

On the Optimal Number of Contract Types

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The theoretical availability of an infinite number of contract types suggests that there may be an optimal quantity from which contractual parties could make a selection. In this Article, we emphasize the difficulty of identifying that optimal number, given information costs and other transaction costs related to the production of a contract type. We argue that standard market failures might cause markets to produce a suboptimal number of contract types. We then consider whether government should intervene to remedy any market failure. We conclude that government would generally lack the access to information necessary to identify the optimal number of contract types. Moreover, we argue that issues of political economy would impede the ability of government to achieve the optimal number of contract types, even if it were able to identify that number. Government, that is, may tend to either oversupply or undersupply contract types. Perhaps the best that government can do is to provide “soft” interventions that reflect appropriate defaults or safe harbors.

INTRODUCTION

In many spheres of contract — including consumer contracts, employment contracts, commercial transactions and more — the content of the contractual obligations is not determined through term-by-term negotiation and drafting. Rather, parties choose from a preset menu of contract forms or types. Indeed,

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some scholars — notably Dagan and Heller¹ — argue that autonomy, as well as efficiency, manifests primarily through the choice among contract types. This argument raises a series of important questions: What is the optimal number of contract types? Can we expect the market to produce the optimal number of contract types? And, if not, should the government intervene in an attempt to create an optimal menu of contract types?

We begin with two preliminary observations. First, we point out an ambiguity in the very concept of a contract “type.” What is a contract type? Do we create a new type by altering a single clause? The answer, we suggest, is “sometimes”; and it depends on the importance of the clause. More generally, the functional difference between two contracts is a continuous variable that increases with the number and importance of the alterations. Still, we agree that it is descriptively useful to designate a sufficiently different contract as a separate “type.” Second, while we use the language of quantity, i.e., the optimal *number* of types, we are really interested in a combined quantity-quality question, or series of questions: What is the optimal number of contract types, when the contract types themselves are chosen optimally (to maximize welfare)? Will the market produce these optimal types? Should the government intervene?

Having made these preliminary observations, we proceed to our main arguments: We emphasize the difficulty in identifying the optimal number of contract types. In a world without information costs (and other transaction costs), the optimal number of types would be equal to the total number of contracting pairs, since each pair of contracting parties will have (at least slightly) different preferences and constraints. In the real world, information costs (and other transaction costs) suggest that the optimal number of types is much smaller.² The information costs story is a standard rational-choice story. Specifically, it assumes that parties’ preferences are exogenous and fixed and that each party knows her own preferences. Dagan and Heller suggest another, nonstandard account, where the existence of a contract type triggers new or, at least, previously unrecognized preferences.³ We acknowledge that the creation of new preferences is beyond the scope of our analysis, but argue that learning about existing yet unrecognized preferences can be incorporated into our framework.

1 HANOCH DAGAN & MICHAEL HELLER, *THE CHOICE THEORY OF CONTRACTS* (2017).

2 Cf. Henry E. Smith, *Modularity in Contracts: Boilerplate and Information Flow*, 104 MICH. L. REV. 1175 (2006).

3 DAGAN & HELLER, *supra* note 1, at 75. See also Charles Fried, *Contract as Promise: No Regrets*, 20 THEORETICAL INQUIRES L. 367 (2019). For further discussion of the nonstandard account, see *infra* notes 13-14 and accompanying text.

We next turn to a descriptive account of markets for contract types and of market failures that might produce a suboptimal number of types. We argue that standard problems, including externalities, monopoly, imperfect information and imperfect rationality, might prevent markets from producing the optimal number of contract types. The argument here borrows from existing accounts of why markets might produce suboptimal contract terms.

Finally, accepting that markets might produce a suboptimal number of contract types, we ask whether government should intervene and try to remedy this market failure. We argue that, in many cases, government would lack the information even to identify an insufficiency of types as a problem, let alone solve the problem. In addition, standard political economy problems suggest that governmentally produced contract types might be constrained in number or quality. Specifically, contract types desired by groups capable of exploiting governmental processes could be unbalanced while contract types desired by groups less capable of exploiting governmental processes will be undersupplied. Still, in appropriate cases, soft, nudge-type interventions may be desirable. Default rules (e.g., plain vanilla mortgage contracts) and safe harbors (e.g., the qualified mortgage) present the most promising regulatory tools in this area.

Following Dagan and Heller, we focus on contract types — on the optimal number of types, on the market’s ability to produce the optimal number of types, and on the optimal role of government in regulating contract types. We believe that focusing on contract types is instructive, despite the ambiguity of the concept. We note, however, that much of the analysis — both the descriptive component and the normative component — is not unique to contract types and could apply with equal force to specific contract terms and to products generally.

I. INFORMATION COSTS AND THE OPTIMAL NUMBER OF CONTRACT TYPES

Before attempting to characterize the optimal number of contract types, we must grapple with the elusive concept of a “contract type.”⁴ In particular, if a contract is a combination of clauses or terms, then would any change in

4 Dagan and Heller offer many examples of what they consider to be contract types, but do not provide a formal definition. Dagan and Heller’s chapter 10 is titled “Contract Types” and, in the first paragraph, it promises “to specify, far more precisely, what we mean by contract types.” DAGAN & HELLER, *supra* note 1, at 102. But the chapter does not offer a formal definition of “contract type.”

terms create a new contract type? Or do we need a sufficiently large number of changes? Or a sufficiently big change (or changes)? Or do changes to some terms perhaps create a new type, but not changes to other terms? The difference between two contracts is a continuous variable. What is the threshold beyond which the second contract can or should be characterized as a new type?

Dagan and Heller do not provide a precise answer to these questions. It is not even clear that they distinguish between different terms and different types. Dagan and Heller do say that a type should be a salient referent to a particular transaction structure, e.g., at-will employment vs. for-cause termination, suggesting that the difference between the two contracts should be significant.⁵ We prefer a definition of difference or “contractual distance” that is a function of the difference in value or utility that the two contracts produce for the contracting parties.⁶ For example, there are multiple arrangements whereby a manufacturer of goods could arrange to have its goods sold to the public. The manufacturer could use its employees to sell directly to the public or to retailers and memorialize the terms of that arrangement in an employment contract; the manufacturer could retain an independent distributor of the goods and memorialize that relationship through a distribution contract; the manufacturer could license retailers to specialize in its goods and memorialize those arrangements in a franchise contract. And so on. The choice of arrangements among the possibilities will depend on the relative value to the parties of the various alternatives given their talents and information. But each of those contractual arrangements presumably captures a sufficiently distinct set of values that it is appropriate to refer to it as a particular contract type, notwithstanding their common objective of disseminating the manufacturer’s goods. For present purposes, we accept that different contract types exist and ignore contractual variation that is insufficiently valuable to produce a different type. And, having dealt with, or evaded, the preliminary question about the definition of contractual type, we can now ask about the optimal number of types.

The optimal number of contract types changes from market to market and from context to context. The optimal number of contract types in a particular labor market is not the same as the optimal number of contract types in a particular consumer market. Context matters, and it is multidimensional. Perhaps the most important dimension is information costs, broadly understood. To appreciate the importance of information costs (and related transaction costs),

5 *See id.* at 117.

6 *Cf.* Yeon-Koo Che & Albert H. Choi, *Shrink-Wraps: Who Should Bear the Cost of Communicating Mass-Market Contract Terms?* (Va. Law & Econ. Research Paper No. 2009-15, 2009), <https://ssrn.com/abstract=1384682>.

consider an unrealistic benchmark of a world without any information costs (and related transaction costs). In this imaginary world, every contracting party has perfect information about her needs and constraints, as well as perfect information about the needs and constraints of her counterparty. This party also has perfect information about all existing and potential contract types.

To take a concrete example, consider a consumer who seeks to finance the purchase of a new home. In our imaginary world, this consumer would have perfect information about her financing needs and about her ability to repay (or refinance). She would fully understand the prospect and implications of securitization and of different servicing arrangements and, specifically, how she would be affected by different securitization and servicing arrangements. The consumer would also have a good understanding of macroeconomics — interest rate fluctuations, trends in real-estate and labor markets, etc. — and how they affect the costs and benefits, to her, of different mortgage contracts.

Indeed, and most importantly, the consumer would have perfect information about the existing and potential mortgage products. She would know the differences between fixed-rate, adjustable rate and hybrid mortgage products. She would understand how ARMs use different indexes and margins and caps. She would appreciate the importance of different fees and penalties. Finally, and here we incorporate search costs into our broad definition of information costs, our hypothetical consumer would be able costlessly to consider all the mortgage products offered by all lenders.

In such a world, the optimal number of contract types equals the number of contracts signed. Every consumer is a little bit different. And so every consumer would choose a slightly different contract. In the zero information cost world, the notion of choice among contract types converges with the notion of choice by negotiation over contract terms.⁷

In the real world, information costs can be quite high. Consumers are rarely aware of all contractual design options and how they affect the overall benefits and costs of the contractual relationship. And even better-informed consumers would need to expend substantial time and money to find a contract that is a better fit with their particular needs and constraints.

When information costs are high, the optimal number of contract types shrinks. Since information costs rise with the number of types, the optimal number of types decreases the greater the magnitude of the information costs. (We assume that each contract within the subset is one that could be chosen by a reasonable person acting within the transactional domain to which the

7 With zero information costs, a single complete-contingent contract is also optimal. A complete-contingent contract is highly complex and, from this perspective, similar to many simple contracts.

contract applies. That is, we assume that all the relevant contract types are of a reasonable quality.)

And returning to the importance of context: In contexts or markets where information costs are lower, perhaps because online tools facilitate the flow of information and allow for quick search and comparisons among different contract types, the optimal number of types is larger. And in contexts or markets where information costs are higher, perhaps because consumers or employees are less sophisticated or because the complexity of the transaction makes it difficult to compare different contract types, the optimal number of types is smaller.

Our claim that the optimal number of types is inversely correlated with the magnitude of information costs requires further elaboration. In particular, we must consider the following critique: Assume that, given the magnitude of information costs, a consumer would search for and compare only three different contract types.⁸ Does this necessarily mean that the optimal number of contract types is three? Why not have ten different contract types? Each consumer would still search for and compare only three types. What is the harm in adding seven more contract types? The answer is that adding contract types is harmful. It dilutes the forces of competition. If all consumers compare the same three contract types, competition will drive each of these types to contain optimal terms or will drive the price associated with each type to the lowest point. If different consumers consider different three-contract subsets from the overall ten contracts, competition will not work as well. A search by one consumer creates a positive externality that is enjoyed by other consumers. An excessively large number of contract types inefficiently reduces this positive externality. Put differently, comparison-shopping creates a positive externality; additional contract types create a negative externality.⁹

To clarify: We do not mean to argue that if each consumer searches for and compares only three different contract types, then the optimal number of types is three. Even if the three contract types are optimally chosen such that they provide a good fit for many consumers, there will necessarily be some consumers who would prefer a fourth type. By adding a fourth type we benefit these consumers. At the same time, however, adding the fourth type harms the consumers who prefer one of the initial three types, because these consumers (who sample only three contracts) might not find their preferred

8 Cf. George J. Stigler, *The Economics of Information*, 69 J. POL. ECON. 213 (1961).

9 Dagan and Heller discuss related costs of increasing the number of contract types. DAGAN & HELLER, *supra* note 1, at 106 (“if [the number of contract types] gets too big, choice can actually be curtailed for cognitive, behavioral, structural, and political economy reasons.”). See also *id.* at 128-30.

contract.¹⁰ If the benefit exceeds the harm, then we may want to consider adding a fourth contract type and perhaps a fifth, etc. Of course, we would still need to weigh the net benefit of adding new types against the cost of reduced competition — the negative externality that we described in the preceding paragraph.

The preceding analysis assumed that consumers or, more generally, contracting parties are perfectly rational. The introduction of bounded rationality may further reduce the optimal number of contract types. These boundedly rational parties will find it difficult to navigate the complexity of multiple types and, indeed, might be confused by a large number of contract types.¹¹ Bounded rationality amplifies the standard information costs problem and thus pulls the optimal number of types further down.¹²

More fundamentally the preceding analysis assumes that parties' preferences are exogenous and fixed and that each party knows her own preferences. These are standard assumptions in (almost) all economic analysis of contracts and, indeed, in (almost) all economic analysis of law. But we recognize that they are not always realistic. And we accept Dagan and Heller's suggestion that the existence of a contract type may trigger new or, at least, previously unrecognized preferences.¹³ To the extent that preferences are exogenous and fixed, but unknown, we conjecture that our information costs analysis will continue to hold. At the same time, we acknowledge that if the addition of a contract type creates new preferences, a welfare economics framework such as ours does not apply.¹⁴

10 Let K1, K2 and K3 denote the initial three contract types; and let K4 denote the fourth type. Assume that each consumer samples only three contracts. Consider a consumer who prefers K2. If only the three initial types are available, the consumer will surely sample K2 and choose that contract. If four types are available, then there is a 25% chance that the consumer will sample contracts K1, K3 and K4 and miss her preferred contract type.

11 See OREN BAR-GILL, *SEDUCTION BY CONTRACT: LAW, ECONOMICS AND PSYCHOLOGY IN CONSUMER MARKETS* 7-50 (2012).

12 See also DAGAN & HELLER, *supra* note 1, at 106.

13 *Id.* at 75.

14 See Oren Bar-Gill & Chaim Fershtman, *Public Policy with Endogenous Preferences*, 7 J. PUB. ECON. THEORY 841 (2005).

II. WHY MARKETS MIGHT NOT PRODUCE THE OPTIMAL NUMBER OF CONTRACT TYPES

Consider a given market with a certain magnitude of information costs. There is an optimal number of contract types for this market. And yet, we cannot always count on market forces to provide this optimal number of types. Standard market failures — externalities, monopoly, imperfect information and imperfect rationality — might result in the provision of either too few or too many contract types.

A. Market Power

First, consider the problem of monopoly or, more generally, of market power. The economic literature has considered incentives to innovate and how they depend on market structure.¹⁵ The concern is that a monopolist will have a weak incentive to innovate.¹⁶ While the literature has focused more on product innovation, the same concern applies to contract innovation. In a concentrated market, the number of contract types might be too small.

Market power also interacts with the externality problem. Comparison-shopping fuels competition and serves as a check on market power. An excessively high number of contract types, we have seen, might interfere with efficient comparison-shopping and thus create market power. While the interrelated dynamics of market structure and contract types are difficult to predict, there is a risk that the market will produce a large number of contract types, not because the extra types are a good fit for some consumers, but because the added complexity creates market power.¹⁷ For example, the high levels of complexity in the mortgage market and the credit card market arguably increase the costs of comparison shopping and thus contribute to the

15 See Kenneth Arrow, *Economic Welfare and the Allocation of Resources for Inventions*, in *THE RATE AND DIRECTION OF INVENTIVE ACTIVITY* 609 (Richard R. Nelson ed., 1962).

16 See, e.g., Daniel F. Spulber, *How Do Competitive Pressures Affect Incentives to Innovate When There Is a Market for Inventions?*, 121 *J. POL. ECON.* 1007 (2013).

17 Parties might create additional contract types in an attempt to increase their market power, or parties who already enjoy substantial market power might create additional types in order to consolidate their position. Cf. BAR-GILL, *supra* note 11, at 18-21, 23-24 (discussing contractual complexity as a design feature, arguing that sellers increase complexity in order to take advantage of consumers' bounded rationality, and noting the adverse effects of complexity on competition).

creation and maintenance of market power in these industries.¹⁸ And having secured market power, the surviving seller(s) will have insufficient incentive to innovate and offer contract types that serve consumer needs.

B. Network Externalities and Coordination

Second, consider the problem of externalities, independent of the monopoly problem. Some contract types create positive network externalities. Their value increases as they become more prevalent.¹⁹ This creates a coordination problem: Everyone wants to join an established network, but few want to join a potential network that might never come to be. This coordination problem might prevent the creation of efficient contract types. When discussing market power, we argued that adding contract types creates a negative externality, resulting in an excessive number of types. Here, we argue that a positive network externality might prevent the creation of efficient contract types, resulting in an insufficient number of types.

C. Asymmetric Information

Third, the problem of asymmetric information and its effects on contract design are well studied. This literature can be readily applied to the question of contract types. For example, the standard adverse selection problem results in the exit of low-risk parties from an insurance market; and the standard lemons problem results in the removal of high-quality products from the market.²⁰ Similarly, asymmetric information can result in the absence of high-quality contract types or terms. If sellers are unable to charge a high price for the high-quality, high-cost (to the seller) types or terms, they will offer low-quality types or terms.²¹ It may be thought that contracts are different in the sense that their content is observable to both parties, thus eliminating the asymmetric information problem. But, of course, contracts are not always

18 *Id.*

19 *See, e.g.,* Marcel Kahan & Michael Klausner, *Standardization and Innovation in Corporate Contracting (or “The Economics of Boilerplate”)*, 83 VA. L. REV. 713 (1997).

20 *See, e.g.,* George Akerlof, *The Market for “Lemons”: Qualitative Uncertainty and the Market Mechanism*, 84 Q.J. ECON. 488 (1970); Joseph E. Stiglitz & Andrew Weiss, *Credit Rationing in Markets with Imperfect Information*, 71 AM. ECON. REV. 393 (1981).

21 In addition, parties might introduce inefficient contract types as a signaling mechanism. *See* Philippe Aghion & Benjamin Hermalin, *Legal Restrictions on Private Contracts Can Enhance Efficiency*, 6 J.L. ECON. ORG. 381 (1990).

read — and some types of contracts are almost never read.²² And so the asymmetric information problem persists.

D. Imperfect Rationality

Finally, imperfect rationality might prevent markets from offering the optimal number of contract types. Behavioral market failures have been shown to create inefficient contract designs.²³ This means that inefficient contract types will be offered, whereas efficient contract types might not be offered. The implications for the overall number of types in a market are ambiguous, but the overall number of types is a relevant metric only if this number includes value-enhancing contracts. Consider a market where the optimal number of types is three. Specifically, in this market we should have the following contract types: K1, K2 and K3. With imperfect rationality, we can still have three contract types, but they would be the wrong three types, e.g., K4, K5 and K7.

In addition, imperfect rationality may result in the production of too many types, especially in consumer markets. Imperfectly rational consumers will find it more difficult to deal with contractual complexity. Therefore, given imperfect rationality, the optimal number of types is smaller. The private incentives of sellers, however, operate in the opposite direction: Sellers have an incentive to increase complexity and the number of types — both in order to confuse imperfectly rational consumers and to generate market power.²⁴

The basic question, recall, is why and when markets will not produce the optimal number of types. Answering this question is particularly important as we transition to the normative part of this Article and consider the appropriate scope of legal intervention. We have argued that standard market failures explain why and when markets will not produce the optimal number of types. Dagan & Heller also acknowledge the role of standard market failures. For example, they note that “collective action problems or other (say, cognitive) difficulties inhibit the translation of people’s preferences for new types into market-based demand.”²⁵

22 See, e.g., Yannis Bakos, Florencia Marotta-Wurgler & David R. Trossen, *Does Anyone Read the Fine Print? Consumer Attention to Standard-Form Contracts*, 43 J. LEGAL STUD. 1 (2014).

23 See, e.g., BAR-GILL, *supra* note 11.

24 See *supra* note 15 and accompanying text (discussion of market power).

25 DAGAN & HELLER, *supra* note 1, at 115.

III. THE STATE'S ROLE IN ENSURING THE OPTIMAL NUMBER OF CONTRACT TYPES

A. General

We have suggested that market failures might prevent the production of an optimal number of contract types. To the extent that market failures continue to constrain the availability of useful contract types, one conventional response might be to enlist government to cure the deficiency. A large part of the role of government, after all, is to facilitate the provision of goods and services that would otherwise be undersupplied due to the very kinds of market failures that underlie suboptimal provision of contract types.

Whether governmental intervention provides a solution to suboptimal provision of contract types, however, depends on whether government can address the relevant market failure by increasing or promoting the number of contract types where they are otherwise undersupplied, or by constraining their promulgation where they are oversupplied. In some cases, those strategies will be insufficient. For example, if we are facing a collective action or positive externality problem, then simply adding — by government fiat — another contract type to the existing menu of types would not work. The coordination problem suggests that the new type would not be used. The government would have to mandate the use of the new type or transform it into a sticky default, and, by definition, the government action would reduce the number of available or adopted contract types. Where the market failure involves only the quantity of contract types (all of reasonable quality), it is theoretically possible that government involvement could be appropriate. We have, however, indicated above that it is both theoretically and practically difficult to identify the optimal number of contract types. Even if standard market failures cast doubt on the ability of the market to produce the optimal number of types, would the government be able to discern whether the existing number of types is too small or too large? Would it be able to identify which types should be added or prohibited? We are skeptical that government can play either role satisfactorily.²⁶

With respect to the first issue, we have claimed above that the optimal number of types decreases as information costs increase. If, other things

26 *Id.* at 114 (“The starting point for this discussion is, and should be, skepticism regarding the state’s affirmative role.”). *See also id.* at 115 (“It is difficult to expect that legal systems would routinely invent new contract types. Indeed, carrying out the state’s obligation to enhance choice in such a top-down fashion is often undesirable given the comparative disadvantage of state institutions vis-à-vis contractual parties in coming up with appropriate innovations.”).

being equal, more contract types are better than fewer contract types, then it is plausible that government could increase the optimal number of types by reducing information costs. Government might play that role either by developing the information itself and publicizing it, thus creating a good that others could access at low cost, or by enacting regulations that require firms to report information that would be relevant to contract type generation. The Credit Card Accountability Responsibility and Disclosure Act of 2009, for example, requires each credit card issuer to post its credit card agreement with consumers on a website,²⁷ and requires the Board of Governors of the Federal Reserve Board to create a repository of credit card agreements.²⁸ Apart from efforts to assemble and analyze data in areas as diverse as population, inflation, and unemployment,²⁹ the federal government also either generates or consolidates information that individuals or firms might otherwise find costly to obtain in areas such as airline performance and product defects that create a substantial hazard.³⁰ Thus, the federal government could collect information concerning existing and novel contract types, or data that may be useful in creating new contract types. Reducing search costs for information that is relevant to the terms and conditions within contract types would facilitate development of new forms or modification of existing forms.

Alternatively, government could reduce information costs by affirmatively drafting new types of contracts and making them available at low cost. The Consumer Financial Protection Bureau, for example, has drafted and made available a prototype credit card agreement that could be adopted by banks and customers at zero additional cost.³¹ Parties to credit card agreements may, but are not required to, adopt the proposed form or parts of it.

Each of these strategies could increase the optimal number of contract types by reducing information costs. But it is not clear that either of these strategies will increase overall social welfare, because the reduction of information costs for contracting parties is itself costly, and the government might not internalize these costs. In particular, the creation of new contract types might itself require

27 The Credit Card Accountability Responsibility and Disclosure Act of 2009, 15 U.S.C. § 204(a) (2009).

28 *Id.* The database is maintained by the Consumer Financial Protection Board. See *Credit Card Agreement Database*, CONSUMER FIN. PROT. BUREAU, <https://www.consumerfinance.gov/credit-cards/agreements/> (last visited Jan. 5, 2019).

29 See U.S. CENSUS BUREAU, <https://www.census.gov/topics/population/data.html> (last visited Jan. 5, 2019); U.S. BUREAU OF LABOR STATISTICS, <https://www.bls.gov/bls/proghome.htm> (last visited Jan. 5, 2019).

30 15 U.S.C. § 2064.

31 See, e.g., *Welcome to ABC Bank*, CONSUMER FIN. PROT. BUREAU, https://www.consumerfinance.gov/static/cc/kbyo_cc.pdf (last visited Jan. 5, 2019).

the costly generation of information. And the parties who would bear this cost are not necessarily the same contracting parties who would benefit from more contract types. Moreover, as we discuss more fully below, these adversely affected parties would have insufficient incentive to oppose the government action, because of a collective action problem or related reasons. Therefore, when the government mandates the generation of information necessary for the creation of new contract types, it might be imposing an externality on third parties. This is not to say that this externality will necessarily exceed the increase in social benefits that information-cost reduction generates. It is only to say that governmental provision of information is not necessarily a beneficial exercise.

Take, for example, Dagan and Heller's contention that additional types of surrogate contracts would be useful.³² Assume that, in pursuit of that goal, government required existing surrogates to report their experiences with different clauses in current surrogacy contracts. That would decrease information costs for future surrogates and might assist in the generation of additional contract types of the sort that Dagan and Heller favor. However, on the assumption that most surrogates do not repeat the experience, the beneficiaries of the effort comprise a different set of people than those who bear the burden of generating the information. Barring substantial participation by prior surrogates who are representative of surrogates generally in the process whereby the regulatory apparatus for obtaining the relevant information is created, it is unlikely that the decision-making process about whether and what to collect will consider the interests of those who must provide the information. Instead, only the costs to the government and the benefits to future surrogates may be considered. As a consequence, government efforts to reduce information costs could impose regulatory reporting costs that exceed the benefits. In that event, even if the subsequent reduction in information costs increases the optimal number of contract types, taking into account only the interests of future surrogates, the value of that reduction may be exceeded by the corresponding total social costs, i.e., costs that include the burden imposed on previous, non-repeat surrogates. Even if government attempts to consider the compliance costs imposed on previous surrogates, if there is insufficient compliance with the government mandate, and if there is no reliable proxy for non-complying surrogates, then government is unlikely to obtain reliable data to calculate the burdens related to information cost reduction.

The possibility that intervention will fail to generate an optimal number of contract types increases as government's role moves from reducing information costs to affirmatively producing contract types. The traditional claim that

32 DAGAN & HELLER, *supra* note 1, at 120.

government can readily solve market failures treats government actors as cognizant of and motivated by (1) a widely shared view of the public interest, (2) the extent to which market failures inhibit achievement of that public interest, and (3) the tools and political will necessary to implement policies that align with that interest. The very nature of government suggests that there are limitations on the ability of government to fulfill that role. This is not due solely to the threat of “capture” in which the very entities that government is supposed to regulate in order to strengthen market forces come to control the regulatory process. Instead, the broader problem lies in the nature of government itself. While government can be a response to collective action problems, the act of governing is itself a public good that is vulnerable to the same failures as any other public good. If A participates in government, then B need not do so, and vice versa.³³

One consequence of the public good nature of governance is that any party that does participate in government, either as a government actor or as a participant in a governmentally sponsored process, is likely to do so because he or she receives disproportionate benefit or suffers disproportionate costs from the regulatory process relative to the average person.³⁴ Those who are representative of the interests of the public at large are less likely to become involved because they may believe that they can more readily free-ride on the efforts of other similarly interested parties. Hence, individual effort may not be worth the expected value of obtaining representative benefits (which can be obtained at zero cost if others participate) or of avoiding representative costs (which can be avoided at zero cost if others participate). Nonrepresentative parties, however, may enjoy idiosyncratically high benefits or avoid idiosyncratically high costs if they participate, and will have less incentive to free-ride on others, given the smaller population that shares their idiosyncratic interests.

In the context of contract types, these collective action effects could lead to any of three “government failures,” which are equivalent to the market failures that government is supposed to cure. First, government intervention could generate an undersupply of contract types relative to the social optimum. Second, government intervention could cause an oversupply relative to the social optimum. Third, government intervention could cause suboptimal terms to be part of a contract type, even if the number of contract types is optimal. That is, each of the available contract types could be reasonable, but

33 For a general discussion of the issue, see LYNN A. BAKER, CLAYTON P. GILLETTE & DAVID SCHLEICHER, *LOCAL GOVERNMENT LAW* 38-50 (5th ed. 2014).

34 See Clayton P. Gillette, *Who Puts the Public in the Public Good? A Comment on Cass*, 71 *MARQ. L. REV.* 534 (1988).

a governmentally supplied term within one or more of the contract types could mean that the “best” contract type is unavailable. We take each of these in turn.

B. Government Intervention Results in an Undersupply of Contract Types

Begin with the risk that government intervention will cause an undersupply of contract types. The baseline of contract types is the one that the market generates. Therefore, government can create an undersupply of contract types by affirmatively suppressing contract types that the market creates. Alternatively, undersupply might involve government failure to produce a contract type that the market fails to generate, and that government is uniquely positioned to produce.

Take first the possibility of affirmative suppression. Inefficient government suppression of contract types could occur if a subset of contracting parties would benefit from the availability of a contract type or term, but well organized interests have the incentive and resources to lobby government officials to prohibit the type or term on behalf of adversely affected parties, even though the aggregate benefits to all contracting parties exceed aggregate costs. Think, for example, of family-related contracts that might have benefitted parties who desired state-sanctioned relationships that did not fall within traditional marriage contracts and therefore were not permitted legal status. Alternatively, the Consumer Financial Protection Bureau has issued a rule that prohibits covered providers of certain consumer financial products and services from using a pre-dispute arbitration agreement to block consumer class actions in court.³⁵ One need not conclude that arbitration clauses are inherently desirable to recognize that government prohibition of such clauses could reduce the available number of contract types. It is enough to conclude that, at least under some conditions, including proper pricing of the arbitration clause, a contract type that included an arbitration clause could be reasonable, even if it would be rejected by most informed purchasers.

Government suppression might nevertheless be justified if the non-salient nature of the arbitration clause lulls too many purchasers into accepting its provisions, notwithstanding that some informed purchasers would accept it, presumably because they received net expected benefits from the clause. Assume, for example, that one informed purchaser would select a contract with the arbitration clause but ten uninformed purchasers would also “select” it, notwithstanding that it created net expected costs for them. Assuming that disputes arise proportionately with informed and uninformed purchasers, it is probably optimal to ban arbitration clauses and thus to reduce the number

35 Arbitration Agreements, 82 Fed. Reg. 33210 (July 19, 2017).

of contract types. Again, the optimal number of contract types assumes a qualitative element that excludes from the set any contractual choices that no informed party would make. Prior to the 2008 fiscal crisis, for example, many firms marketed pay option adjustable rate mortgages, which allowed mortgagors to choose payment options that did not even cover the monthly interest due. Those instruments apparently were selected primarily by financially illiterate mortgagors and were responsible for a disproportionate amount of delinquent mortgages. Their suppression by government would not reduce the quantity of contract types as we use that term.

Standard collective action problems could also cause government to forgo a contract type that would be socially useful but that would not be readily produced by the market. That might be the case if those who favor a particular contract type unavailable in the market are too diffuse to coalesce in a manner that brings their desire to the attention of the relevant government actors or to lobby for adoption of the type. After all, one would think that if the group could coalesce sufficiently to urge government promulgation, they would also be able to coalesce for purposes of generating the contract type without government intervention (although once a coalition is formed, it may have a greater likelihood of success by participating in traditional markets rather than political markets). The problem is exacerbated if those who disfavor creation of the contract type are relatively well-organized.

Consider, for example, rights and obligations that arise through government recognition of “contractual” (in the sense of volitional exchange) arrangements in the family context. Notwithstanding traditional distinctions between contract and status, Dagan and Heller characterize many relationships within family as contractual.³⁶ While there may be benefits in limiting the range of state-recognized family relationships, we concur with Dagan and Heller’s argument that technological advances and changes in social norms weigh in favor of recognizing additional contractual arrangements that parallel traditional parenthood or marriage relationships. Groups that favor such relationships may be difficult to organize because participants are diffuse and may not wish to self-identify because doing so risks running afoul of traditional norms. Groups that disfavor expansion of traditional “contractual” norms, however, may more readily organize around existing associations (religion) and thus more successfully lobby government to suppress the expansion of state-sanctioned arrangements. Under these circumstances, government is unlikely to sponsor even socially beneficial contract types.

One might be skeptical of the willingness of even a well-organized interest group to expend political capital on prohibition of a contract type, since the

36 See DAGAN & HELLER, *supra* note 1, at 119-22.

group presumably could simply avoid use of the type it deems undesirable without incurring the related lobbying costs. But the group opposing government promulgation might find lobbying worthwhile under either of two circumstances. First, the group might fear that making the contract type optional is simply a first step towards making it mandatory and thus prefer that the initial step be frustrated. Assume, for example, that the CFPB has, instead of prohibiting arbitration clauses in certain consumer contracts, generated and publicized a contract type that excludes any such clause. One could imagine that business groups and the financial industry would have lobbied against the creation of such a contract type out of concern that, once it received a governmental imprimatur, there would be additional political pressures to use that form to replace contract types that allow arbitration.

Second, the interest group might perceive negative externalities stemming from the contract type. That may explain constraints on contract types, for example, in the area of family law. People who oppose the legitimacy of polygamous relationships likely are not trying to create a pre-commitment mechanism against their own entering into such a relationship. Rather, they likely believe that recognizing polygamous arrangements will have adverse effects on the society at large, even on those who are not parties to such arrangements.

C. Government Intervention Results in an Oversupply of Contract Types

Perhaps the greater concern, however, is that government intervention could cause contract types to be oversupplied relative to the social optimum. In theory, that could occur either because interest groups with disproportionate access to the agency charged with writing an optimal number of contract types in an area lobby for an excessive number of types. Or it might occur because government actors within an agency have incentives to oversupply contract types.

Oversupply due to interest group lobbying should not be a major issue. One might initially be concerned that those who would benefit from creating a supra-optimal contract type have incentives to advocate its promulgation, while those who oppose it may simply refuse to enter into such contracts and need not invest resources in objecting to its promulgation. Thus, those lobbying for government promulgation would face little opposition to their efforts. Since neither those who favor the new contract type nor the government actors who actually produce it will internalize the externalities that oversupply involves, unopposed contract types may be vulnerable to oversupply. But if a group would benefit from the promulgation of a contract type, and if that group is sufficiently organized to lobby for governmental promulgation, then one

would imagine that the group would be sufficiently organized to overcome the collective action problem that creates the need for governmental intervention in the first instance. The organized group could simply generate the contract type by itself. (It is, of course, plausible that a group with disproportionate access could lobby for a mandatory contract type. But that would lead either to an optimal number of contract types (if the optimal number is one) or to an undersupply rather than an oversupply.)

It is more plausible that government actors would promulgate an oversupply of contract types of their own volition. Once government agencies are charged with producing contract types, individuals in those agencies have incentives to create them in order to demonstrate to clients (congressmen, interest groups) or to superiors within the agency that they are performing their assigned function. Given the difficulty of calculating when the optimum has been reached, no agency has incentives to cease producing contract types on the grounds that the assignment has been achieved.

Indeed, notwithstanding our claim above that lobbying for additional contract types would be minimal, consideration of the incentives of government actors suggests that an analogous set of incentives outside the public sector could also contribute to oversupply. That might be because groups that favor the contract type believe that it would generate greater acceptance if it had government's imprimatur, or because those groups desire that government make the contract type mandatory in certain contexts.

Groups that appear before government agencies in a representative capacity have incentives to demonstrate fidelity to their constituents in ways that could increase the demand for additional governmentally created contract types. Think, for example, of public interest groups that exist on small contributions from a large number of members. Those members are unlikely to monitor the group's leadership to ensure that it has achieved or lobbied for an optimal level of regulation. The small contributions of individual members do not warrant the costs necessary to scrutinize the representatives' actions. Donors who provide substantial contributions may be more attentive to the behavior of group leaders, but not in order to ensure that those officials achieve an optimal level of regulation. Those donors are unlikely to care about the social costs of regulation that they consider personally beneficial, since their personal benefits are likely to exceed their personal share of those costs. As a result, leaders of interest groups have incentives to demonstrate that they have generated results that constituents and donors consider desirable rather than to achieve a socially optimal level of contract types. Leaders of such groups are more likely to obtain rewards by pointing to a contract type that they helped a government agency to develop than by announcing that

the group withheld support because it concluded that an optimal number of contract types were already available.

D. Government Intervention Results in Contracts of Suboptimal Quality

But let us assume that government actors obtain sufficient information to approximate the optimal number of contract types and ensure that the number is not exceeded. That still does not ensure that the available contract types correspond to the types that private parties would negotiate even if transaction costs were negligible. Instead, government actors may produce contract types optimal in quantity, but suboptimal in quality in the sense that the parties' optimal contract is missing from the set of government-supplied contracts. Here, we return to our admittedly fuzzy distinction between types and terms. A governmentally produced type may contain terms that vary from those for which informed parties would bargain. That could occur if a preexisting governmentally produced form that is available at low or zero cost becomes sticky as parties conclude that negotiating for a different term is not cost-effective, notwithstanding that they would have bargained for that term had no such form existed. Alternatively, where government actors create contracts, the same biases that cause them to select one contract type over another could also cause them to select a specific term within a contract type. The same collective action problems that could cause actors to favor well-organized groups could also induce government actors to adopt terms favored by those who have incentives to participate in the contract-production process. The promulgated contract may then be unbalanced in that it provides terms that vary from those that the market would provide if the contract had been negotiated between private parties.³⁷ In a negotiation that involves multiple parties, contract terms are likely to evolve in a give and take process in which one term is traded off against another. A price term, for example, is likely to reflect the warranty term or a term that involves return or exchange. Where those tradeoffs result from the interaction of parties affected by them, and who internalize both the costs and benefits of the terms, something close to the social optimum is likely achieved. Where those tradeoffs evolve from a process dominated by a third party, such as a government agency — even

37 Ian Ayres & Robert Gertner, *Filling Gaps in Incomplete Contracts: An Economic Theory of Default Rules*, 99 *YALE L.J.* 87 (1989); Clayton P. Gillette, *Commercial Relationships and the Selection of Default Rules for Remote Risks*, 19 *J. LEGAL STUD.* 535 (1990); Charles J. Goetz & Robert E. Scott, *The Limits of Expanded Choice: An Analysis of the Interactions between Express and Implied Contract Terms*, 73 *CALIF. L. REV.* 261 (1985).

one informed by notice and comment processes — the result is more likely to deviate from the terms that the affected parties would have reached.

E. Skepticism About Autonomy-Enhancing Mandatory Types and Terms

As long as contract types and terms are only voluntary, little harm may be done by the addition of contract types or suboptimal terms to a set of choices, because contracting parties will not adopt it, as long as the costs of bargaining around it are sufficiently low. Even if those opposed to the contract type are unable to organize against its promulgation by government, they may have sufficient bargaining power to avoid incorporation of the type into their transaction. Thus, Dagan and Heller propose primarily an “experimentalist” role for government that fosters innovative contract types that “would fade if left to people’s own devices because of predictable market failures.”³⁸ Nothing compels the use of those types if they turn out to deviate from the preferences of contracting pairs.

Nevertheless, there are reasons to be skeptical of Dagan and Heller’s optimistic embrace of experimentalism. Once one invites government into the process of facilitating experimentation with contract types, it becomes difficult to cabin governmental actors to that singular role. Instead, private actors who favor the contract type and who have an organizational advantage, or governmental actors with a political agenda, have incentives to make the contract type mandatory rather than voluntary. Dagan and Heller are certainly aware of this possibility. Indeed, to some extent they embrace it in cases in which there is a possibility of what they identify as “autonomy-enhancing” mandatory terms.³⁹ It would not be difficult for any governmental actor to claim that a proposed new contract type or term within the type serves that ambiguous objective. Once we assign to government, as the representative of collective will, the role of expanding contractual choice, it is difficult to preclude government actors from playing the related role of deciding, in the name of the collective, when mandatory terms are appropriate for autonomy enhancement. Indeed, government monitors of contractual terms have incentives to use mandatory rules to reduce the supply of contract types or terms. Once they have concluded that (1) a particular term is detrimental to one set of clients (typically consumers), and (2) the parties within that set have difficulty evaluating the propriety of the challenged type or term, the governmental actor may be likely to use prohibitions or mandatory terms,

38 DAGAN & HELLER, *supra* note 1, at 116.

39 *Id.* at 111.

since conclusions 1 and 2 entail that allowing the contract will be autonomy-reducing to inherently incompetent parties.

Some insight into these possibilities may be had by considering those situations in which government has entered the market for contract types or terms. This has happened most frequently in the consumer context, where one might think that the conditions for market failure would be most prevalent and mandatory rules that enhance autonomy may be plausible. The Magnusson-Moss Warranty Act imposes specific terms for written warranties of consumer goods that the Act covers.⁴⁰ The Federal Trade Commission's Holder in Due Course Rule requires consumer credit contracts to include a clause subjecting holders to third-party defenses, notwithstanding that the effect is likely to increase the price of consumer credit.⁴¹ The Federal Trade Commission's Rule concerning cooling-off periods for door-to-door home sales requires the inclusion in any covered contract of a cancellation period that lasts until not less than midnight of the third business day after the date of the transaction.⁴²

Autonomy-enhancing mandatory rules may be viewed as more plausible within the realm of consumer transactions, where market protections for consumers may be swamped by cognitive issues or informational asymmetries that favor sellers.⁴³ But mandatory rules also exist in commercial contexts. The Automobile Dealers' Day in Court Act, for example, essentially adds to any franchise agreement between an automobile dealer and manufacturer a clause that allows suit to be filed for a claim that the franchise was terminated without good faith.⁴⁴

Of course, even in the commercial context, mandatory terms may be explained by efforts to enhance the autonomy of a party disadvantaged by asymmetric information or market power exercised by the counterparty. It is fully conceivable that automobile dealers who have made significant relationship-specific investments would be vulnerable to hold-up risks presented by automobile manufacturers if dealerships were terminable at will. Nevertheless, it is also plausible that the federal act was a response to interest group pressures that disrupted a well-operating market for dealerships. The difficulty in distinguishing the autonomy-enhancing explanation from the interest group explanation cautions against an uncritical endorsement of government intervention.

40 16 C.F.R. § 701.3(a)(7)-(9).

41 16 C.F.R. § 433.2.

42 16 C.F.R. § 429.1.

43 See BAR-GILL, *supra* note 11.

44 15 U.S.C. § 1222.

Dagan and Heller suggest that American legal processes should look to other legal systems for creative contract types. That seems perfectly appropriate, but that same comparative exercise reveals other contexts in which contract types and terms may be affected by the very characteristics about which we express some reservation. The European Directive on certain aspects of the sale of consumer goods creates a minimum two-year guarantee that a consumer good will not contain a nonconformity at the time it is delivered.⁴⁵ Essentially, “nonconformity” means that a good will not fail to perform as expected during the two-year period after its sale. Whether that requires all goods to remain in operating condition for at least two years is a matter of interpretation. It might be that some goods are expected to last for less than two years, so that the good’s failure to perform within that period does not necessarily constitute a nonconformity. (Imagine a rubber band or a piece of chalk that wears down after several months of use.) But it does suggest that some goods that have a significant useful life must be produced at a quality that allows them to remain in operating condition for at least two years. This mandatory term makes the implicit, if questionable, assumption that any market for low-quality goods that may last for less than two years is sufficiently tainted by the market power of sellers to offset the benefit that consumers would receive by having access to such goods at a price that reflects their limited utility. One might celebrate a legal reform that has the effect of forcing shoddy goods out of the marketplace. But, again, assuming that price reflects quality, if there is a subset of consumers who could afford shoddy forms of a good, but could not afford higher-quality forms of the same good, it is unclear whether consumer welfare is improved by denying that group the ability to obtain any form of the good. Prohibiting a contract type or term that facilitates the sale of consumer goods that are produced to last only a year, that is, does not necessarily increase the autonomy of affected consumers or necessarily reflect either the efficiency or communitarian goals of contract law generally. The fact that governments have embraced such prohibitions again warns against endorsement of governmental imposition of mandatory terms.

Alternatively, consider the interventions of various governments into the controversial area of payday loans. The popular press has highlighted stories about high interest rates that accompany these loans, and suggested that payday lenders target certain susceptible populations, including military families, who end up with a Sisyphean mountain of debt from which they

45 Directive 1999/44/EC of the European Parliament and of the Council of 25 May 1999 on Certain Aspects of the Sale of Consumer Goods and Associated Guarantees, 1999 O.J. (171) 1.

cannot escape. The result has been the enactment of legislation that limits the terms of payday loans for these groups,⁴⁶ and efforts by states to restrict terms on which any payday loans can be made.⁴⁷ Given that these restrictions are typically favored by consumer groups, one might conclude that unregulated payday loan terms constitute a formidable example of the kind of mandatory term that precludes exploitation of consumers who, relative to lenders, have inferior information concerning default rates, calculation of annual percentage rates, total interest costs, or other characteristics of payday loans that determine whether a consumer benefits from their availability at the rate determined by the lender. Thus, one might conclude that payday loan terms again pose a quintessential example of how government intervention can generate a contract type (a restricted rate payday loan) that would not arise in a market setting.⁴⁸

The empirical literature about payday loans, however, is less conclusive about the adverse effect of unregulated payday loans. Some of the literature suggests that payday loan restrictions have spillover effects that reduce consumer credit limits generally or raise costs due to decreased competition.⁴⁹ Other literature suggests that consumers who are denied access to payday loans as a consequence of regulation substitute for them other forms of high-interest credit.⁵⁰ Some of these alternatives may prove to be more harmful to consumers than payday loans, either because they entail higher interest rates or involve illicit sources of credit where enforcement involves violence rather than legal process as a means of recovery. The result, therefore, is that, without additional interventions that might mitigate the adverse effects associated with alternative sources of credit, government might, out of a sense of benevolence and increasing autonomy, constrain a certain contract type, but to much more negative effect.

Our concern in this Part has not been to demonstrate that government intervention leads to inappropriate decisions. Rather, it is to suggest that government generation, or suppression, of contract types and of specific terms

46 See Military Lending Act of 2007, 10 U.S.C. 987, implemented by 32 C.F.R. 232.

47 See, e.g., *State ex rel. Swanson v. Integrity Advance, LLC.*, 870 N.W.2d 90 (Minn. 2015); *In re Advance America, Cash Advance Centers of North Carolina, Inc.*, 657 S.E.2d 405 (Ct. App. N.C. 2008).

48 See, e.g., Michael D. Grubb, *Overconfident Consumers in The Marketplace*, 29 J. ECON. PERSP. 9 (2015).

49 See, e.g., Brian T. Metzger & Donald P. Morgan, *Competition in a Consumer Loan Market: Payday Loans and Overdraft Credit*, 24 J. FIN. INTERMEDIATION 25 (2015).

50 Neil Bhutta, Jacob Goldin & Tatiana Homonoff, *Consumer Borrowing after Payday Loan Bans*, 59 J.L. ECON. 225 (2016).

within those types might do more harm than good. Considerations of political economy caution against replacing market failure with government failure. These government failures may produce deviations in quantity or quality that replicate, rather than cure, the shortcomings of markets.

CONCLUSION

Dagan and Heller have suggested that the available quantity of contract types may have important implications for reasons that include, but also transcend, efficiency. Assuming that they are correct, we are left with the empirical question of how best to achieve the optimal number of contract types. We have not attempted to solve that difficult issue. On the one hand, we agree with Dagan and Heller that market failures might impede the evolution of desirable contract types. At the same time, we conclude that Dagan and Heller's faith in governmental processes to develop contract types is overstated, and in both directions. Government processes may lead to either an oversupply or undersupply of contract types, and may fail to generate optimal contract terms. The fact that we cannot identify an ideal mechanism for the generation of an optimal number of contract types does not deny the efficacy of Dagan and Heller's central claim. But it does raise a cautionary note about the easy translation of that claim into legal policy prescriptions.