

PRECONTRACTUAL INVESTMENTS AND THE PROTECTION OF ONE-TIME PLAYERS

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Abstract Drawing on Grosskopf and Medina's (2007) analysis on the economy of precontractual investments, the article deals with legal solutions for the protection of so-called non-repeat or "one-time players". Given the conditions under which the risk of excessive precontractual investment is greater, it is argued that legal measures to prevent one-time players from investing too much may have a distinguishable distributive impact, mostly benefitting small business owners and non-entrepreneurs who start dealings with large corporations. It is stated, further, that the duties and precontractual liability arising from the principle of good faith (art. 422 of the Brazilian Civil Code) should be understood in a manner consistent with the particular vulnerability of one-time players. Good faith duties should therefore be constructed to restrain maneuvers whereby the counterparty intentionally

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induces one-time players to exaggeratedly compete with each other on the stage prior to contracting.

Introduction

This article deals with precontractual investments, defined as costly actions taken by the parties prior to engagement. The investments I will address are, in general, specific, i.e. investments whose value for the other party is greater than to other potential partners. Examples of precontractual investments range from simply waiting for the other party (with the corresponding opportunity costs) to the elaboration of proposals and drafts and preparations for future implementation.

Through a prior agreement, the parties may provide for precontractual investments, so that one of them is entitled to be compensated by the other for the investments it does. In the absence of such an agreement, the law may also contain provisions concerning negotiations and even (as occurs in Brazil) to deem one of the parties liable for losses arising from precontractual investments made by the other.

Throughout the article, my aim shall be to demonstrate that the legal regulation of precontractual dealings can exercise a distributive function. To this end, I will take as a starting point an economic analysis of precontractual investments made by two types of agents, those who often perform the operation in question – "repeat players" – and those who do not – "one-time players" (on this respect, I shall draw heavily on Grosskopf and Medina 2007). In view of the differences between these two sorts of players, I argue that certain legal measures about precontractual investments made by agents of the latter type may have a somewhat defined and allegedly desirable distributional impact.

In an article inspired by Thomas Piketty's recent book (Piketty 2014), Hsu (2014) calls attention to the distributive role

of several branches of the legal system outside tax law (the area on which Piketty focuses). Among the legal rules with distributive potential,² there are "market rules", rules concerning property rights, and the ways of transacting about them.³ If Piketty is right as to the cause of long-term inequality – the difference between the rate of return on capital, r, and the growth rate, g, expressed by the inequality r > g – it would be a good advice to think of legal strategies for reducing g to the same time reducing g (or, at least, without reducing g to the same extent).⁴ Legal reforms influencing the variations in the rate of return of capital could also be contemplated, in the attempt of preventing it from being higher among the richest.⁵

A policy-oriented analysis about the legal framework of precontractual investments can thus question the conditions under which the legal system would be able to reduce capital's

^{2.} Hsu's article (2014) deals particularly with the distributional impact of sectors such as regulation of financial markets and antitrust laws.

^{3.} Tax rules are also, of course, rules defining property rights. There are many other rules that fulfill this role, however, such as those dealing with adverse possession or patents. Above, I refer to market rules lying out of the domain of tax law.

^{4.} I agree with Fullbrook's (2014) criticism on the incommensurability between rates of return of capital and growth. It is plausible, however, that legal rules cause these rates to increase or decrease in variable measures, what may render comparable the effects of different rules. On the difference between commensurability and comparability, see Chang (1997).

^{5.} The present article results from a research project on the relationship between private law and John Rawls' idea of "property-owning democracy" (see, especially, Rawls 2001, Part IV). Among various interpretations (see, e.g., the book edited by Martin O'Neill and Thad Williamson, O'Neill and Williamson 2012), a property-owning democracy differs from capitalist welfare States by including measures for the dispersion of capital and wealth. By gathering data on the recent rise of inequality, Piketty's book (2014) helps to highlight the contrast between the Rawlsian ideal and the reality of welfare countries in general (not only more liberal versions of welfare state capitalism, as the US). It is possible, therefore, that the goals of long-term capital and wealth dispersion require broad legal reform.

rate of return – especially among the richest – without adversely affect the growth rate. Perverse legal solutions in distributive terms have even more reasons to be abandoned if they are also inefficient.

The work is organized as follows. In the first section, I present the main differences between precontractual investments made by repeat and one-time players. The second section argues that, because of such differences, legal regulation on precontractual investments may have a predictable and arguably desirable distributive impact. In the third section, I consider the ways by which legal rules on the precontractual stage could pursue distributive goals without sacrificing efficiency.

6.1 Precontractual Investments by Repeat and One-Time Players

Like other works on economic analysis of precontractual investments, Grosskopf and Medina (2007)⁶ envisage a situation in which an agent, A, makes certain investment to contract with another, B. The main peculiarity of Grosskopf and Medina's article consists of separating the analysis into two sub-hypotheses, one in which A, the investor, carries out the operation in question frequently (being thus a "repeat player") and another in which it does not (the investor is an "one-time player").

Before presenting the main conclusions of the analysis, some of its assumptions should be stressed. The first one is that A, either as a repeat or as a one-time player, is not the only one capable of providing what B wants. A, in other words, faces competition by others who may or may not enter into negotiations with B at the same time. Second, it is postulated that A makes a precontractual investment without having a prior

^{6.} Numbers in parentheses throughout this section refer to Grosskopf and Medina (2007).

agreement with B, whereby it is assured that A's investment will not be lost, by either granting a right to recover in the event of negotiations' failure, or through the stipulation of a minimum price should the contract take place. Third, it is assumed that A and B are independent agents. This is somewhat obvious, but it is still worth mentioning, in order to point out that A does not make use of the "verticalization" strategy to avoid the risks of precontractual investments, by means of integrating B's activity into its firm (Klein, Crawford, and Alchian 1978).

Proceeding to the analysis of precontractual investment, we will assess both repeat and one-time players, starting with the former. Grosskopf and Medina claim that prices in markets with repeat players include a "compensation factor" for precontractual investments (2002-2007). At first glance, one may suppose that A, who made an investment of \$10 before contracting with B, sets its reservation price⁸ regardless the investment it has already made. At the time of contracting, the cost of precontractual investments is a sunk cost that should not affect⁹ the minimum or maximum prices under which, in the current circumstances, it is advantageous for A to deal with B. A, however, is a repeat player and, as such, defines its reservation price by taking into account the precontractual cost of operations, like the one it is about to perform with B. The explanation for this is simple: anyone who, as a repeat player,

^{7.} This presumption is especially important in the case of one-time players.

^{8.} For the buyer, the reservation price is the maximum it is willing to pay for the good; for the seller, it is the minimum required to dispose of it.

^{9.} Contrary to the rationality postulate alluded to above, people often take into account sunk costs in their decisions. See, inter alia, the classic article by Arkes and Blumer (1985). The argument to be discussed below may lose force if the sunk costs of precontractual investments influence A's reservation price for the agreement with B.

constantly ignores its precontractual investments would not be able to stay in the market for too long.¹⁰

Because of the compensation factor, there is little reason for fearing that repeat players will refrain from doing precontractual investments (2013). Another peculiarity of the markets in which repeat players operate is that the counterparty (in the example, B) may have an incentive to reduce precontractual costs of its potential partners (2008). Suppose that A adjust the compensation factor to the level of precontractual investment it makes in each case (or something close to it). The compensation factor is a function of two variables: the cost of precontractual investments and the probability of contracting. The lower the probability of getting a contract, the higher will be the multiplier applied to the cost incurred in each operation, in order to reach an appropriate compensation factor. For example, if A is successful in one out of every three times it starts negotiations, the compensation factor included in A's price must correspond to its medium precontractual cost multiplied by 3. Under such conditions, it becomes advantageous to B to limit the number of agents with which it initiates negotiations. By negotiating only with A and another competitor, say, C, B (assuming the chances of contracting are the same for A and C) reduces to 2 the multiplier used to get the compensation factor of the successful competitor (be it A or C). Although repeat players markets¹¹ may have some minor problems,12 the principal measure law should

^{10.} If repeat players raise their prices to compensate for precontractual investments, what can prevent them from being overpowered by one-time players? In markets where repeat players are successful, repetition gives competitive advantage due to a variety of factors, such as expertise and reputation (2001).

^{11.} As a "repeat players market," I mean one in which the party making the investment, A, is a repeat player. It is immaterial whether the other party, B, is also a player of that sort.

^{12.} One problem is the risk of B hiding the existence of competitors in order to lead A to believe that its chances to be hired are greater than they actually

likely address regarding precontractual investments therein is to clearly define parties' rights and the conditions for reaching valid transactions.

Let us consider, now, the case of one-time players' markets. As a one-time player, A should face whatever precontractual investments it does in order to contract with B as sunk costs. There is, thus, at first glance, a risk of B ending up with part of the value created by A's precontractual investments (what economists designate as "holdup") or even of the whole operation becoming disadvantageous to A.

This conclusion ignores, however, what Grosskopf and Medina call "entry mechanism" (2016-2018). Assume that A and its competitors are perfectly informed and robustly rational (more about the adverb "robustly" in a minute). They know, in that case, that bargaining with B involves costs that will be, at the time the contract is celebrated, sunk costs that neither they nor any of their competitors will have reason to take into account when setting their reservation prices. Anticipating such scenario, A and other one-time players shall avoid start dealing with B unless they know that the number of competitors they will face is small. Weak concurrence prevents the counterparty, B, from gaining too much bargain power, therefore allowing anyone who wins the battle to contract with B under conditions favorable enough to make good for precontractual investments.

Given its importance for the rest of the article, it is worth to clarify the last point with an example. Suppose A knows in advance that, in addition to itself, there are four other agents that may contract with B: C, D, E and F. A knows, too, that the contract with B requires a certain precontractual investment, and that, in order to get a price consistent with that investment, it cannot face competition from more than one person.

are, reducing the compensation factor of the price A charges (2014).

The decision to start or not negotiations with B will therefore depend on the behavior of C, D, E and F. If, from the four potential competitors, A is aware or can anticipate that just one more (at most) will begin negotiations with B, its decision will be "to enter the market". If, however, A knows or can predict having two or more competitors, it will decide "to stay out". It is this "entry mechanism", consisting of decisions based on information or calculation about the behavior of competitors, that warrants compensation for precontractual investments made by one-time players.

It should be clear, by now, why the entry mechanism requires informed and robustly rational agents. If A does not have information about the cost of precontractual investments it has to incur, the price it can get from the contract with B in different settings, or the behavior of potential competitors, the entry mechanism will fail. The same will hold if, although perfectly informed, A lacks the cognitive powers to use all those information in order to start negotiations with B only under favorable conditions.

There is still another difference between repeat and one-time players' markets that should be stressed. When dealing with repeat players, B has, as seen, an incentive to limit the number of people with whom it bargains. Since the compensation factor is sensitive to the probability of successful contracting, that factor declines with the number of competitors. When dealing with one-time players, on the other hand, B has no advantage if competition reduces, ¹³ but on the contrary. The greater the competition faced by A, the more favorable to B the contract conditions shall be.

^{13.} Unless, of course, the advantage to B of reducing its own precontractual investments when such investments are necessary and vary according to the number of people with whom B negotiates.

Without the information and rationality required by the entry mechanism, A, as a one-time player, can, as a consequence, be harmed in two ways. It may, first, fail to get the contract with B and lose the precontractual investment it has made (assuming such investment to be specific). ¹⁴ Second, even if it wins the competition, it can be forced into terms that do not adequately remunerate it for the precontractual investment. ¹⁵ In the third section of the article, I shall address legal measures to prevent or at least mitigate the losses suffered by one-time players. First, however, the next section will ask whether such measures, if successful, might have a predictable as well as desirable distributive impact.

6.2 Who are the "Losers"?

At the end of the previous section, I highlighted one of the conclusions of Grosskopf and Medina's (2007) analysis on precontractual investments: one-time players can suffer losses both when negotiations fail and when they do not. In the latter, given excessive competition, those players may end up unable to contract in terms that compensate them for the investment they have made. The question facing us now is: supposing there are legal measures to prevent or mitigate the losses of one-time

^{14.} Of course, even a perfectly informed and rational one-time player can decide to start negotiations, be overridden and lose its investment. A player with those characteristics, however, only enters into negotiations in circumstances where the earning expectations are a sufficient counterweight to the risk of being defeated.

^{15.} Generally, works on economic analysis of law do not care for the loss suffered by investors, but for the propensity that, without adequate compensation being assured, efficient precontractual investments (whose added value to the contract is greater than its marginal cost) will not take place. See, e.g., (Katz 1996), (Craswell 1996), and (Bebchuk and Ben-Shahar 2001). The main objective of Grosskopf and Medina's article (2007) is to demonstrate that such underinvestment problem does not exist in competitive markets with repeat and one-time players.

players, would those measures have an attractive distributive effect?

To answer, consider two criteria about what renders a legal rule desirable from a distributive standpoint. According to one of them, a law is welcome when it reduces differences in wealth (criterion of wealth dispersion). For the second criteria, the goal is capital dispersion (criterion of capital dispersion), with capital being deemed more dispersed as more dispersed is the value of production between independent businesses.¹⁶ The two criteria are, as seen, different and potentially conflicting. A society dominated by large companies may perform quite well regarding wealth distribution, especially if stock ownership is well sprayed, whereas a society in which substantial part of the production comes from small and medium firms may present large inequalities of wealth. In practice, however, it is possible that a fair degree of wealth dispersion is not attainable without some capital dispersion. I shall, therefore, take capital dispersion in the following as a parameter to judge the convenience of legal protection of one-time players' investments.

An assessment of the impact of legal rules protecting precontractual investments by one-time players depends on information about who are these players and the conditions under which they are more likely to make excessive investments. In this regard, the analysis of the previous section is instructive. Although, in general, everyone engages, time and again, in one-time operations, the problem of precontractual investments does not afflict any one-time player to the same extent. Rather, the problem is restricted, as seen, to misinformed agents or

^{16.} The two criteria are possible interpretations (not necessarily defensible ones) of what a "property-owning democracy" mainly pursues (Rawls 2001, 139). Although somewhat vague, both seem able to make comparisons in a fairly abundant number of cases.

agents lacking the "robust" rationality required by the entry mechanism.

Notice, moreover, how the assumptions made by Grosskopf and Medina (2007) in their analysis provide additional information about one-time players for whom the risk of excessive precontractual investment is higher. First, there is the presumption of competition. When acting as monopolists, one-time players are unlikely to lose precontractual investments, not only because they do not face competition, but also since, as monopolists, the chance that the contractual price will not be high enough to compensate their investment is considerably smaller. Furthermore, a monopolistic one-time player can use its bargaining power to get a prior arrangement which guarantees payment for precontractual investments, or to force the other party to carry out investments in its place whenever precontractual investments are "transferable", that is, it can be made by either of the parties.

Second, and still considering the prior arrangement issue. The lack of an agreement by which an one-time player assures the right to compensation in case of failure of negotiations or to a certain price (consistent with the bulk of the investment) can have many causes, not all of them suggestive of some special "vulnerability". Precontractual investments may not be "contractible" in the sense used by economists, as there may be insurmountable difficulties to reach an agreement about them. Investments can be difficult to describe or, if not, difficult to observe or verify. Agreements that guarantee compensation for precontractual investments may also lead to a problem of

^{17.} Suppose, for example, that a precontractual investment consists of becoming familiar with the business practices of the potential partner. It may not be possible to precisely describe what constitutes "to become familiar" in a way as to avoid excessive doubt about the clause's reach. The corresponding behavior could also be hard to observe or verify by third parties, such as judges.

"moral hazard," encouraging excessive investment. But leaving aside the cases where contracting is impossible for reasons not related to the characteristics of the agents, it should be acknowledged that the absence of a prior agreement may also be due to investor's inexperience or lack of sophistication. As such, it is not a problem hitting every one-time player in the same way. Even without performing the operation in question habitually, it can be expected that savvy or sophisticated one-time players will be safeguarded more often, through a prior agreement, against the risks associated to precontractual investments.

Third, there is the failure to verticalize. If the investment is done in order to contract with B, this is in general only because B's activity is outside the scope of A' firm. The decision to verticalize production (ie. to replace the contract by production within the limits of the firm), although less likely, is still conceivable when it comes to something that A wants to have or produce only occasionally. Among the many factors on which verticalization depends, one is capital. Even when verticalization would be advised, A may remain in need of contracting with B for not having the means to integrating B's activity in its firm.

Based on the above considerations, it may be concluded that the problem of losses arising from precontractual investment tends to be higher for one-time players who are non-entrepreneurs or small business owners, since they are less likely to be informed and act with the robust rationality the entry mechanism requires.¹⁸ It is also rare for these agents to be in a monopolist position or have the bargaining power and sophistication leading to a prior agreement. They are less apt, finally, to avoid the need of precontractual investing, by means of verticalization.

^{18.} One should point out that "irrational" investment decisions by large corporations may take place due to agency problems.

It should be borne in mind, furthermore, that a potential cause of excessive precontractual investments by one-time players is the interest of the other party in increasing competition (Grosskopf and Medina 2007, 2019). The higher the number of competitors A faces, the more favorable to B should be the terms of the contract. B has an incentive, therefore, to induce the highest number possible of agents to compete with A,19 not necessarily observing fair play rules (e.g. B can hide from A that it is also negotiating with C). One could, hence, infer the proclivity of non-entrepreneurs and small business owners being in the role of one-time player A when it does an excessive investment, as also of large businesses and corporations being in the role of A's counterparty, B. Thanks to the sophistication of their management, major corporations may more often resort to maneuvers to increase competition between their potential partners. As large-scale contractors, it is also easier for them to instigate competition.

This section leads, thus, to the conclusion that the legal framework of precontractual investments by one-time players has a distributive bias. There are reasons to assert that investments not compensated through the entry mechanism are more commonly made by non-business agents and small business owners when dealing with large firms. Legal measures for preventing excessive precontractual investment by one-time players seem, therefore, to benefit the former group of agents and act against the interests of the latter.

^{19.} At least up to the point in which increased competition imposes precontractual investments to B, whose cost is greater than the benefit competition offers to it.

6.3 Legal Solutions for Precontractual Investments not Protected by the Entry Mechanism

This section is divided in two parts. In the first one, I will discuss measures to restrain the deliberate incitement of one-time players to excessive "entry". In this way, those players can compete above the threshold at which the sufficient bargaining power to compensate precontractual investments is preserved. In the second part, I consider legal strategies to prevent that, due to lack of information or limited rationality, the entry mechanism fails.

6.3.1 Precontractual Investments and Fair Play

In order to avoid excessive competition, one-time players must start negotiations only when the evidence suggests that there will not be much competition depriving them from the necessary bargaining power to compensate for precontractual investments. Given the difficulty that the decision to entry the market brings by itself, the minimum that the legal system should do is to prohibit maneuvers whereby the counterparty deliberately induces one-time players to overestimate the prospects of a transaction. For example, suppose that B, a franchisor, declare to A, a person with little business experience, that it is looking a partner for a franchise with minimum capital of \$500,000, when, in fact, the franchise can be opened with \$300,000. Based on the false information, A can be led to underestimate the number of competitors it will have if it decides to start negotiations with B.

In general, acts to induce an erroneous assessment regarding expected benefits of precontractual investing should be restrained. Brazilian law currently has an applicable principle for this purpose, the principle of good faith (Civil Code, article 422). Although the article 422 of the Brazilian Civil Code does not refer to it explicitly, it is quite uncontroversial that

good faith applies to the precontractual stage, rendering one of the parties liable in case of non-compliance with certain duties, also called precontractual duties.²⁰

There is less clarity, however, on the conditions for a precontractual duty to be breached. The duties of good faith in the precontractual stage are often described in a somewhat vague way, as in a recent ruling by the Superior Court of Justice: "the lack of a contract does not free the parties from cooperation duties, as they must act with honesty, loyalty, and fairness, being anyone who acts contrarily to this ethical standard subjected to liability". ²¹ In view of the above considerations, it would be advisable to construct precontractual duties, in order to sanction any counterparty's behavior, whose intent is to lead one-time players to erroneously assess benefits and costs of investment decisions. ²²

^{20.} See, e.g., Statement n. 25 of the Civil Law Workshops of the Council of Federal Justice (*Jornadas de Direito Civil do Conselho da Justiça Federal*): "Art. 422 of the Civil Code does not preclude the application by the judge of the principle of good faith in the precontractual and postcontractual phases" (in the original: "[o] *art. 422 do Código Civil não inviabiliza a aplicação pelo julgador do princípio da boa-fé nas fases pré-contratual e pós-contratual*"). It should be noted, however, that Brazilian law allows disputes to be referred to arbitration (Law n. 9.307/1996), provided that, of course, there has been a prior agreement to that end. The diffusion of arbitration makes business relationships (precontractual or contractual) opaque to public policy concerning one-time players' protection.

^{21.} Superior Court of Justice (Superior Tribunal de Justiça), Special Appeal (Recurso Especial) n. 1.367.955, p. 8. In the original: "inexistência de negócio jurídico não libera as partes dos deveres de cooperação, devendo atuar com honestidade, lealdade e probidade, não isentando de responsabilidade aquele que atua em desrespeito a esse padrão ético de conduta".

^{22.} Grosskopf and Medina (2007, 2014) advocate "normative intervention" to prevent repeat players to be deceived by the counterparty about the chances of contracting. The problem does not seem to be as serious for these players, however, because it is more likely that, in relation to them, the other party have reputational concerns. As for one-time players, on the other hand, the same authors curiously claim that the ban on practices that promote optimism

On precontractual duties, the level of damages is an issue that deserves to be examined. Brazilian law currently imposes some limits in this regard, starting with the prohibition of compensation being greater than the harm done (Civil Code, article 944, heading). It is also common to state that, in cases of violation of precontractual duties, only reliance ("negative") damages should be granted (see, e.g., Cappelari 1995). There are several reasons to conclude, however, that reliance damages are not enough to deter that practice. Consider, first, that the infringement of a precontractual duty and the reliance harm it causes are often impossible to verify. If damages are limited to verified reliance costs, the violator usually will not, in consequence, completely internalize the costs it inflicts to other parties²³. Second, even full cost internalization may not be enough to deter the violation. If the benefit that B obtain by mistakenly inducing A and others to enter into dealings (the benefit of more favorable contract terms) is greater than the added cost of precontractual investments, leading potential partners to error, it will continue to be advantageous for B, even if all negative harm was compensated.24

would be "very costly", "requiring massive regulation of the negotiation process" (2007, 2028).

^{23.} Aside from being very difficult for A to obtain reparation for its precontractual costs when it ends up contracting with B. In general, a right to compensation for precontractual expenses is only cogitated by Brazilian courts when negotiations fail. As explained above, however, the fact of being hired does not guarantee that A was not harmed by B's move to convince it to start dealings. For the idea of calculating damages through the use of a multiplier corresponding to the percentage of estimated cases in which the defendant escapes condemnation, see Polinsky and Shavell (1998).

^{24.} The idea of forcing B to pay a compensation higher than the total cost of investments is also defensible in terms of efficiency, as part or even the whole benefit B gets from increased competition can be devoid of social value. Competition is only socially desirable, in terms of efficiency, when it helps to find the agent willing to provide what B wants at the lowest cost. If that agent is A, B's action to lead A to face competition from C and D has the sole effect of increasing B's contractual surplus.

6.3.2 Measures to Combat Misinformation and Excessive Optimism

Not always, however, the failure of the entry mechanism can be attributed to a counterparty's deliberate maneuver to elicit excessive competition between one-time players. As explained in the previous section, even if nothing is intentionally done to deceive them, one-time players need to have a wide range of information and be strongly rational, in order to take the decisions that the entry mechanism requires. What other measures could be contemplated, then, to prevent any players from doing excessive precontractual investments?

There seems to be reasons to rule out solutions seeking to replicate the results the entry mechanism would provide under ideal conditions of perfect information and unlimited rationality. Examples of solutions of that sort would be a rule prohibiting B to start negotiations with several agents at once, or another one imposing a minimum contractual price corresponding to the one the entry mechanism would warrant. Measures of that kind would require that the authorities count on information that is extremely hard to collect. Without such information, rules restraining contractual freedom could prove disastrous for efficiency and probably also contrary to the interests of one-time players.

If the strategy of mimetizing the results of the entry mechanism is unattractive, one could still consider measures to improve information and counteract the effects of a possible "optimistic bias" of one-time players.²⁵ As for the information issue, a problem is that information that A and its potential competitors lack can also be not known by B. B may not, for

^{25.} For some ideas on how the legal system can cope with the optimistic bias in areas such as consumer and corporate law, see Jolls and Sunstein (2006).

example, have better evidence than A about the level of competition the latter is likely to face.

Still, it would be possible to require B to disclose information of the kind of "self-enforcing prophecies", which would then help A to compare the benefits and costs of precontractual investment. For an example of "self-enforcing prophecy", consider a rule ordering B to report to A the maximum number of people with whom it is willing to enter into negotiations, or another one forcing B to set a minimum price it will pay should the contract occur. Self-enforcing prophecies have, however, certain disadvantages. If, as in the first case, B is asked to limit the number of candidates with whom it can negotiate, the consequence could be excluding from competition the agent able to perform at the lowest cost, which is inefficient.²⁶ Also, to keep alive the chance of hiring in advantageous terms to itself, B could fix an excessive number of competitors or an incredible low minimum price, discouraging potential candidates to a greater extent than the entry mechanism would warrant. This would increase the risk of B not finding the most efficient partner or of failure of transaction, if the conditions B chooses are adverse to the point of discouraging all or most of the potential partners.²⁷

In view of these remarks, perhaps other solutions, still less ambitious than self-enforcing prophecies, should be contemplated in order to improve information of one-time players. One of them could be to require B to inform if it is already in discussion with others or, if not, if there may be other candidates,

^{26.} If the cost of A to provide what B wants is \$100 and for C is \$95, efficiency asks B to contract with C, not with A. A rule that forces to limit the number of competitors could, however, prevent C from entering the dispute.

^{27.} B could, in such a case, change its conditions, but such a process of trial and error would lead to an increase in transaction costs.

albeit without stating an exact number.²⁸ B could also have to disclose information about trading processes it made before – for instance, the average success rate of people with whom it entered into negotiations earlier in similar circumstances.

In general, however, it would be appropriate to assign the subtler duties last referred to only to sophisticated contractors. This helps giving these obligations a more palatable distributive sense and also avoids a substantial increase of transaction costs among agents who are in general unfamiliar with the legal system. For those last agents, sanctions should perhaps be restricted to cases of deliberate acts to deceive one-time players concerning expected benefits and costs of precontractual investments.

One can finally think of legal action to elude a possible optimistic bias causing too much competition among one-time players. In an article on debiasing legal techniques, Jolls and Sunstein (2006) mention two devices against optimism, availability heuristic and framing. In the former case, the idea is to prevent optimism by making use of human beings' tendency to treat events that come readily to mind as more probable. Availability could thus refrain optimism when the decision-maker is provided with information about negative events. The second technique, framing, explores the tendency to give more importance to losses than gains (loss aversion). Information is then presented in a way in which losses are highlighted, which should lead the agent to "frame" the decision to be taken as a decision about losses, not gains.

It is not hard to imagine communication between A and B having the effects of the two techniques mentioned by Jolls

^{28.} One should also consider the risk that information about other interested parties have the reverse effect of increasing A's optimism about the gain to expect. Competition can be to A a sign of the advantage that the contract with B is able to offer.

and Sunstein (2006). For example, in the first case (availability heuristic), B could advise A to talk to C, a former partner of B, who made unsuccessful precontractual investments. In the second (framing), when inviting A to start negotiations, B would talk about the costs of precontractual investments and the chances of failure, rather than about the gain A can obtain from the contract. However, the problem of legally compelling communication between A and B in the attempt of preventing excessive optimism by the former is that information able to produce the desired effect seems to vary greatly depending on the circumstances. It renders impossible, thus, to precisely describe B's duties beforehand on that respect. The fact of B's approach being little susceptible to debias A (or even prone to induce A's optimism) could, of course, be recognized by the judges ex post facto, but then with all the disadvantages that ex post fact ruling brings with it. There might be, therefore, better ways to address optimism bias among one-time players - for example, a government program of education for small entrepreneurs – than regulation of precontractual relationships.²⁹

Conclusion

This work dealt with the problem of precontractual investments. Based on the analysis of Grosskopf and Medina (2007) on the economy of precontractual investments, it drew attention to the particular vulnerability of the so-called "one-time players", agents who do not perform a given operation habitually. The compensation of the investments made by those agents depends on an "entry mechanism" – the decision, in other words, to start negotiations only when competition is not fierce enough to excessively undermine the investor's bargain power.

^{29.} Another problem of legal remedies against optimism, as Jolls and Sunstein note (2006), is that they need to be calibrated, in order to not give rise to excessive pessimism.

The article argued that legal measures helping to prevent excessive precontractual investments by one-time players may promote capital (if not wealth) dispersion. Small business owners and non-businessmen seem more likely to invest too much, because they lack more often the information and "robust" rationality the entry mechanism requires. Besides, the problem of excessive investment is restricted to one-time players who are not monopolists and do not possess the bargain power or sophistication to extract from the counterparty a prior agreement on the investments they make. Large companies are also less subject to the problem of specific precontractual investments, since firm expansion through vertical integration is a means of avoiding the risks of those investments. Lastly, large firms seem more likely to take advantage of misinformation and limited rationality of one-time players to induce them to invest too heavily.

The third section examined possible legal solutions to prevent excessive precontractual investments by one-time players. Under Brazilian law, liability due to the violation of precontractual duties is recognized in accordance with the principle of good faith (Civil Code, article 422). The above analysis highlights the importance of acknowledging a breach of those duties when one-time players are deliberately misled as to the likelihood of getting a contract or the benefit they can get with it. It was also observed that, in view of the difficulty of verifying maneuvers to deceive potential partners, limiting damages to reliance (or "negative") harm may be insufficiently deterrent. Finally, I expressed some reservations concerning measures that, in addition to restraining deliberate induction to error, regulate precontractual negotiation, aiming at mimetizing the results that the entry mechanism would produce.

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