FAIR BUY-SELL
(A Mechanism For Resolving Disputes Between Joint Owners of Property)*

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ABSTRACT

This paper describes a new game-theoretic bargaining mechanism that can be used by joint owners of property – such as business partners, joint venturers, shareholders, and married couples – to bring their joint ownership to an end in a fair, efficient, and legally enforceable manner. The system provides each party with an opportunity to enter data into the system under an escrow arrangement, including confidential data specifying a monetary value for the property at which that party would be willing either to sell its share to the other side or buy out the other side's share (similar to the proposal made by the initiating party under a traditional "buy-sell" arrangement). The system compares the offers and announces a sale to the party that offered the higher value. However, the sale price is set at the midpoint between the offers (or at some other intermediate value arrived at by applying a mutually agreed-upon formula).

The use of the system by the involved parties always produces a full and complete resolution, and it always provides each party – whether the buyer or seller – with a resolution that is equal to or more favorable to it than the one that it had proposed. The system can be used pursuant to a prior agreement between the parties, but it is configured so that it can also be initiated unilaterally by one party, allowing that party to either achieve an outcome that equals or exceeds what that party considers to be acceptable or – if the other party declines to use the system – to demonstrate, without having to reveal its own proposed valuation, that the other party had walked away from a fair and reasonable solution.

** A fully operational online version of the system described within this paper can currently be accessed and used free of charge at https://www.fairoutcomes.com/run_fbs/home.pl*

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INTRODUCTION

This paper begins with a description of some of the problems associated with the dissolution of joint-ownership relationships (at pp. 2-4). It then considers the manner in which traditional buy-sell mechanisms address but fail to fully resolve some of those problems (at pp. 4-7). The paper then provides a description of a new bargaining mechanism that serves to provide a solution to the problems in question (at pp. 7-11). Although a party involved in a joint-ownership relationship can use the mechanism at any time, without the need for a preexisting contractual agreement with the other side, Appendix I includes a sample clause that parties can insert into contracts (similar to an arbitration or buy-sell clause) so as to facilitate the use of the mechanism in various contexts. Appendix II sets forth some examples of how it works in particular situations.

(I) GENERAL DESCRIPTION OF THE UNDERLYING PROBLEM

When joint owners of property (such as married couples, partners, or shareholders in a closely held corporation) are engaged in a dispute, or when their relationship has in some other respect become dysfunctional, it will often be in the best interests of both parties to sell the property to a third party, with the former owners then going their separate ways after splitting the proceeds in accordance with their percentage ownership interests in the underlying property. (In cases where either party has a claim against the other with respect to the extent of those interests or the circumstances that led to the sale, some portion of the proceeds of the sale may be held by a neutral party pending a resolution of those claims, as is done in court-ordered dissolution proceedings, so that the jointly owned property will not be held hostage to the outcome of the dispute.) However, in many instances a sale to a third party is not a viable option, either because there is no valid, external

market for the property (as would be the case whenever each of the common owners values the property much more highly than would a third party), or because there is some contractual relationship between the parties that effectively defines a buy-out of one by the other as the only permissible option.

A party that is effectively compelled either to buy out or sell out to its partner in order to extricate itself from such a relationship faces certain problems that have been touched upon in game theoretic and strategic studies. [1] More specifically, each party would want to sell its share to the other party if the other party valued the property more highly than it did, and each party would, conversely, want to buy out the other party's share if the other party's valuation of the property was lower than its own. But neither party will have any knowledge of the other party's valuation unless and until the other party proposes a sale of its share for a given price, or a purchase of the other's share for a given price.

One interesting aspect of the dynamic that takes place in such contexts is that, in contrast to several other forms of bargaining, each party has a very powerful incentive not to posture and to instead retreat into intransigent silence. This arises out of the fact that if, for example, a party makes an offer to sell its share for what it considers to be an inflated price, the other party may respond by simply "turning the table" and offering to allow its share to be bought out for exactly the same price. Alternatively, if a party makes an offer to buy the other party's share for what the offering party considers a deflated price, the other party may again respond by "turning the table" and offering to buy the offering party's share for the stated value. In cases where the two parties stand in a fiduciary relationship to one another (as is typically the case with joint owners of property, whether it be a partnership, a closely held corporation, or a marital relationship), a party that refuses to allow the table to be turned may be fairly interpreted as having attempted to profit at the other party's expense,

which in turn would constitute a clear breach of that fiduciary duty. As a result, the parties often find themselves at a deadlock. This is the dynamic in which buy-sell mechanisms, as discussed below, have their origin.

(II) TRADITIONAL BUY-SELL MECHANISMS

In dissolution of joint ownership of property contexts, if a party reaches a point where (a) it has arrived at what it considers to be a fair valuation of the property, and (b) it is willing to either sell its share to the other side or, alternatively, buy out the other side's share at a price based upon that valuation, then that party can utilize what is known as a traditional buy-sell mechanism. More specifically, such a party can disclose that valuation to the other side and make a firm offer to either sell its share at the stated price, or buy the other side's share at the stated price, at the election of the other side. This, in turn, allows such a party either to break the deadlock or establish that the continuing damage flowing from the deadlock was solely the responsibility of the other side. (Buy-sell proposals are virtually always accompanied by a deadline, because it is understood that a failure by the party that is on the receiving end of the proposal to elect to buy or sell within a given time will further devalue the property, nullifying the valuation reflected in the proposal.) [2]

The power of a buy-sell proposal is intuitively understood. The party that makes the proposal must go through the often difficult process of arriving at an independent valuation, and that party must, in order to protect its own interests, be satisfied that the valuation is fair, because that party may be forced to stand on either side of the transaction. But by going through this process, that party arrives at a position of significant power, because that party is now able effectively to compel its adversary, in order for the adversary to protect its own interests, to go through a similar process: determining whether to buy or sell at the stated amount. [3] The party who proposes the buy-

sell price is engaging in conduct that is self-evidently fair but that is, at the same time, profoundly coercive. If the adversary refuses to either buy or sell at the stated price, evidence of this refusal can then be used against the adversary in a multitude of different ways. It will, for example, allow the offering party to justify devoting resources to pursuing litigation against the adversary, to form alliances with third parties who might have otherwise been reluctant to take sides, to sow dissension or equivocation among the adversary's allies, and to establish at the end of the controversy that all diminution in value that took place after the tendering of the buy-sell offer was directly attributable to self-destructive and irrational conduct on the part of the adversary. Initiating a buy-sell proposal in one of only a handful of known methods whereby one party can engage in effective, unilateral, coercive action without running afoul of the rules imposed by a sovereign power, and without having to first seek or secure the consent of the other side or the assistance of a court.

The efficacy of buy-sell arrangements is evident from the fact that they have been praised by real-world practitioners as "the ultimate mechanism for resolving disputes,"[4] and by the fact that, according to some commentators, an attorney's failure to include a clause providing for the use of such an arrangement when drafting certain forms of joint-ownership contracts "is considered 'malpractice' among legal scholars and practitioners." Brooks & Spier (2004), at note 6, p.3. But since a buy-sell proposal can be initiated by either party at any time, with or without the existence of pre-existing contractual provision, why might some consider a lawyer's failure to include such a provision as rising to the level of legal malpractice in certain contexts? The reason is that many (although by no means all) parties are, in the absence of a contractual provision obliging them to initiate a buy-sell proposal under certain set conditions, reluctant to do so for the reasons set forth in the next section of this paper.

(III) THE INHERENT PROBLEM WITH TRADITIONAL BUY-SELL ARRANGEMENTS

Notwithstanding the benefits that can be obtained by initiating a traditional buy-sell proposal, many parties are reluctant to do so because they are troubled by the prospect of giving their adversary what might be interpreted as a "windfall." More specifically, if their adversary values the property differently from the valuation set forth in the initiating party's proposal, then the difference between those two numbers may be fairly interpreted as representing a "surplus" that the non-initiating party could capture by simply electing to buy (if the initiating party's valuation was lower than its own) or to sell (if the initiating party's valuation was higher than its own).

In recognition of the fact that the involved parties might both be reluctant to initiate the use of a buy-sell mechanism, attorneys will often recommend that parties that are entering into a joint venture or joint-ownership relationship agree, in advance, that one of the parties must initiate the use of a buy-sell mechanism under certain conditions (and that the other party must buy or sell in reply), such as where the parties have arrived at a deadlock over how to manage or use the property, or have failed to meet certain specified objectives, or where a party has evidenced an intent to bring the relationship to an end.[5] However, even where such contractual provisions are in place, the reluctance of parties to initiate a traditional buy-sell proposal due to a fear of losing surplus often gives rise to litigation over whether the conditions precedent to doing so have been met. See, *e.g.*, Kittsteiner & De Frutos (2004), at pp. 2-3.

The prospect of losing surplus through an initiation of a buy-sell proposal can also create distress in situations where one of the involved parties owes a fiduciary or similar duty to a third party to consummate the transaction on reasonable terms, such as where one of the two parties involved in a potential initiation of a buy-sell proposal is a trustee, partner, or corporate officer, acting for the benefit of others not directly involved in the negotiations. A party in such a situation

faces the prospect that, if it fails to initiate a buy-sell proposal, then it may fail to extricate itself and those to whom it owes a fiduciary duty from a detrimental relationship, but if it initiates a buy-sell proposal then it may face a claim by those to whom it owes the fiduciary duty that it improperly gave up surplus value within the context of the transaction.

The reluctance of parties to initiate the use of buy-sell arrangements is detrimental to the public interest because it interferes with the ability of parties to extricate themselves from relationships under terms that are acceptable to both sides, and prevents property from being paired with parties who, from an objective standpoint, value that property more highly. These inefficiencies may also lead to attempts by one of the involved parties to bring the relationship to an end through some means other than a voluntary agreement with the other side, such as through litigation. This phenomenon is, accordingly, adverse to the public interest, as well as adverse to the interests of the parties themselves.

Having briefly reviewed both the benefits and difficulties that have historically been associated with the use of traditional buy-sell arrangements, the following section provides a brief summary of a system (hereinafter, the "Fair Buy-Sell System," or the "System") that provides those same benefits while at the same time solving the historical problems.

(IV) SUMMARY OF THE FAIR BUY-SELL SYSTEM

The System that is the subject of this paper involves the use of some of the steps involved in a traditional buy-sell arrangement. However, unlike traditional buy-sell arrangements, the steps that are employed in the Fair Buy-Sell System do not include having one party (a "first party") disclose to the other party (a "second party"), at the outset of the process, a price or valuation at which the first party would be willing either to sell its share in certain jointly owned property to the second

party or, alternatively, buy out the second party's share. Instead, the first party initiates the use of the Fair Buy-Sell System by entering into an escrow arrangement with the administrators of the Fair Buy-Sell System, entering data that identifies the property that is the subject of the use of the System, the name and addresses of the involved parties, and the respective ownership interests held by each, and depositing as escrow data that comprises a binding contractual undertaking to (a) sell or transfer its share in the specified property to the second party at a price determined by the Fair Buy-Sell System provided that said price is greater than or equal to a numerical value specified by the first party within that undertaking; and (b) buy out the second party's share in the specified property at a price determined by the System provided that said price is less than or equal to that same specified numerical value.

At the time that the first party provides the above-described data to the Fair Buy-Sell System, the first party also enters data signifying the first party's agreement to an arrangement under which, if the second party elects to use the System and submits a numerical value that is not equal to the numerical value specified by the first party, then (1) the party submitting the higher numerical value will be deemed to be the buyer, and the other party deemed to be the seller (consistent with the general principle that property should be paired with the party that values it most highly), and (b) the System will set a sale price based upon a formula agreed to by the parties at the time they enter their respective data. For example, under the version of the System appearing at https://www.fair outcomes.com/run_fbs.home.pl, the formula under which the sale price is determined consists of adding the two numerical values and multiplying the total by 0.50. [6]

The first party also agrees at the outset to a protocol for determining the identity of the buyer and the seller in the unlikely event that the numerical values submitted by the parties are equal. For example, under the version of the System referred to in the preceding paragraph, if the numerical

values are equal and the parties have not agreed on who should buy and who should sell under those circumstances, then the administrators of the Fair Buy-Sell System will determine the identity of the buyer and seller by a process analogous to the flip of a fair coin.

After entering data as described above, the first party completes the initiation process by setting a deadline and authorizing the administrators of the Buy-Sell System to issue an invitation to the second party, advising the second party of what the first party has done (without disclosing the first party's specified value) and inviting the second party to make a similar presentation of data into the System up to the deadline specified by the first party. In the event that the second party enters such data prior to the deadline, then the System will determine the sale price and the identity of the buyer and seller using the formula and protocols agreed to by the parties at the time that they entered their respective data. This information will then be revealed to both parties, allowing each party to enforce the sale in accordance with the undertakings made by the parties at the time that they entered their respective data. Under these circumstances, each party will obtain an outcome that is equal to or better than the outcome that they agreed to abide by at the time that they entered their data.

In the event that the second party does not present such data by the deadline, then the System deletes the first party's specified value (with the result that it is never revealed), and provides the first party with an affidavit attesting to the first party's use of the System, and to the second party's failure to respond by the deadline. Thus, the structure of the Fair Buy-Sell System is such that, if the first party uses the System in a reasonable manner, then the first party will always receive something of significant value even if the second party declines the invitation to use the System. For example, if the second party declines the invitation to use the system, then the first party will be in a position similar to the position that it would have been in if it had bound itself to buy or sell at a fixed, disclosed value under a traditional buy-sell arrangement and the second party had then refused to

either buy or sell in response (except that, unlike in traditional buy-sell, the first party's proposed valuation will not have been revealed). More specifically, under those circumstances the first party will be able to demonstrate (again, without having to reveal its own proposed valuation) that the second party had effectively walked away from an opportunity to carry out the exchange for a price which – while unknown – would have been at least as good (in the unlikely event that the numerical values were equal) or better (if the numerical values were not equal) than whatever price had been considered fair by the second party at that time. If, within such a context, the first party had bound itself to an arrangement under which the formula for determining an intermediate numerical value would produce the mean of the numerical values submitted by the parties (or a numerical value that was more favorable to the second party than the mean), then the second party's refusal to use the Fair Buy-Sell System could be fairly interpreted as constituting or involving an attempt by the second party to capture more than fifty percent of the surplus (*i.e.*, the differential between the two numbers) and thus to profit at the first party's expense, rather than to accept an outcome that was as good or better than an outcome that the second party considered to be fair and reasonable.

Thus, if the first party initiates the use of the Fair Buy-Sell System in a thoughtful manner, then, even in the event that the second party refuses to respond to that initiation, the first party's use of the System will, as with the initiation of a traditional buy-sell offer, provide the first party with a meaningful and useful strategic benefit (as discussed *supra* at pp. 4-5). If the second party fails to respond by the deadline, then the affidavit issued by the System allows the first party to establish that it had acted in a demonstrably fair manner, but that the second party failed to do the same, thereby providing the first party with something that may prove to be of significant value to the first party, and that may prove to be substantially detrimental to the second party, especially in cases

where at least one of the parties is acting in a fiduciary capacity or under an implied covenant of good faith and fair dealing.

(V) CONCLUSION

It will be observed that the Fair Buy-Sell System provides a useful and demonstrably fair arrangement through which parties can extricate themselves from problematic relationships and engage in transfers of interests in property under terms that are reasonable and enforceable from the perspective of both sides.[7] Many variations are possible, such as by having the manner in which the System may be used stipulated to in a pre-existing agreement (i.e., an agreement entered into by the parties prior to the time at which the circumstances giving rise to the purchase or sale arose, similar to an arbitration clause), or directed by an entity to whose power both parties are subject, such as a sovereign entity, its court system, or an employer.[8] Appendix I provides a sample clause that may be used by parties wishing to incorporate a reference to a possible or mandatory use of the System into a contract. Appendix II sets forth some examples of how the System works in particular situations, allowing the reader to further grasp the features and utility of the Fair Buy-Sell System and the extent to which it constitutes a substantial improvement to traditional buy-sell arrangements.

Endnotes

[1] See, *e.g.*, Brooks & Spier (2004), at page 2 ("This paper is concerned with the dissolution of common ownership agreements – such as closely held corporations, partnerships, and limited-liability companies – where the external market for ownership interests is thin. The absence of efficient ownership markets implies that dissolution effectively leads to a private auction among the members of the venture. There are numerous ways of conducting this auction, as well as meaningful alternatives to an auction (e.g., negotiation, mediation, or liquidation), but we focus on a particular auctioning device known as a Texas Shootout. A Texas Shootout – so labeled because once initiated (or triggered) only one party will be 'left standing' – is a buy-sell provision where a party names a price for her share of the venture and another party decides whether to pay that price (*i.e.*, buy out the first party) or to be paid that price (*i.e.*, sell out to the first party)." (Footnotes omitted.) See also, in this regard, Brooks, Landeo & Spier (2010), Kittsteiner & De Frutos (2004). and Cramton &Gibbons (1987).

[2] It may be asked whether disparities in wealth between the parties might create an additional problem within the context of a buy-sell arrangement insofar as this might make it easier for one party, as distinct from the other, to elect to be a buyer. This problem is typically addressed by including a provision that allows the buyer to pay the purchase price for the other party's share over time out of ongoing revenues, or a provision that grants the buyer a reasonable amount of time within which to secure a loan or other funding from a third party, secured by future revenues or by the inherent value of the property, so that the purchase price can be paid in full at the time of the closing. Such provisions commonly appear in contracts that contemplate a potential use of a buy-sell mechanism. In cases where the buy-sell proposal is not being made pursuant to such a pre-existing contract, the party initiating the buy-sell proposal will often include such provisions within the proposal so as to be in a position to demonstrate the fundamental fairness of the proposal and deprive the other party of an excuse for failing to respond.

[3] The process that an adversary goes through when finding itself on the receiving end of a buy-sell proposal will vary depending upon whether the adversary's conception of valuation is interdependent (*i.e.*, inextricably intertwined with its understanding of what the other side might ultimately be willing to grant). An adversary whose conception of valuation is not interdependent, and who arrives at an independent valuation, would simply compare its number with the proffered number – any differential between the two numbers would be sufficient *in itself* to compel it to buy or sell. (Under such circumstances the party that initiated the proposal may wind up selling its interest for a price that is lower than the other party would, at least in theory, have been willing to grant, etc. But the possibility that the initiating party may be leaving some "money on the table" is a matter of indifference to a party that has elected to initiate a traditional buy-sell proposal - what the initiating party seeks is to bring the matter to an end by obtaining an outcome that it has defined as acceptable.) If, alternatively, the adversary's conception of value is interdependent, then the proffered number will exert a gravitational-like pull upon the adversary, because the structure of the system is such that there is no rational basis for supposing that the number is "postured." The proffered number effectively satisfies the classical definition of value: it constitutes a value at which a willing buyer and a willing seller (in this case, the party initiating the proposal fits both definitions) are willing to carry out the exchange. Thus, such an adversary could rationally elect to either buy or sell at that number, but could not rationally elect to ignore it. A party seeking to extricate itself from a joint-ownership relationship is effectively compelled by self-interest to either buy or sell at that number prior to the deadline.

[4] With regard to the reference to traditional buy-sell arrangements as the "ultimate" dispute resolution method, see Kittsteiner & De Frutos (2004) at note 2, p.1, quoting from the *Guide to US Real Estate Investing*, issued by the Association of Foreign Investors in Real Estate.

[5] The use of contractual arrangements to address this problem is discussed by Brooks & Spier (2004) at p. 4. Game-theoretic studies have also considered attempting to address the problem by having the parties agree to an arrangement whereby each party would "bid" for the right to be on one side, or the other, of the buy-sell proposal. See, in this regard, , Kittsteiner & De Frutos, (2004).

[6] While most parties will elect to use the formula employed on the version of the System that appears at https://www.fairoutcomes.com/run_fbs/home.pl, there are many situations in which a party, or both parties, might prefer to have the administrators of the Fair Buy-Sell System apply a different formula. For example, there may be instances where the first party might want to propose a formula that could provide the second party with an outcome more favorable than the mean in order to induce the second party to use the system and/or deprive the second party of a rational basis for failing to use it. By way of further example, parties entering into a joint venture contract might wish to include provisions allowing either

party to initiate the use of the System under certain conditions, but they might also wish to provide incentives and disincentives for a party to use it under specific circumstances. They could do so by agreeing to use a formula that did not produce the mean. The use of a different formula might also be appropriate where, for example, the property at issue comprised corporate shares in a single company but where the value of those shares might vary somewhat depending upon which party was the owner, either as a result of differing classes of some of the involved stock or – in cases where there were multiple other shareholders allied with one of the parties, but not with the other – because one party might, as a buyer, be able to utilize the stock in ways that the other could not.

[7] It will be observed that, in traditional buy-sell arrangements, the arrangement resembles the classic method for dividing a cake, whereby one person - say, Ann - cuts a cake and the other person - say, Bob - chooses a piece. Ann must divide the cake 50-50 in terms of her preferences to ensure that, whatever piece Bob chooses, she gets a 50% share. On the other hand, Bob, if his preferences are different from Ann's, will think one piece is bigger than the other and so will choose this piece, getting a bonus (i.e., more than 50%) from being the chooser. If Ann makes the initial offer under a traditional buy-sell arrangement, she is in the position of the cutter, because she must make an offer that makes her indifferent between whichever option - buying or selling - Bob chooses. Thus, Ann will be reluctant to initiate the use of a traditional buy-sell mechanism, with the result that both Ann and Bob will remain at a deadlock over the issue of how to cut the cake. By contrast, the Fair Buy-Sell System provides a method whereby this deadlock can be broken by placing the parties in a position where, instead of Bob getting all of the bonus, the bonus will be shared. As long as the price is intermediate between the two offers, Ann and Bob *both* benefit - each gets more than the value that each attaches to his or her share. More specifically, if Ann is the buyer, she benefits from not having to pay as much as she offered, and Bob benefits from selling at a price that is higher than that which he offered. See generally, with regard to cake-cutting arrangements, Steven J. Brams and Alan D. Taylor, *Fair Division: From Cake-Cutting to Dispute Resolution* (New York: Cambridge University Press, 1996), chpt. 1, and Steven J. Brams and Alan D. Taylor, *The Win-Win Solution: Guaranteeing Fair Shares to Everybody* (New York: W.W. Norton, 1999), chpt. 4. For a game-theoretic analysis of various features of the Fair Buy-Sell System, see Stergios Athanassoglou, Steven J. Brams, and Jay Sethuraman, A Note on the Inefficiency of Bidding Over a Share, *Mathematical Social Sciences* (forthcoming), a copy of which is currently available online at http://politics.as.nyu.edu/object/stevenbrams.html).

[8] While it is not necessary to have a preexisting agreement in place in order to use the System, such an agreement may facilitate the use of the System in particular contexts. It may also include provisions that vary one or more features of the System, such as provisions that allow the parties to obtain interim information from the System concerning the initial submissions made by the parties and allow one or both parties to revise their numerical values based upon that information. For example, the agreement or arrangement may provide that, upon a determination that the numerical values submitted by the parties were not equal, the System would then disclose interim information to each party such as (a) the identity of the party that submitted the higher numerical value; and/or (b) whether or not the differential between the two numerical values was greater than or less than some differential specified by the parties in advance. Depending upon the protocols agreed to by the parties, one or both parties might then be allowed to revise the numerical value that it originally submitted, or one or both parties might then be allowed to revise the numerical value that it had originally submitted provided that neither party objected to such a revision.

Appendix I

The following paragraph consists of a sample of the sorts of contractual clauses that may be used by parties wishing to incorporate a reference to a possible or mandatory use of the Fair Buy-Sell System into a contract:

The Parties to this Agreement understand and agree that [either party may]/[in the event that (insert description of contingency), then either Party may/the following party:_____ shall] give written notice to the other Party of the notifying Party's intent to initiate the use of the buy-sell mechanism that is offered on the following web page: https://www.fairoutcomes.com/run_fbs/home.pl (the "Fair Buy-Sell System"), citing this clause of this Agreement. The Parties hereby agree that, under such circumstances, the notifying Party shall cause the Fair Buy-Sell System to issue an invitation to the other Party in the manner provided for under said system within ___ days of the date upon which the notice referred to in the preceding sentence was given. The Parties agree that the Party to whom that invitation is issued shall respond to that invitation in the manner provided for under said system prior to the deadline set forth in that invitation, provided, however, that it is understood and agreed by the Parties that the following terms and conditions shall apply to said use of the Fair Buy-Sell System by the Parties: _____ (e.g., the property shall be described as follows: _____; the deadline shall be set at _____ days from the delivery of the invitation; in the event that the numerical values submitted by the parties are equal, the following party shall be the buyer: _____; within ___ days of the giving of a notice of an intent to use the Fair Buy-Sell System under this clause of this Agreement, the parties shall exchange copies of the following documents/financial statements: _____; notwithstanding any standardized terms offered or referred to on the Fair Buy-Sell System, the sale shall take place, and the sale price shall be paid, in the following manner: _____ etc.).

Appendix II

Example I: In this example we consider a simple case wherein two parties each hold a fifty-percent (50%) ownership interest in a given piece of property and wish to bring their joint ownership relationship to an end. The parties could each disclose to the Fair Buy-Sell System a price at which that party would be willing to either sell its share to the other side, or buy out the other side's share in the property. The parties could also agree to a protocol and a formula under which the System would compare the two numbers and, if they were not equal, issue a binding determination that the party who submitted the higher price would be the buyer, and a binding determination that the sale price would be the mean of the two numbers. Under such an arrangement, the parties would always achieve their desired goal of a buyout of one by the other and, except in event that each party proposed exactly the same number, each party would always obtain terms that were more favorable to it than the terms that it had proposed. In the event that each party proposed exactly the same number, each party would obtain terms that were no better than, but also no worse than, the terms that it had proposed, and the identity of who would be the seller and who would be the buyer could, by prior agreement between the parties, be determined by an agreement between the parties at that time or, if they were unable to agree, by the System via a process analogous to the flip of a fair coin or some other process agreed to in advance. The chart below illustrates the outcome that would be achieved in this situation under various conditions where the parties did not submit equal numbers:

First Party's Proposed Buy-Sell Price	Second Party's Proposed Buy-Sell Price	Identity of Buyer as Determined by System	Sale Price as Determined by System under Agreed-Upon Formula
$150,000	$200,000	Second Party	$175,000
$150,000	$100,000	First Party	$125,000
$200,000	$100,000	First Party	$150,000
$100,000	$200,000	Second party	$150,000

Example II: In this example we consider a simple case where two parties each hold stock in a closely held corporation. Assume (a) that the company has issued a total of one hundred (100) shares of stock, (b) that the first party owns twenty percent (20%) of that stock, and (c) that the second party owns ten percent (10%). Each party would like either to own thirty percent (30%) of the company or sell their existing stock on reasonable terms and end their relationship with the company. The parties could agree to use the same simple arrangement and formula as used in Example 1, except that in this case the term proposed by the parties would consist of a price per share. The following chart depicts the outcome that would be achieved in this situation under various conditions (and uses the approach under which each party would propose a price-per-share):

First Party's Proposed Buy-Sell Share Price	Second Party's Proposed Buy-Sell Share Price	Identity of Buyer as Determined by System	Share Price as Determined by System under Agreed-Upon Formula
$15.00 per share	$20.00 per share	Second Party	$17.50 per share
$15.00 per share	$10.00 per share	First Party	$12.50 per share
$20.00 per share	$10.00 per share	First Party	$15.00 per share
$10.00 per share	$20.00 per share	Second party	$15.00 per share

Example III: In this example we consider a case in which the first party and the second party own similar homes that are adjacent to one another, with each house being situated on a half-acre lot. We assume that a recent change in zoning laws makes it permissible for homeowners in their neighborhood to operate gambling casinos out of their homes, but only if they own at least one acre of land, with the result that the two houses would have much more value under common

ownership than under their current ownership. The parties could agree to use the same simple arrangement and formula as used in Example 1. The chart below illustrates the outcome that would be achieved in this situation under various conditions where the parties did not submit equal numbers, and would be identical to the chart depicted in Example 1, except that here we add a minimal level of complexity and assume that the first party's house is on a corner lot, which would add twenty thousand dollars ($20,000) in value to the first party's property, whether sold separately or sold jointly with the second party's property to a third party. In order to address this complexity, the parties could agree that, in the event that the second party was determined to be the buyer, then the formula would consist of adding the two numbers together, dividing the total by two, and then adding twenty thousand dollars ($20,000) to the product of that division, with that total becoming the sale price. The following chart depicts the outcome that would be achieved in this situation under various conditions:

:First Party's Proposed Buy-Sell Price	Second Party's Proposed Buy-Sell Price	Identity of Buyer as Determined by System	Sale Price as Determined by System under Agreed-Upon-Formula
$150,000	$200,000	Second Party	$175,000 + $20,000
$150,000	$100,000	First Party	$125,000
$200,000	$100,000	First Party	$150,000
$100,000	$200,000	Second party	$150,000 + $20,000
$150,000	$160,000	Second Party	$155,000 + $20,000
$160,000	$150,000	First Party	$155,000

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