies are not always large. When they are, one must still

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340 On the reasons for persistent legalese, see Hill, *supra* note 82.

341 For an example, see 15 U.S.C. § 2304(a)(1), (4) (2000) (Magnuson-Moss).

342 Contract is, after all, only one part of the relations of contracting parties, and often not the most important part. This observation usually is attached to relational contract theory, but goes back further. *See* Karl N. Llewellyn, *What Price Contract – An Essay in Perspective,* 40 YALE L.J. 704, 730-31, 736-37 (1931).

343 *See, e.g.,* Charny, *supra* note 60; Stewart Macaulay, *Non-Contractual Relations in Business: A Preliminary Survey,* 28 AM. SOC. REV. 55, 58-59 (1963).

344 To take just one illustration, this point comes up time and again in the proposed revision to Article Two of the U.C.C. Many industry advocates have consistently opposed the revision, not just because they perceive substantive defects but because they see uncertainty and disruption coming even from improvements in drafting. *See, e.g.,* Comments of UCC Committee Members on Proposed ABA Endorsement of Revisions to Article 2 & 2A of the Uniform Commercial Code 7-8, 26-29 (n.d. [July 2003]).

345 *See* sources cited *supra* note 93.

consider the costs of parentalist regulation. A degree of conservatism may thus be appropriate – not that we should fail to look at law from this vantage, but we should do so with some care not to overreach.[346]

Finally, there are political reasons not to do so. One is the unlikelihood that any such attempt would clear a legislature or a supreme court. Consider the troubled revision of Article Two of the U.C.C., in which relatively modest substantive changes provoked massive industry criticism and ultimately the scrapping of the draft and the departure of the Reporter and the Associate Reporter.[347] Another is the likely effect if a one-size-fits-all rule were proposed. After all, we have had those rules for most of the history of law, and they were seldom favorable to consumers. There would be considerable pressure, one may predict, to curtail consumer protection, thus making matters worse rather than better for the most severely affected parties. The remaining uncertainty and the reduced protection would yield a measurably inferior contract law.

B. Treat all small businesses like consumers

Another possibility is to lump small businesses with consumers. This preserves the important distinction between large and small businesses and recognizes that at times small businesses resemble consumers more than large businesses. Moreover, linking small businesses and consumers might make their common rules harder to weaken, as the two groups could more easily fight large firms politically than could only one.[348] Some state UDAP statutes do something like this, at least through a focus on transaction size.[349] Still, not all rules would be appropriate for joint adoption. Some consumer rules focus on problems held mainly by consumers; others focus on problems held also by small businesses. Indeed, some focus on problems held mainly by consumers dealing with small businesses, as in some of the used-car rules and small lending rules.

We would also have a problem with definitions. What is a small business? The Small Business Administration takes fifty pages of the *Code of Federal Regulations* to struggle with this question.[350] Does one use the SBA's most common approach, based on the number of employees

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[346] A point made by Professor Mitchell. *See* Mitchell, *Pessimism, supra* note 93.

[347] *See, e.g.,* Symposium, *Perspectives on the Uniform Laws Revision Process,* 52 HASTINGS L.J. 603 (2001); Garvin, *supra* note 9, at 345-49; Linda J. Rusch, *A History and Perspective of Revised Article 2: The Never Ending Search for Balance,* 52 SMU L. REV. 1683 (1999).

[348] Though the consequence might instead be to conform the common rule to the needs of small business, not the needs of the consumer.

[349] Most notably that in Texas. TEX. BUS. & COM. CODE ANN. §§ 17.41 et seq. (Vernon 2002).

[350] 13 C.F.R. pt. 121 (2003).

in a particular industry? Or how about its main alternative, annual sales volume? The SBA's attempts to draw lines makes for puzzling reading. Why, for instance, can a business engaged in cookie and cracker manufacturing (as defined in North American Industry Classification System 311821) qualify for SBA largess if it has up to 750 employees, but a business that turns out frozen cakes, pies, and other pastries (NAICS 311813) do so only with 500 or fewer?[351] How about 750 employees for soap and other detergent manufacturers (NAICS 325611), but only 500 for polish and other sanitation good manufacturers (NAICS 325612)? And then there are the mixed standards – for instance, 1,500 employees for courier services (NAICS 492110), but annual revenues of $21,500,000 for local messengers and local delivery (NAICS 492220). Drawing new lines to split large businesses from small would yield equally strange results, prepared, one assumes, at great expense, as each industry's trade association would sally forth to push for a line drawn here or there or somewhere else.[352]

Even good rules of this sort, and we may assume that the SBA's rules are good, would yield much litigation. Who is to determine whether a firm falls into this bin or that, which might be the critical question in a dispute? The SBA has administrative officials who do this, and an administrative appeals process to supervise it, but we would have only the overtaxed and inexpert courts.[353] To be sure, they would have the guidance of the *NAICS Manual,* filled with nuance and velleity on the fine distinctions among these many categories – fourteen hundred pages of nuance and velleity, in fact.[354] Not ideal reading for a generalist court.

Perhaps courts would do well with this task, albeit at much cost. Perhaps instead the rule could be simple – a single number of employees for all industries, say. A uniform rule would trade accuracy for simplicity, though, and the trade may not be a good one. But even if the NAICS category is settled or made uniform, there may still be disputes about whether a firm falls on one side of the line or the other. How does one count part-time employees? Employees of

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351 All these examples may be found in 13 C.F.R. § 121.201 (2003).

352 And other agencies use their own definitions to give special breaks to small business. *See supra* note 53 (SEC rules exempting small issuers from some registration requirements). *See generally* Bradford, *supra* note 8, at 2-4, 23-25 (listing size criteria for many small business exemptions and suggesting how these distinctions might be made).

353 For instances of the sort of litigation that results, see, e.g., Catalyst Direct, Inc., No. SIZ-4572 (SBA OHA July 25, 2003) (whether firm in Direct Mail Advertising or Advertising Agency categories); NIT Technologies, Inc., No. NAICS-4570 (SBA OHA July 8, 2003) (whether firm in Base Housing Maintenance or Base Maintenance categories); Durodyne, Inc., No. NAICS-4536 (SBA OHA Feb. 13, 2003) (whether procurement for non-metallic hose assembly fell under Rubber and Plastics Hoses and Belting Manufacturing or Other Aircraft Parts and Auxiliary Equipment Manufacturing).

354 U.S. OFFICE OF MANAGEMENT & BUDGET, NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM: UNITED STATES, 2002 (2002). It is available on CD-ROM for the devoted student.

wholly-owned subsidiaries? Partly-owned? Joint venturers? Affiliated firms? This too has yielded much regulation and litigation.[355] Rules that draw these lines, however closely tailored, might even drive business decisions. For instance, a firm might outsource work or spin off subsidiaries rather than cross one of these lines and lose its legal protection – not desirable, if crossing the line would otherwise be the better choice.[356]

Most important, what definition of small business would properly capture the reasons for classing small businesses with consumers? The SBA definitions were designed for SBA purposes. Deciding whom to reward with low-cost loans or preferential contracts is hardly the same as deciding whether two private parties have made a contract or breached it. We would thus need a new set of definitions, adding to the complications of small business management.

And, given the aims of contract and commercial law and the exploitable weaknesses of small business, what criteria would let us draw the most useful lines? Number of employees? This may correlate with sophistication, but surely hiring large numbers of undereducated and inexperienced employees adds little in that vein. On the other hand, a very modest number of even sophisticated employees may not have the time or resources to gather information. For some purposes, the presence of middle management might be more relevant. With middle management some of the cognitive problems that attend entrepreneurship would be mitigated, as might some of the problems that can result from groupthink or other unfortunate aspects of group decisionmaking. Others, though, might be exacerbated, such as biased information search.

Sales volume? This may do better, particularly for the aspects of consumer law that rest on assets and access to credit. Even there, though, profit margins vary greatly, so two firms with identical sales volumes may have very different incomes, very different prospects, and very different access to capital. In addition, sales per dollar of assets also varies wildly. As a result, a firm could have modest assets but a high sales volume, rendering the firm relatively susceptible to financial shock. Sales volume may not, however, be a good proxy for information. Within a product area, sales and information may correlate well. But a million dollars in sales may mean three houses or two million cans of corn. Even the diminishing marginal return from the later corn sales does not efface the great difference in the quantity of information in the latter case. Moreover, a small, low-grossing firm may be very knowledgeable. Indeed, many small firms begin precisely because the founders know a lot about a field.[357] A large-grossing firm may know

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355 *See, e.g.,* 13 C.F.R. § 121.103 (2003); DSE, Inc. v. U.S., 169 F.3d 21 (D.C. Cir. 1999) (size, affiliation); Cash Realty of N.Y., Inc., No. SIZ-4569 (SBA OHA July 8, 2003) (volume of business); Dawson Bldg. Contractors, Inc., No. SIZ-4501 (SBA OHA Aug. 21, 2002) (whether family members' businesses were affiliated).

356 This may not be too likely; very few changes in contract law would warrant major changes in business practice. Still, SBA regulations do affect business activity. To take one example from my practice experience, some small firms have remained artificially small in order to remain eligible for the SBA's minority business preference programs.

357 A small firm may also have entered into strategic alliances or joint ventures with much larger firms, which may provide a good deal of information not routinely available to

less, if its interests are widely dispersed. Sales volume also gets at cognitive issues very indirectly. Perhaps sheer quantity might overcome some cognitive effects, but others might increase as a sort of defensive mechanism. Heuristics arise in part from our attempt to make sense of a welter of information effectively and efficiently.[358]

Assets? Possible again, but, like sales volume, an imperfect proxy for resources. Assets often cannot be borrowed on, should the market in those assets be modest.[359] Just as sales volume may come from large assets or small, assets may produce much income or little. Furthermore, assets are far harder to value than sales, and far more susceptible to manipulation by creative accountants. When one looks beyond resources to information and cognition, assets do even less well than sales. At least sales volume correlates with number or size of transactions within an industry. Assets may or may not be used, and their use may generate much information or little. Nor is relative wealth a guarantee of cognitive capacity. Indeed, some heuristics and biases arise from ownership. The endowment effect, for example, comes about because owners value what they own more than what they do not.[360] Cognitive dissonance operates in somewhat the same way. Dissonance aversion requires something aversive. We thus might see more profound dissonance aversion over relatively large decisions than over relatively small ones, though both may show aversion.[361]

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smaller firms.

[358] *See supra* Part II.B.

[359] Though collateral is useful only in part because of what the creditor can get if it is sold. A creditor may thus take collateral that has minimal resale value in order to threaten the debtor with its removal, where the debtor needs the collateral and could not replace it. *See, e.g.,* Arthur Allen Leff, *Injury, Ignorance and Spite – The Dynamics of Coercive Collection,* 80 YALE L.J. 1 (1970); Ronald J. Mann, *Strategy and Force in the Liquidation of Secured Debt,* 96 MICH. L. REV. 159 (1997). *Cf.* Anthony T. Kronman, *Contract Law and the State of Nature,* 1 J. L. ECON. & ORG. 5, 12-18 (1985) (distinguishing between hostages and collateral).

[360] *See supra* Part II.C.2.e. Absolute size is not always as important as relative size, though. The escalation bias, for instance, is tied to the relative, not absolute, sunk cost in a project. *See, e.g.,* Howard Garland & Stephanie Newport, *Effects of Absolute and Relative Sunk Costs on the Decision to Persist with a Course of Action,* 48 ORG. BEHAV. & HUM. DECISION PROCESSES 55 (1991). Indeed, high sunk costs can even lead to risk aversion and de-escalation of commitment. *See, e.g.,* Howard Garland et al., *De-Escalation of Commitment in Oil Exploration: When Sunk Costs and Negative Feedback Coincide,* 75 J. APPLIED PSYCHOL. 721 (1990); Marcel Zeelenberg & Eric van Dijk, *A Reverse Sunk Cost Effect in Risky Decision Making: Sometimes We Have Too Much Invested to Gamble,* 18 J. ECON. PSYCHOL. 677 (1997).

[361] The evidence here is equivocal. *Compare* Arkes & Blumer, *supra* note 169 (costs incurred correlate with avoidance behavior) *with* Stevick et al., *supra* note 153 (size of bets at racetrack did not affect degree of confidence significantly).

None of these methods of separating small businesses from large is perfect. Each captures some aspect of the reasons for making the distinction, but none captures all, and some reasons are left largely unaddressed by any of these methods. Ideally one would draw the lines to capture every potential gain from line-drawing, thus maximizing the benefit from this exercise.[362] A system that is neither overinclusive nor underinclusive would be horribly complex, even by the standards of administrative law. The SBA itself has a good many exceptions to its basic schema, in a system far more controlled than the universe of consumer law.[363] The alternative, a simple test, would often err. Either would yield many unintended results, as businesses might arrange their behavior to fit under the desired heading. Drawing these lines might well yield great benefits, but they would have to to justify their costs.

C. Craft an intermediate rule for small business

The solutions above in part provoke doubt because they merge classes of businesses or people that aren't entirely alike. Treating all contracting parties the same means that we must treat General Motors like Forrest Gump, or perhaps Forrest Gump like General Motors. Treating small businesses like consumers means that we lump together those on opposite sides of contracts and contract disputes. One way out is to craft special rules for small businesses, creating a third category of legal rules. More precisely, there would be three classes of contracting parties that would have largely similar but distinct bodies of contract law applied to their transactions. After all, consumer contracts are generally treated like commercial contracts for most of contract law – consideration, remedies, conditions – but with some critical variations at important points. A small business contract law would do much the same.

The idea is hardly original. Most recently, Alan Schwartz and Robert Scott have embarked on a project to define classes of contracting parties and describe the legal regime that should apply to each.[364] Before that, though, the Legal Realists at times contended that there is no Contract Law, but rather laws governing different sorts of legal relations – construction contracts,

362 *See* Bradford, *supra* note 8, at 23-25.

363 *See, e.g.,* 13 C.F.R. §§ 121.301(b) (Development Company programs), 121.301(c) (SBIC programs), 121.301(d) (surety bond assistance), 121.410 (SBA § 8(d) subcontracting program), 121.507 (purchase of government-owned timber other than Special Salvage Timber), 121.508 (purchase of government-owned Special Salvage Timber), 121.509 (coal mining leases), 121.510 (uranium mining leases), 121.512 (purchases for stockpiles), 121.702 (SBIR program), 121.802 (reduced patent fees) (2003). The SBA also allows agencies to set up their own standards with approval by the SBA. 13 C.F.R. § 121.903 (2003).

364 The first installment is Alan Schwartz & Robert E. Scott, *Contract Theory and the Limits of Contract Law,* 113 YALE L.J. 541 (2003).

personal services contracts, real property conveyances, and so forth.[365] Indeed, still earlier the law of contract arose from these assorted laws of voluntary legal relations.[366] It seems clear enough when we describe the American legal system that we do have many different laws under the heading of contract, each with its own vocabulary, its own norms, its own rules, often flatly contradicting analogous aspects in other areas. Why not a separate set of rules for small business? If indeed small businesses are in some degree distinct from their larger counterparts, on the one hand, and from consumers, on the other, then they may warrant distinct treatment, just like sellers of goods or employees or builders or stockbrokers.

This attractive proposal has at least two related difficulties: definition and content. To craft small business law we must be able to define small business. Otherwise we cannot determine how small businesses differ from other businesses and thus how the law might accommodate those differences. So far, though, defining small business has proved difficult and has yielded at best modest success, even in the limited realm of access to government programs.[367] Too narrow a definition and one omits firms that merit distinct treatment; too broad a definition and one loses any distinctiveness and with it any reason for different law. Possibly different parts of contract law may need different definitions, depending on which aspect of smallness that part of law affects. Should the definitions grow too complex, though, they become expensive, and the costs of policing their borders grows immensely. And three categories means two borders. The border between consumers and small businesses may be relatively easy to define, though the plethora of businesses without employees in the United States suggests that may not be the case.[368] As we have seen, though, the border between small and large business may prove difficult to draw, and ill-defined borders cause uncertainty and increase the costs of business.

Nor will it always be easy to craft a good rule that stands between pure consumer treatment and pure large merchant treatment. Intermediate rules are not uncommon in contract and commercial law. In remedies, the reliance measure usually stands between expectation and restitution. Some scholars suggest that it has an important role in the structure of remedies.[369] In

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365 *See, e.g.,* LAURA KALMAN, LEGAL REALISM AT YALE, 1927-1960 53 (1986).

366 *See, e.g.,* LAWRENCE M. FRIEDMAN, CONTRACT LAW IN AMERICA 17-18 (1965); GRANT GILMORE, THE DEATH OF CONTRACT 11-12 (1974).

367 *See supra* Part III.B.

368 About three-quarters of U.S. business firms, some fifteen million, have no payroll, mostly self-employed people running unincorporated businesses. U.S. Census Bureau, *supra* note 47.

369 *See, e.g.,* George M. Cohen, *The Fault Lines in Contract Damages,* 80 VA. L. REV. 1225 (1994); David D. Friedman, *An Economic Analysis of Alternative Damages Rules for Breach of Contract,* 32 J.L. & ECON. 281 (1989); David A. Skeel, *A Reliance Damages Approach to Corporate Lockups,* 90 NW. U.L. REV. 564 (1996).

any case, the intermediate measure *is* used, particularly in promissory estoppel cases[370] and other cases with relatively weak fault or uncertain formation.[371] Divisibility doctrine also has an intermediate effect, allowing for partial enforcement of an obligation to avoid complete forfeiture.[372] Still, these are exceptions to a generally binary approach. True, carefully designed intermediate rules can avoid the contorted doctrine that results when courts seek to apply harsh binary rules to compelling sets of facts. Intermediate rules, however, can end up as ill-defined, almost equitable doctrines that are hardly rules at all, a result with its own great costs.

D. Use standards-based analysis to choose among rules

Perhaps setting up rules to put businesses into one camp or another seems too complex or too arbitrary or both. One might instead move to a standards-driven legal regime. Not all businesses are created equal; neither are all consumers. The courts might thus take the relative sophistication, size, information costs, cognitive capacity, and the like of the contracting parties into account when deciding which rule to apply and how to apply it.

If courts apply this method correctly, we might thus avoid the errors of over-inclusiveness and under-inclusiveness that the other two methods may show. Indeed, this approach might also solve the over-inclusiveness that a broad definition of consumer now entails. Some consumers, after all, may not need the full range of consumer protections, and ought not be able to use them as post hoc ways to get out of bad deals. Nor is this method unfamiliar to courts. Unconscionability analysis, for instance, looks broadly at the sophistication of the parties as part of its procedural aspect. Indeed, standards-based analysis is ubiquitous in the law – witness the plethora of multi-factor tests in constitutional law or the frequent uses of reasonableness tests in contract and commercial law.[373]

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370 *See, e.g.,* Robert A. Hillman, *Questioning the "New Consensus" on Promissory Estoppel: An Empirical and Theoretical Study,* 98 COLUM. L. REV. 580, 601-02, 609-10 (1998).

371 *See* Cohen, *supra* note 369.

372 *See, e.g.,* Carrig v. Gilbert-Varker Corp., 50 N.E.2d 59 (Mass. 1943); RESTATEMENT (SECOND) OF CONTRACTS § 240 (1981).

373 For instances of the latter, see, e.g., U.C.C. §§ 2-201(2), 2-204(3), 2-205, 2-206(2), 2-207(1), 2-208(2), 2-305, 2-306(1), 2-309, 2-316(1), 2-317, 2-318, 2-508(2), 2-510(3), 2-511(2), 2-603, 2-604, 2-605, 2-606(1), 2-607, 2-608, 2-609, 2-610(a), 2-615(b), 2-704(2), 2-705(3)(a), 2-706, 2-708(2), 2-709(1), 2-710, 2-711(3), 2-712(1), 2-715(1, 2(a)), 2-718(1), 2-723(2) (2001). Hence the frequent observation that Article Two, unlike most statutes, allows courts much freedom in tailoring results to the facts at hand. *See, e.g.,* Richard Danzig, *A Comment on the Jurisprudence of the Uniform Commercial Code,* 27 STAN. L. REV. 621, 633-35 (1975); Peter Winship, *Jurisprudence and the Uniform Commercial Code: A "Commote,"* 31 SW. L.J. 843, 863-64 (1977); Imad D. Abyad, Note, *Commercial Reasonableness in Karl*

Here, though, we face the old rules versus standards debate.[374] A standard has the advantage of nuance, properly applied. It is cheaper to frame than a tightly-drawn rule.[375] It also lacks certainty.[376] While the rules of contract law have some play in the joints, they do provide a great deal of certainty in run-of-the-mill cases. Whatever one may say about the mailbox rule, for example, it does tell us exactly when a contract is formed. Perhaps standards are not a great problem in the contract defenses, which are seldom invoked, almost never when a nice use of standards is needed.[377] Unconscionability illustrates this. The courts routinely state that businesses normally will not be able to invoke the defense successfully, as they will have too much market power and sophistication to warrant its use.[378] On the other hand, the courts have sometimes allowed small businesses to invoke unconscionability where the owners were especially ill-educated or ill-informed, where their market power was especially weak, where the acts of the other party were especially misleading, and the like.[379] But letting standards-based analysis into more routine areas of contract might yield excessive uncertainty and thus lower the value of contract law. Consider, for instance, what would happen if the formation rules, which in Article 2 depend in part on merchant status,[380] might or might not apply depending on a multi-

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Llewellyn's Uniform Commercial Code Jurisprudence, 83 VA. L. REV. 429 (1997).

374 *See, e.g.,* Douglas G. Baird & Robert Weisberg, *Rules, Standards, and the Battle of the Forms: A Reassessment of § 2-207,* 68 VA. L. REV. 1217, 1227-28 (1982); Louis Kaplow, *Rules Versus Standards: An Economic Analysis,* 42 DUKE L.J. 557 (1992); Duncan Kennedy, *Form and Substance in Private Law Adjudication,* 89 HARV. L. REV. 1685 (1976); Kathleen M. Sullivan, *The Justices of Rules and Standards,* 106 HARV. L. REV. 22, 58-59 (1992).

375 *See, e.g.,* Isaac Ehrlich & Richard A. Posner, *An Economic Analysis of Legal Rulemaking,* 3 J. LEGAL STUD. 257, 267 (1974); Kaplow, *supra* note 374, at 573.

376 Though as Carol Rose has observed, a standard like "commercial reasonableness" might be more certain to businesses than a set of arcane, complex, and unfamiliar rules. Carol M. Rose, *Crystals and Mud in Property Law,* 40 STAN. L. REV. 577, 609 (1988).

377 *See, e.g.,* Garvin, *supra* note 86, at 362.

378 *See, e.g.,* Tharalson v. Pfizer Genetics, Inc., 728 F.2d 1108, 1111 (8th Cir. 1984); D.S. Am. (E.), Inc. v. Chromagrafx Imaging Sys., Inc., 873 F. Supp. 786, 794-95 (E.D.N.Y. 1995); Salt River Project Agric. Improvement & Power Dist. v. Westinghouse Elec. Corp., 694 P.2d 198, 204 (Ariz. 1984).

379 *See, e.g.,* Johnson v. Mobil Oil Corp., 415 F. Supp. 264, 266 (E.D. Mich. 1976); Weaver v. Am. Oil Co., 276 N.E.2d 144, 145-46 (Ind. 1971); Moscatiello v. Pittsburgh Contractors Equip. Co., 595 A.2d 1190, 1195-97 (Pa. Super. Ct. 1991); Jane P. Mallor, *Unconscionability in Contracts Between Merchants,* 40 SW. L.J. 1065 (1986).

380 U.C.C. § 2-207(2) (2001).

factor test of the nature of one's business.[381]

To be sure, over time the cases would accumulate and provide certainty in the usual common-law manner.[382] As we see from the agonizing revision of Article 2, though, businesses mistrust common-law development, seeing it as too plastic and manipulable (implicitly, I suppose, manipulable by others).[383] Furthermore, costs of uncertainty can rest most heavily on small firms.[384] They generally cannot afford highly sophisticated legal advice and innovative arguments.[385] Legal complexity favors the informed, so moving to a more standards-based regime might ironically make matters worse for small firms, the very ones whom standards were supposed to help.

We should also consider whether behavioral effects would make a standards-based regime more or less desirable. As Professor Korobkin has shown, one cannot paint with a broad brush here; sometimes rules will fit better with the welter of behavioral effects we show, and sometimes standards will, depending on the exact legal issue and the exact parties affected.[386] For instance, where the endowment effect[387] is strong, a standards-based system may prove helpful, as uncertainty about the resulting entitlement would diminish the sense of endowment.[388] In contrast, the self-serving bias[389] points toward rules: their relative clarity lowers the scope for self-

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381 On the vices of standards in contract formation, see, e.g., Baird & Weisberg, *supra* note 374.

382 *See, e.g.,* Ian Ayres, *Preliminary Thoughts on Optimal Tailoring of Contractual Rules,* 3 S. CAL. INTERDISC. L.J. 1, 15-16 (1993); Kaplow, *supra* note 374, at 577-84.

383 *See supra* note 347. One might also explain this as a special case of the status quo bias, as industry, benefitting from the status quo, would work harder to maintain it than any beneficiaries of change would work to change it. *See, e.g.,* Russell B. Korobkin, *Behavioral Analysis and Legal Form: Rules vs. Standards Revisited,* 79 OR. L. REV. 23, 34 (2000); Carol Rose, *A Dozen Propositions on Private Property, Public Rights, and the New Takings Legislation,* 53 WASH. & LEE L. REV. 265, 294-95 (1996).

384 *See, e.g.,* U.S. SMALL BUS. ADMIN., OFF. OF ADVOCACY, THE CHANGING BURDEN OF REGULATION, PAPERWORK, AND TAX COMPLIANCE ON SMALL BUSINESS: A REPORT TO CONGRESS 12-14 (1995), *available at* http://www.sba.gov/advo/laws/archive/laws_brd.html.

385 *See, e.g.,* Steverson, *supra* note 7, at 308-09.

386 Korobkin, *supra* note 383, at 57-58.

387 *See supra* Part II.C.2.e.

388 Korobkin, *supra* note 383, at 51-52.

389 The self-serving bias is our tendency to read ambiguous evidence in a favorable light. *See, e.g.,* George Loewenstein et al., *Self-Serving Assessments of Fairness and Pretrial*

serving interpretations by those subject to them, yielding lower litigation costs and increased settlement.[390]

Of these heuristics and biases, the self-serving bias seems particularly worrisome for small businesses. Entrepreneurs are likely to prove especially prone to this effect, given their overconfidence and risk-seeking tendencies.[391] If so, then a standards-based system applied to entrepreneurs will probably yield too much undesirable behavior. In contrast, entrepreneurial risk-taking should lower the possibility that a vague standard will reduce desirable behavior.[392] We might thus be wary of standards applied, say, to small-business safety regulations, but less wary about standards applied to contract formation.[393]

IV. CONCLUSION

In sum, small businesses fall awkwardly in the usual consumer-merchant dichotomies of contract and commercial law. By treating them uniformly as merchants,[394] the law places burdens

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Bargaining, 22 J. LEGAL STUD. 135, 150-51 (1993); Nancy Pennington & Reid Hastie, *Explanation-Based Decision Making: Effects of Memory Structure on Judgment,* 14 J. EXPERIMENTAL PSYCHOL.: LEARNING, MEMORY & COGNITION 521 (1988). This overlaps with the confirmatory bias, which is our tendency to read ambiguous evidence to support our initial hypotheses. *See, e.g.,* Charles G. Lord et al., *Biased Assimilation and Attitude Polarization: The Effects of Prior Theories on Subsequently Considered Evidence,* 37 J. PERSONALITY & SOC. PSYCHOL. 2098, 2101-02 (1979); Matthew Rabin, *Psychology & Economics,* 36 J. ECON. LIT. 11, 26 (1998).

390 Korobkin, *supra* note 383, at 47; *see also, e.g.,* Linda Babcock et al., *Biased Judgments of Fairness in Bargaining,* 85 AM. ECON. REV. 1337 (1995).

391 *See supra* notes 181-189 and accompanying text.

392 On the general effect, see Richard Craswell & John E. Calfee, *Deterrence and Uncertain Legal Standards,* 2 J.L. ECON. & ORG. 279, 299 (1986); Ehrlich & Posner, *supra* note 375, at 262-63; Korobkin, *supra* note 383, at 57.

393 The latter point undercuts slightly the case for rules in contract formation, but only slightly. Small businesses may not be deterred much from contracting by vague standards, but the large businesses with which they often deal might be. That loss probably is enough to overcome the benefits of standards.

394 Or not. Some courts have strained to exclude small businesses from the definition of merchant when the result of a proper classification seemed too harsh. *See, e.g.,* Moscatiello v.

on small businesses not always appropriate for their real nature – their resources, their abilities to gather and process information, their propensities to err when doing so. Though rarely would they be worse off than consumers in any of these, rarely would they be as well off as large firms. Their intermediate status causes problems that the law might properly address.

The perils of failing to do so are evident when we look at some recent changes to the Uniform Commercial Code. Revised Article Nine, proposed in 1999 and enacted in all states by 2001, did indeed carve out some consumer protections.[395] Sometimes, though, the consumer protections came alongside tougher rules toward non-consumer debtors. For example, the revision allows deposit accounts to serve as security under Article Nine, but not for consumer transactions.[396] Elsewhere the statute resolves prior disputes in favor of senior creditors while simply not addressing consumer transactions.[397] Yet other changes broadened the scope of

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Pittsburgh Contractors Equip. Co., 595 A.2d 1190 (Pa. Super. Ct. 1991); *see also supra* note 28 (distinction between farmer and merchant). If the law treated small business appropriately, courts would have less need to make bad law that can be misused in less appealing circumstances. As Karl Llewellyn put it, "Covert tools are never reliable tools." K. Llewellyn, Book Review, 52 HARV. L. REV. 700, 703 (1939) (reviewing O. PRAUSNITZ, THE STANDARDIZATION OF COMMERCIAL CONTRACTS IN ENGLISH AND CONTINENTAL LAW (1937)).

395 *See supra* notes 22-23 & accompanying text.

396 U.C.C. § 9-109(d)(13) (1999). Under the prior version of Article Nine, deposit accounts could not be Article Nine collateral directly, but could be subject to a security interest as proceeds of collateral. U.C.C. § 9-104(l) (1995). Some non-uniform state law, however, as well as actions based on common law, allowed these direct security interests. *See, e.g.,* Braucher, *supra* note 23, at 94.

397 For instance, before the revision the statute was not clear what effect failure to comply with the foreclosure rules of Article Nine might have on the creditor's ability to recover a deficiency judgment. Most states applied the "rebuttable presumption" test, under which the court presumes that a properly conducted foreclosure sale would have satisfied the debt but allows the creditor to prove the contrary. *See, e.g.,* ROC-Century Assocs. v. Giunta, 658 A.2d 223 (Me. 1995). Other courts used the "absolute bar" rule, which prevented a non-complying creditor from recovering a deficiency. *See, e.g.,* Diefenbaugh v. Rachow, 508 N.W.2d 575 (Neb. 1993). Finally, a few states required that the debtor prove the losses caused by the creditor's failure to comply with the foreclosure rules. *See, e.g.,* Underwood v. Coffee County Bank, 668 So. 2d 10 (Ala. Civ. App. 1994). Revised Article Nine left this issue unresolved for consumer transactions, thus allowing consumers to try for the absolute bar rule in undecided jurisdictions. U.C.C. § 9-626(b) (1999). For other transactions, though, the statute mandates the absolute bar rule. U.C.C. § 9-626(a) (1999). This deprives small business debtors of the protections engendered in several states by the absolute bar rule. Much the same happened with the law on later advances under purchase money security. Before the revision, some courts held that an advance secured by property already subject to a purchase money security interest invalidated the

Article Nine security[398] or the breadth of security interests[399] in contexts mainly relevant to business debtors, again advancing the standing of senior lenders over junior lenders (most notably unsecured creditors, many of them small businesses) and debtors.[400] The proposed amendments to Article Two similarly show some tendency to favor strong sellers over buyers, though often excepting or even favoring consumer buyers as they do so. Sellers will be able to recover consequential damages, but not in consumer contracts.[401] Sellers will have the right to cure after revocation, but not for consumer contracts.[402] Sellers can get specific performance,[403] and parties, save in consumer contracts, may agree to specific performance, though a court need not give effect to their agreement.[404] Certainly some changes in the Code favor buyers or relatively weak

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purchase money priority, essentially transforming a purchase money interest into a non-purchase money interest. *See, e.g.,* Roberts Furniture Co. v. Pierce (*In re* Manuel), 507 F.2d 990 (5th Cir. 1975). Others held that the later advance, though not secured with purchase money priority, did not vitiate the earlier purchase money interest, creating dual status. *See, e.g.,* Billings v. Avco Colo. Indus. Park (*In re* Billings), 838 F.2d 405 (10th Cir. 1988). As with defective foreclosures, Revised Article Nine adopts a rule relatively favorable to creditors, the dual status rule, for non-consumer-goods transactions. U.C.C. § 9-103(f) (1999). The statute is, however, silent as to consumer goods transactions. U.C.C. § 9-103(h) (1999).

[398] U.C.C. §§ 9-109(a)(2) (agricultural liens), -(a)(3) (payment intangibles and promissory notes), (c)(12) (commercial tort claims) (1999); *see also supra* note 396 and accompanying text (deposit accounts).

[399] *See, e.g.,* U.C.C. § 9-504(2) (1999) (validating "all assets" financing statements).

[400] On the effects of these changes in the scope of Article Nine, see, e.g., Symposium, *The Priority of Secured Debt,* 82 CORNELL L. REV. 1279 (1997).

[401] U.C.C. § 2-710(2) & (3) (2003).

[402] U.C.C. § 2-508 (2003). To be sure, the current case law is split. Some courts have held that because current section 2-508 mentions only rejection, not revocation, cure is available after rejection alone. *See, e.g.,* Gappelberg v. Landrum, 666 S.W.2d 88 (Tex. 1984). On the other hand, others have held that as section 2-608(3) provides that revoking buyers are in the same position of rejecting buyers, and as the policies favoring cure apply whether it follows rejection or revocation, cure should be available to sellers after revocation. *See, e.g.,* Tucker v. Aqua Yacht Harbor Corp., 749 F. Supp. 142 (N.D. Miss. 1990); Gregory M. Travalio, *The U.C.C.'s Three 'R's': Rejection, Revocation and (The Seller's) Right to Cure,* 53 U. CINN. L. REV. 931 (1984). The amendments resolve the uncertainty in favor of the seller.

[403] U.C.C. § 2-703(2)(k) (2003).

[404] U.C.C. § 2-716(1) (2003).

sellers over strong sellers.[405] Still, on balance the changes favor a model of contract that works reasonably well for contracts between large firms. Exceptions often protect consumers. They do not protect small firms.

What, then, is to be done? No single approach will do. In part this stems from the dual role of small business, as both promisor and promisee. Treating small businesses specially means that their contracts with consumers, with large firms, and with other small firms need to be examined separately. When a small business deals with a consumer, it is unlikely that the consumer can deliberately capitalize on the informational or cognitive failings of the small firm.[406] Consumers will rarely be able to see the effects of the errors, given the amount of noise interfering with that information. Most likely the consumer would merely pay a little less or get a little more than it would from a larger firm. But if the consumer stands at a financial, informational, or cognitive disadvantage to the small business, the case for protecting the consumer remains. It may be weaker, for the consumer is closer to the small merchant than to the large merchant. As a result, we may generally be best off retaining the usual consumer protections, perhaps with some generosity where a small business would otherwise assume potentially catastrophic risks without clearly having been compensated to assume them. Contract law already has such a doctrine – the disproportionality limit on consequential damages.[407]

Small businesses dealing with each other pose greater difficulties. The group is potentially so heterogenous that one can have great disparities of resources, information, and cognition within it, very possibly greater than those between some small businesses and some consumers or large businesses. Moreover, even when one small business may clearly be distinguished from another on some criteria, it may not on others, thus yielding a weaker case for special treatment. A high-tech firm with one hundred employees is a small business, just as is a janitorial service run by an eighth-grade dropout. The latter operates under some significant informational and cognitive handicaps. Still, the high-tech firm has its own difficulties – some of the group-induced biases, overconfidence, and others may be more problematic for it than for the janitorial firm. And though the high-tech firm may generally be better informed, it may well not be for janitorial services. Whether these cognitive and informational effects cancel out or leave some imbalance one way or another cannot be answered without specific parties and contracts in hand. We can say, though, that the imbalance is likely modest and, given the costs of intervention, probably not worth correcting for with bold or bright-line tests.

In contrast, large firms are better able to capitalize on their superior size, information, and cognition when dealing either with small firms or with consumers. This does not mean that small

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405 For example, the codification and modest extension of warranties created by a non-privity seller, U.C.C. § 2-313A, or by advertising, U.C.C. § 2-313B; the acknowledgment of the buyer's ability to use goods without accepting under appropriate circumstances, U.C.C. § 2-608(4); and the loosening of the time limits on reclamation, U.C.C. § 2-702(2).

406 We may assume that the consumer is no wealthier than the small merchant.

407 RESTATEMENT (SECOND) OF CONTRACTS § 351(3) (1981); *see also, e.g.,* Garvin, *supra* note 86.

firms should be granted the status of what Arthur Leff called the "presumptive sillies" of the law.[408] Special treatment may even backfire. If small firms can get out of deals too readily, others will be less willing to do business with them for fear that they will exercise those rights. Still, there are some cases where small businesses so clearly resemble consumers that these costs are overcome, and here law reform may focus. Disclosure rules seem particularly well suited to this extension. If sellers, lenders, and the like already disclose information to consumers clearly, simply, and vividly, they can do so to small businesses for little greater cost. More information is no panacea, but there are some problems it can solve.

The law already takes these disparities into account when regulating small business. Securities regulation takes the cost of money and the cost of information into account when it relaxes registration requirements for small issuers.[409] Much of franchise law is an attempt to mediate the desire of the franchisor to prevent the franchisee from freely riding on the reputation established by others and the desire of the franchisee to keep the franchisor from taking undue advantage of the franchisee's transaction-specific investment. We thus see a collection of statutory and common-law doctrines that give franchisees significant rights, rights that exist in large part because of asymmetries in wealth, information, and cognition.[410] Other statutory changes have been proposed. Elizabeth Warren has suggested that in bankruptcy secured creditors be taxed twenty percent of their security, the proceeds to go to the benefit of unsecured creditors.[411] This would compensate for some of our asymmetries, for unsecured creditors tend disproportionately to be small firms with modest ability to withstand bad debts and greater willingness, perhaps because of over-optimism and the like, to extend credit.

One can also use this approach beyond the statute book. Recall the common-law dichotomies, or hybrid dichotomies, mentioned in the introduction. Many of the contract defenses – duress, unconscionability, mistake, impracticability – invoke questions of resources, information, and cognition, just as consumer law does.[412] Very often common-law courts refuse

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[408] Arthur Allen Leff, *Unconscionability and the Code – The Emperor's New Clause,* 115 U. PA. L. REV. 485, 532-33 (1967).

[409] *See supra* note 53.

[410] *See, e.g.,* JEFFREY A. SCHNEIDER & ROBERT J. NYE, BUSINESS FRANCHISE LAW (2003).

[411] Elizabeth Warren, *Article 9 Set Aside for Unsecured Creditors,* UCC BULL., Oct. 1996, at 1.

[412] *See, e.g.,* John Dalzell, *Duress by Economic Pressure,* 20 N.C. L. REV. 237 (1941); Russell Korobkin, *Bounded Rationality, Standard Form Contracts, and Unconscionability,* 70 U. CHI. L. REV. 1203 (2003); Donald C. Langevoort, *Half-Truths: Protecting Mistaken Inferences by Investors and Others,* 52 STAN. L. REV. 87 (1999); M.H. Ogilvie, *Economic Duress, Inequality of Bargaining Power and Threatened Breach of Contract,* 26 MCGILL L.J. 289, 312-19 (1981); Richard A. Posner & Andrew M. Rosenfield, *Impossibility*

to apply these doctrines to businesses, or apply them only in the most extraordinary cases.[413] This Article's analysis suggests that these courts may be unduly stingy. At a minimum, some small firms so closely resemble non-merchants that they should be treated similarly, not just for the purposes of consumer law but elsewhere.[414] Even doctrines like the parol evidence rule are at times relaxed when there are pronounced disparities between the parties.[415] The courts at times refer to inequality of bargaining power.[416] This may be too blunt an instrument. As we have seen, the differences among our classes of contracting parties blur and cross, and simple power does not encompass all the nuances. Still, this and other doctrines suggest at least marginal willingness of common-law courts to tread this path.[417] These approaches must be cabined for the welfare of those subject to them. Too liberal a set of defenses and potential promisors will shy away from contracting with those who can readily invoke them. But a measured examination of resources, information, and cognition in such defenses as duress, mistake, misrepresentation, promissory fraud, and of course unconscionability would go far to mitigate the legal difficulties of small businesses.

One can go further, though, and ask whether something between pure enforceability and pure unenforceability might be in order. Perhaps where a promisor faces great, but not overwhelming pressure, a court might remake the deal rather than decide between pure invalidation and pure affirmance. Contract defenses are at root about faulty risk bearing. Resources, information, and cognition are most germane to us when they affect a contracting

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and Related Doctrines in Contract Law: An Economic Analysis, 6 J. LEGAL STUD. 83 (1977).

413 *See, e.g.,* 1 JAMES J. WHITE & ROBERT S. SUMMERS, UNIFORM COMMERCIAL CODE § 4-9, at 236-37 (5th ed. 1995); Harry G. Prince, *Unconscionability in California: A Need for Restraint and Consistency,* 46 HASTINGS L.J. 459, 479-82 (1995).

414 Some courts have indeed allowed small firms to assert these defenses. They typically look at size either as a factor in its own right or as a proxy for sophistication, market power, information, or the like. *See, e.g.,* Int'l Paper Co. v. Whilden, 469 So. 2d 560, 563-64 (Ala. 1985) (duress); Weaver v. American Oil Co., 276 N.E.2d 144, 145-46 (Ind. 1971) (unconscionability); Gianni Sport Ltd. v. Gantos, Inc., 391 N.W.2d 760, 762 (Mich. Ct. App. 1986) (unconscionability); Hochman v. Zigler's Inc., 50 A.2d 97, 98-100 (N.J. Eq. 1946) (duress).

415 *See, e.g.,* Robert Childres & Stephen J. Spitz, *Status in the Law of Contract,* 47 N.Y.U. L. REV. 1 (1972).

416 *See generally* Barnhizer, *supra* note 37.

417 Other such doctrines include the reasonable expectations test, most commonly found in insurance law but also appearing, albeit with limited success, in the Restatement. RESTATEMENT (SECOND) OF CONTRACTS § 211(3) (1981). *See also, e.g.,* James J. White, *Form Contracts under Revised Article 2,* 75 WASH. U. L.Q. 315 (1997).

party's ability to shift or bear risk by contract. The binary result of defenses may, however, be too blunt an instrument to deal with the sorts of imbalances discussed above, making a risk-sharing approach potentially attractive. Still, as noted earlier, this move toward standards has costs. It is certainly unfamiliar to most commercial judges. Possibly, as others have suggested, the courts are unready for this more Solomonic legal method.[418] Perhaps what some have termed the new conceptualism makes such a move highly improbable.[419] It may, however, be worth considering as a means of tailoring law to reality.

How practical is all this? More so than consumer law reform, at least in most jurisdictions. Though we are all consumers, our interest in incremental consumer law reform rarely stirs us to act. We tend to ride freely on the efforts of overworked consumer affairs associations.[420] In contrast, small business has relatively well-supported lobbies in state and federal legislatures. Its organizations work to extend the rights of small business (though, it must be said, they work harder to remove regulatory constraints).[421] Legislators are alert to their many constituents who run or work for small businesses – many, indeed, are small businesspeople themselves. Even relatively pro-business legislatures may be willing to favor small businesses over large. Congress has small business committees in both houses, creating some institutional momentum for action. So too do many state legislatures. At the least, the pertinent interest groups might nullify each other, making legislation purely on the merits a little more likely. Whatever the political truths, though, small business has fallen on the wrong side of these divides for too long. It is time we looked beyond them.

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[418] *See, e.g.,* Halpern, *supra* note 1.

[419] *See, e.g.,* Ralph James Mooney, *The New Conceptualism in Contract Law,* 74 OR. L. REV. 1131 (1995); *see also, e.g.,* David Charny, *The New Formalism in Contract,* 66 U. CHI. L. REV. 842 (1999); Robert A. Hillman, *The "New Conservatism" in Contract Law and the Process of Legal Change,* 40 B.C. L. REV. 879 (1999).

[420] To take one illustration from recent law reform: During the interminable revisions of U.C.C. Article 2, a typical drafting committee meeting would hold dozens of industry observers, most of them active participants. I don't recall a meeting with more than two consumer representatives, and it was much more common to have only one.

[421] As may be shown by a look at the Web sites for the National Federation for Independent Business (http://www.nfib.com) or the American Small Business Association (http://www.asbaonline.org/index.html).