Comment on Mary Anne Case's Enforcing Bargains in an Ongoing Marriage

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Mary Anne Case's paper *Enforcing Bargains in an Ongoing Marriage*¹ raises both a narrow and a broad question. The narrow question relates specifically to *McGuire v. McGuire*,² which is commonly interpreted as standing for the proposition that courts will not enforce contracts between spouses in ongoing marriages.³ Case argues that this interpretation is wrong. The McGuires had no contract and, hence, *McGuire* is about status, about the obligations implied by marriage, not about contract.⁴

The broad question is whether courts should enforce bargains between spouses in ongoing marriages. Would a willingness to enforce (some? most? all?) bargains be superior to the current "love-it-or-leave-it" rule?⁵ Economic models of bargaining in marriage appear to imply an affirmative answer to this question. I argue, however, that simple bargaining models exaggerate both the inefficiencies associated with the non-enforceability of contracts and the extent to which legal enforceability would avoid these inefficiencies. Accordingly, these arguments do not contradict Case's claim that enforceability would improve upon the "love-it-or-leave-

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^{1.} Mary Anne Case, Enforcing Bargains in an Ongoing Marriage, 35 WASH. U. J.L. & Pol'y 225 (2011).

^{2.} McGuire v. McGuire, 59 N.W.2d 336 (Neb. 1953).

^{3.} Case, supra note 1, at 227.

^{4.} *Id*

^{5.} The idea that courts generally refuse to enforce bargains in ongoing marriages, dubbed the "love-it-or-leave-it" rule by Saul Levmore, leaves couples to negotiate amongst themselves or obtain a divorce. *Id.* at 225 (quoting Saul Levmore, *Love It or Leave It: Property Rules, Liability Rules, and Exclusivity of Remedies in Partnership and Marriage*, 58 LAW & CONTEMP. PROBS. 221, 226 (1995)).

it" rule, but they do suggest that the magnitude of the improvement would be relatively small.

The first economic models of bargaining in marriage, which were developed by Manser and Brown⁶ and McElroy and Horney,⁷ were published in the early 1980s in the *International Economic Review*.⁸ Traditional economic analysis treated a married couple as if it were a single "economic agent" that maximizes a utility function subject to a resource or budget constraint.⁹ Economists refer to models in which economic agents maximize a utility function subject to a resource constraint as "unitary models."¹⁰ Traditionally, economists simply assumed that the unitary model, which is usually introduced in the context of an individual consumer, applied directly to married couples. Samuelson, in a throw-away section of a paper on the theory of international trade, pointed out that the usual treatment of married couples, whom he referred to as "Dr. Jekyll and Mrs. Jekyll," was problematic.¹¹ Samuelson identified the problem, but had little interest in modeling allocation within marriage.

Gary Becker, who won the Nobel Prize in Economics in 1992, put the study of the family, including marriage, on the agenda of economics. Becker's "altruist model" of allocation in marriage recognizes that spouses have distinct preferences, but nevertheless implies that married couples would behave as predicted by the

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^{6.} Marilyn Manser & Murray Brown, Marriage and Household Decision-Making: A Bargaining Analysis, 21 INT'L ECON. REV. 31 (1980).

^{7.} Marjorie B. McElroy & Mary Jean Horney, *Nash-Bargained Household Decisions: Toward a Generalization of the Theory of Demand*, 22 INT'L ECON. REV. 333 (1981).

^{8.} I have a particular attachment to these two papers because, as editor of the *International Economic Review*, I accepted them for publication at a time when editors of most economics journals would have rejected them.

^{9.} See Manser & Brown, supra note 6, at 31. A utility function "represents" preferences in the sense that it assigns numbers to alternatives in such a way that preferred alternatives are assigned higher numbers.

^{10.} Robert A. Pollak, Samuelson's 'Dr. Jekyll and Mrs. Jekyll' Problem: A Difficulty in the Concept of the Consumer, in Samuelsonian Econimics and the Twenty-First Century 116 (Michael Szenberg, Lall Ramratten & Aron A. Gottesman eds., 2006).

^{11.} Paul A. Samuelson, *Social Indifference Curves*, 70 Q.J. ECON. 1, 9 (1956). In international trade theory, economists often simply assumed that the unitary model applied to countries. Samuelson argued that the correct approach was to analyze the behavior of individuals and then "aggregate" individuals' behavior to understand the behavior of countries or couples. *See* Pollak, *supra* note 10, at 117.

unitary model.¹² The altruist model assumes that one family member, the "altruist," has the lion's share of both resources and bargaining power, and concludes that the couple maximizes the altruist's utility function subject to the couple's resource constraint. 13 In a 1988 study, I describe Becker's altruist as the "husband-father-dictator-patriarch" and argue that the source of his power is the implicit assumption that he can confront other family members with take-it-or-leave-it offers.¹⁴ Thus, I interpret the altruist model as an "ultimatum game"—a game in which one of the players, Becker's altruist, proposes a division of a fixed total (e.g., a sum of money) between himself and the other player, the responder. 15 The responder can either accept the proposed division, in which case each player receives the amount proposed, or reject it, in which case each player receives nothing. 16 With this structure, economic theory predicts that if the proposer places no weight on "fairness" or on the responder's utility, then the responder will get her "reservation utility" (i.e., the minimum utility that will keep her in the marriage) and the proposer will capture the entire "surplus" generated by the marriage. If the proposer does place positive weight on the responder's utility, then the responder will receive more than her reservation level of utility. Regardless of whether the proposer places zero weight or positive weight on the responder's utility, the predicted division maximizes the altruist's utility function, subject to the couple's resource constraint.¹⁷ Thus, Becker does not simply assume the unitary model, but derives it from underlying assumptions about allocation within marriage. Unfortunately, the underlying assumptions are implausible.

More plausible game theoretical bargaining models now play a central role in the economics of the family. These more plausible models make differing assumptions about the enforceability of bargains in ongoing marriages. Game theorists distinguish between

^{12.} Gary S. Becker, A Treatise on the Family 277-306 (enlarged ed. 1991) (setting out the altruistic model).

^{13.} Id. at 279.

^{14.} Robert A. Pollak, *Tied Transfers and Paternalistic Preferences*, 78 Am. ECON. REV. 240, 242–43 (1988).

^{15.} *Id.* at 243.

^{16.} *Id*.

^{17.} Id. at 242-43.

two classes of games: cooperative and noncooperative. ¹⁸ Cooperative game theory assumes that players can make "binding, costlessly-enforceable agreements." ¹⁹ Noncooperative game theory assumes that players *cannot* make such agreements. ²⁰ In noncooperative game theory, the only agreements players will fulfill are agreements that are in their interest to fulfill—in the language of game theory, "incentive-compatible" or "self-enforcing" agreements. ²¹ Lundberg and Pollak's "separate spheres" bargaining model is also a cooperative Nash bargaining model, but the default outcome is not divorce but a noncooperative equilibrium within marriage that reflects gender norms. ²²

Economists' definition of "efficiency"—formally, "Pareto efficiency"—is best approached by defining "inefficiency." A situation is inefficient if things can be rearranged so as to make everyone better off. For example, if a pie is divided between two people, a division that gives half to one person and one-third to the other is inefficient. An efficient allocation is one that is not inefficient. In the pie example, an allocation is efficient if and only if the shares add up to one. More generally, a situation is Pareto efficient if it is impossible to make one person better off without making someone else worse off.²³

21. Manser and Brown (1980) and McElroy and Horney (1981) were the first to propose and analyze the behavior of married couples as a bargaining game. More precisely, both papers used the cooperative Nash bargaining model, and Manser and Brown also use the Kalai-Smorodinsky solution. Both the Manser-Brown and the McElroy-Horney models are "divorce-threat" models (i.e., divorce is the default outcome if the couple fails to reach agreement). See Manser & Brown, supra note 6, at 38–40; McElroy & Horney, supra note 7, at 334–37.

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^{18.} R. Duncan Luce & Howard Raiffa, Games and Decisions: Introduction and Critical Survey (1957).

^{19.} Shelly Lundberg & Robert A. Pollak, *Noncooperative Bargaining Models of Marriage*, 84 AM. ECON. REV. 132, 133 (1994) [hereinafter Lundberg & Pollak, *Noncooperative Bargaining*].

^{20.} Id. at 133.

^{22.} Lundberg & Pollak, Noncooperative Bargaining, supra note 19, at 133.

^{23.} Robert A. Pollak, *Bargaining Around the Hearth* 9 (Nat'l Bureau of Econ. Research, Working Paper No. 13142, 2007), *available at* http://www.nber.org/papers/w13142.pdf.

BARGAINING MODELS

Both cooperative and noncooperative game theoretic models translate the divergent interests of the players into "solutions" or "equilibria." Cooperative game theory does this by specifying a set of requirements ("axioms") that all solutions ("equilibria") must satisfy and defining the solution as all outcomes that satisfy all of the requirements in the set. Pareto efficiency is one of the requirements always imposed in cooperative game theory. 26

Three types of noncooperative bargaining models illustrate their variety: one-stage games, repeated games, and two-stage games. A solution or equilibrium in noncooperative games is defined by the requirement that each player's "strategy" is a "best response" to the strategy of the other.²⁷ In this sense, equilibrium ensures the compatibility of the decisions of the players. This notion of equilibrium is easiest to understand in the context of a one-stage game.

1. One-stage games.²⁸ In the family bargaining context, suppose that each spouse has control over his or her own resources (e.g., income or earnings). Each spouse decides how much of his or her own resources to spend on his or her private consumption and how much to contribute to a "household public good."²⁹ A household public good is a good that provides utility to both spouses—for example, the goods that are consumed by the couple's child.³⁰ Economists call games of this sort "voluntary contribution games."³¹

^{24.} See LUCE & RAIFFA, supra note 18.

^{25.} *Id.*; Lundberg & Pollak, *Noncooperative Bargaining, supra* note 19, at 132–37; Shelly Lundberg & Robert A. Pollak, *Bargaining and Distribution in Marriage*, 10 J. ECON. PERSP. 139 (1996) [hereinafter Lundberg & Pollak, *Bargaining and Distribution*].

^{26.} See Lundberg & Pollak, Noncooperative Bargaining, supra note 19, at 133. Some would argue that if there are no transaction costs and players can make binding, costlessly-enforceable agreements, then equilibria must be Pareto efficient. The validity of this "Coasian" claim depends on building the conclusion into the meaning of "no transaction costs." My own view is that transaction costs often are significant, that not all bargaining is efficient, and that players sometimes leave money on the table.

^{27.} Lundberg & Pollak, Noncooperative Bargaining, supra note 19, at 133.

^{28.} Economists usually refer to "one-stage" games as "one-shot" games. *See id.* at 134.

^{29.} *Id*.

^{30.} Yoram Weiss & Robert J. Willis, *Children as Collective Goods in Divorce Settlements*, 3 J. Lab. Econ. 268 (1985).

^{31.} Lundberg & Pollak, Noncooperative Bargaining, supra note 19, at 134.

Both spouses are assumed to care about their own consumption and about the child's consumption, but not about the consumption of the other spouse; thus, each spouse would like the other to increase his or her contribution to the child's consumption.³² Under very general conditions, if both spouses contribute to the public good, then the equilibrium of the one-stage game is not Pareto efficient.³³ More specifically, the equilibrium provides too little of the public good in the sense that both spouses would be better off if they both reduced their private consumption and increased their contributions to the public good. The intuition is that if a spouse—for definiteness, the husband-were to unilaterally reduce his own consumption to increase the child's consumption by one unit, he must give up one unit of his own consumption.³⁴ But if the spouses agree to coordinate to increase the child's consumption by one unit, each spouse has to give up only half a unit of consumption.³⁵ Somewhat more formally, in the one-stage game a "strategy" for a spouse is a division of his or her own resources between his or her private consumption and a contribution to the child's consumption.³⁶

2. Repeated games. Repeated games—games in which the same one-stage game is played over and over—are more plausible representations of many family bargaining situations than one-stage games.³⁷ For example, suppose that in every period each spouse must decide how much of his or her own resources to spend on his or her private consumption and how much to contribute to the child's consumption. In this example, the game being played over and over is the one-stage voluntary contribution game.³⁸ Repeated games typically have multiple equilibria, and the analysis typically focuses on selecting a particular equilibrium from this set and arguing that it is *the* equilibrium. Although one-stage voluntary contribution games

^{32.} Weiss & Willis, supra note 30.

^{33.} Lundberg & Pollak, Noncooperative Bargaining, supra note 19, at 135.

^{34.} Id.

^{35.} In a cooperative game, the spouses would agree to do this.

^{36.} The prisoners' dilemma is a well-known example of a one-stage game. In the prisoners' dilemma, the (unique) equilibrium is one in which both prisoners confess. This outcome, however, is not Pareto efficient from the prisoners' standpoint; both would be better off if neither confesses.

^{37.} Lundberg & Pollak, Noncooperative Bargaining, supra note 19, at 134-35.

^{38.} Id. (proposing and analyzing this repeated voluntary contribution game).

lead to underprovision of the household public good, repeated games need not lead to underprovision.³⁹ In a repeated game, bargains can be enforced by dynamic "punishment strategies."⁴⁰ For example, if the spouses agree on how much each is to contribute to the household public good and the husband fails to abide by the agreement in a particular period, then the wife can respond by refusing to contribute in the next period (or in the next two periods). Knowing that his wife will punish him if he fails to abide by the agreement, the husband will contribute the agreed upon amount.⁴¹

3. Two-stage games. Two-stage games provide a framework for analyzing situations in which big, up-front decisions affect future bargaining power and the spouses are unable to make binding agreements about their future behavior (e.g., because courts will not enforce such bargains in ongoing marriages).⁴² Lundberg and Pollak propose and analyze the "two-earner couple location problem" as a paradigmatic example. 43 They consider spouses living in the Midwest who receive job offers on opposite coasts. They assume that if the spouses agree on a location and move there, both spouses know that they will play a bargaining game in the new location. 44 The spouses also know that bargaining power depends on which location they move to. 45 The wife, who would gain bargaining power by moving to California, cannot credibly commit to refrain from exploiting her bargaining advantage. 46 Similarly, the husband, who would gain by moving to New York, cannot credibly commit to refrain from exploiting his bargaining advantage. Without the ability to make

^{39.} Id. at 135.

^{40.} Id.

^{41.} The repeated prisoners' dilemma game has multiple equilibria, including equilibria in which neither prisoner confesses.

^{42.} Case, supra note 1.

^{43.} Shelly Lundberg & Robert A. Pollak, *Efficiency in Marriage*, 1 REV. ECON. HOUSEHOLD 153, 156–62 (2003) [hereinafter Lundberg & Pollak, *Efficiency*].

^{44.} Id. at 156

^{45.} *Id.* For example, suppose bargaining power depends on wage rates, and the wife has been offered a high wage in California, while the husband has been offered a high wage in New York. Pollak argues that bargaining power depends on wage rates. Robert A. Pollak, *Bargaining Power in Marriage: Earnings, Wage Rates and Household Production* 4 (Nat'l Bureau of Econ. Research, Working Paper No. 11239, 2005), *available at* http://www.nber.org/papers/w11239.

^{46.} Lundberg & Pollak, Efficiency, supra note 43, at 157–58.

enforceable bargains, the couple might remain in the Midwest, even though moving would provide enough additional resources to make both spouses better off. Lundberg and Pollak argue that the two-stage game provides a framework for analyzing many situations in which current decisions affect future bargaining power. For example, a husband cannot credibly commit to doing his share of child care if the couple has another child. Hence, the wife may refuse to have another child, even though having another child would make both spouses better off if the husband did his share of child care. Thus, the assumed inability to make binding, enforceable agreements is a crucial feature of the noncooperative two-stage games.

ENFORCEMENT WITHOUT LAW

Models highlight certain features of reality and ignore others. A literal interpretation of the simple two-stage bargaining model exaggerates both the likelihood that inefficiencies will arise and the extent to which legal enforceability of contracts would avoid these inefficiencies. The model exaggerates the likelihood of inefficiency because it fails to include three enforcement mechanisms that are more potent and less costly than legal enforceability: internalized norms, self-help, and (non-legal) third-party help.

1. Economists treat internalized norms as a type of preference and recognize that, although conscience does not enforce all promises, it does enforce some. ⁴⁹ Economists generally ignore the possibility that players make unenforceable promises, characterizing them as "cheap talk" which rational players will disregard. ⁵⁰ Internalized norms of promise-keeping allow some couples to make binding agreements even in the absence of external sanctions. ⁵¹

^{47.} *Id.* at 158. Alternatively, the job offers may be so attractive that the spouses move to opposite coasts, even though, if they could make binding agreements, they would stay together and move to one coast or the other.

^{48.} Lundberg & Pollak, Efficiency, supra note 43, at 156.

^{49.} Shelly Lundberg & Robert A. Pollak, *American Family and Family Economics*, 21 J. ECON. PERSP. 3 (2007) [hereinafter Lundberg & Pollak, *American Family*].

^{50.} Joseph Farrell & Matthew Rabin, Cheap Talk, J. ECON. PERSP., Summer 1996, at 103.

^{51. &}quot;Norms" are an elastic notion, often encompassing both obligations enforced by the prospect of internal sanctions (e.g., you will feel guilty) and external sanctions (e.g., if you mistreat your wife, you will be beaten by her brothers and ostracized by the community).

- 2. Self-help by angry spouses who mistakenly relied on empty promises can range from "harsh words and burnt toast," in Bergstrom's memorable phrase, to violence or threats of violence.⁵² Even in an ultimatum game, experimental evidence indicates that responders punish proposers who make "unfair" offers.⁵³ In the ultimatum game, economic theory predicts that an egoistic proposer will offer the responder nothing or virtually nothing, and that a self-interested responder will accept whatever unequal division she is offered.⁵⁴ Experimental evidence contradicts these predictions: responders angrily reject unfair offers and, perhaps because proposers understand that responders will reject unfair offers, they offer substantially more than the zero or near zero predicted by the theory.
- 3. Non-legal third-party help also provides incentives for spouses to keep promises, regardless of whether their promises are legally enforceable. In bargaining models of marriage, the only players are the spouses; the models depict married couples as isolated from other family members and from friends. In reality, spouses are embedded in often overlapping family and nonfamily networks—parents, children, siblings, friends, neighbors, co-workers, congregants—and spouses' behavior is constrained by a desire to maintain relationships within these networks. Concern for these relationships may deter spouses from breaking promises or fully exploiting bargaining advantages.⁵⁵

Robert Ellickson argues that norms are more important than law, at least until the "end game." See ROBERT C. ELLICKSON, THE HOUSEHOLD: INFORMAL ORDER AROUND THE HEARTH 93 (2008); Robert C. Ellickson, Unpacking the Household: Informal Property Rights Around the Hearth, 116 Yale L.J. 226, 328 (2006).

I argue that, under some circumstances, "endgame considerations may play a greater role in determining midgame allocation than Ellickson acknowledges." Pollak, *supra* note 23, at 10. More specifically, for couples with minor children, legal rules regarding child custody and child support may be important and, for married couples, legal rules governing the division of marital property may be important. *Id.*

^{52.} Theodore C. Bergstrom, *Economics in a Family Way*, 34 J. ECON. LITERATURE 1903, 1926 (1996).

^{53.} See Alvin E. Roth, Bargaining Experiments, in The Handbook of Experimental Economics 253, 264 (John H. Kagel & Alvin E. Roth eds., 1995); Colin F. Camerer, Behavioral Game Theory: Experiments in Strategic Interaction 9 (2003).

^{54.} CAMERER, supra note 53, at 9.

^{55.} See ERIC A. POSNER, LAW AND SOCIAL NORMS 76–79 (2000) (arguing that restricting individuals to a uniform marriage contract facilitates community enforcement of marital obligations).

Thus, even without legal enforceability, internalized norms, self-help, and (non-legal) third-party help imply that inefficiency is less likely than the simple bargaining model suggests.

THE LIMITS OF LEGAL ENFORCEABILITY

Three features omitted from the simple two-stage model cause it to exaggerate the extent to which legal enforceability of bargains would avoid inefficiencies that would otherwise arise: (1) the costs of legal enforcement, (2) the nature of relational contracts, and (3) the reluctance of family members to enter into contracts.

- 1. The cost of legal enforcement limits its effectiveness as a means of forcing spouses to honor promises. As Case emphasizes, high transaction costs imply that even if legal enforcement were available to spouses in ongoing marriages, it would not be a panacea because few couples would resort to the courts. ⁵⁶ Bargaining models usually focus on the polar cases of costless enforcement, as in cooperative games, and infinitely costly enforcement, as in two-stage games. Enforcement that is costly, but not infinitely costly, imposes limits or bounds on when spouses can break promises with impunity—some agreements are not worth enforcing. Hence, with high enforcement costs, the scope for opportunism is large. ⁵⁷
- 2. Elizabeth and Robert Scott argue that marriage can be viewed as a "relational contract." The enforcement of relational contracts, whether within families or between friends, depends more on internalized norms, self-help, and embeddedness in networks than on access to the courts. ⁵⁹ Contracts that prevent spouses from breaking

^{56.} Case, supra note 1, at 250-51.

^{57.} Oliver Williamson defines "opportunism" as "self-interest seeking with guile." Oliver E. Williamson et al., *Understanding the Employment Relation: The Analysis of Idiosyncratic Exchange*, 6 BELL J. ECON. 250, 258–59 (1975). The "outside option" of divorce imposes another bound. If one spouse resorts to legal enforcement, the other may respond by seeking a divorce. *See* POSNER, *supra* note 55, at 82.

Enforcement costs may be greater for one spouse than for the other. For example, a spouse who is an attorney may face lower enforcement costs than one who is not, and this has predictable distributional implications.

^{58.} Elizabeth S. Scott & Robert E. Scott, *Marriage as Relational Contract*, 84 VA. L. REV. 1225, 1229 (1998).

^{59.} Eric A. Posner, *Family Law and Social Norms*, in THE RISE AND FALL OF FREEDOM OF CONTRACT 256 (F.H. Buckley ed., 1990); POSNER, *supra* note 55, at 68–87.

promises and exploiting bargaining power in one dimension will channel exploitation into others. Contracts that prevent spouses from breaking promises and exploiting bargaining power in all dimensions are too costly to negotiate, draft, and enforce. ⁶⁰ Because contracts between spouses cannot deal with all relevant dimensions, such contracts are necessarily incomplete.

3. The reluctance of family members to enter into contracts is a reflection of widely shared societal norms discouraging family contracts. The prevalence of such norms presumably explains why family contracts are unusual even when courts will enforce them. For example, elderly parents and adult children seldom enter into contracts regarding long-term care, and adult siblings seldom enter into contracts regarding the sharing of responsibility and costs of caring for disabled elderly parents. Prospective spouses are reluctant to enter into or even discuss prenuptial agreements specifying the division of assets in the event of divorce. Because suggesting a contract to family members signals a lack of trust, I would expect to see few contracts in ongoing marriages even if courts were willing to enforce such contracts. ⁶²

CONCLUSION

Would legal enforceability of bargains in ongoing marriages be better than the "love-it-or-leave-it" rule? A literal reading of the simple two-stage bargaining model suggests that legal enforceability would avoid the inefficiencies that can arise in such models. A closer look reveals that the simple model exaggerates the likelihood that inefficiencies would arise in the absence of legal enforceability. This exaggeration occurs because the simple two-stage model ignores three mechanisms that, in some cases, would enable spouses to make binding agreements: internalized norms, self-help, and non-legal

^{60.} Elizabeth S. Scott & Robert E. Scott, Marriage as Relational Contract, 84 VA. L. REV 1225 (1998)

^{61.} Lundberg & Pollak, Efficiency, supra note 43; Liliana Pezzin, Robert A. Pollak & Barbara S. Schone, Efficiency in Family Bargaining: Living Arrangements and Caregiving Decisions of Adult Children and Disabled Elderly Parents, 53 CESIFO ECON. STUD. 69 (2007).

^{62.} The outcome would differ if legal enforceability led to a substantial change in norms. See POSNER, supra note 55, at 32–33 (discussing the capacity of law to alter norms).

third-party enforcement. The simple two-stage model also exaggerates the extent to which legal enforceability would enable spouses to avoid inefficiencies that would otherwise arise. Again there are three factors ignored in the simple model: the costs of legal enforcement, the nature of relational contracts, and the reluctance of family members to make explicit bargains with one another. My analysis suggests that Case's proposal to make bargains in ongoing marriages legally enforceable would be only a modest improvement over "love-it-or-leave-it."