Collana Ravenna Capitale

La presente pubblicazione è stata curata da Elisabetta Fiocchi Malaspina e Simona Tarozzi.

Questa pubblicazione è anche finanziata dalla Facoltà di Giurisprudenza dell'Università di Zurigo.

Ravenna Capitale

From International Treaties to the Binding Nature of Contract. A Historical and Comparative Study

Collana Ravenna Capitale

MAGGIOLI EDITORE

Maggioli Editore è un marchio di Maggioli S.p.A.
Azienda con sistema di gestione qualità certificato ISO 9001:2015

47822 Santarcangelo di Romagna (RN) • Via del Carpino, 8
Tel. 0541/628111 • Fax 0541/622595
Internet: http://www.maggiolieditore.it
E-mail: clienti.editore@maggioli.it

Finito di stampare nel mese di maggio 2022
nello stabilimento Maggioli S.p.A.
Santarcangelo di Romagna

Indice

Self-enforcing Tools in International Contracts: A Comparative Perspective

Laura Maria Franciosi
(Università degli Studi di Bologna)

Sommario: 1. Introduction – 2. The three pillars of every international contract – 3. Penalty clauses – 4. "*Contratto autonomo di garanzia*" (performance bond) – 5. Smart contracts.

1. Introduction

One of the most important concerns of parties involved in contractual relationships is the achievement of their respective expectations. This issue is particularly enhanced within international business contracts, due to the absence of a comprehensive and uniform legal framework as well as the lack of a transactional court entitled to solve the disputes arising out of this kind of contract. Such elements concur to increase the transaction costs and the uncertainty about the positive outcome of the deal.[1]

In order to mitigate this phenomenon, contracting parties have developed different tools aimed at ensuring – as far as possible – the proper performance of the contract reducing the transaction costs. Within this field, the role of party autonomy has been significantly valorised through the development of new clauses and/or atypical contracts that have been then recognized by the case law and, in some cases, that have even been turned out in normative provisions of international treaties.

The analysis of these contractual tools reveals a sort of ascending climax focused on the need to guarantee the self-enforcing[2] nature both of the obligation undertaken

[1] This is because the performance of international contracts involves additional risks, and the legal and political framework of international commercial contracts is in general less stable than that of national contracts. See in particular: C. Brunner, *Force Majeure and Hardship Under General Contract Principles*, Alphen aan den Rijn, 2009, 1.

[2] The concept of self-enforcement refers to legal enforceability, not to the broader concept of enforceability discussed by economists. See in particular: R.E. Scott, *A theory of self-enforcing indefinite agreements*, in *Columbia Law Review*, 103, 7, 2003, 1641 (arguing that though scholars

by the party, and/or of the remedy set forth, in order to react to the non-performance of obligations, thus avoiding the costs, risks and duration of controversies. However, the absolute self-enforceability of contractual terms seems more a myth rather than reality since, in one way or another, the dispute-issue will necessarily be involved in the event of one party's breach. In addition, the contractual tools at stake need to be assessed in light of the different national legal systems and their peculiarities.

Accordingly, the present Article will focus, adopting a comparative approach, on some of the most important juridical tools used by parties in international contracts in order to ensure the proper performance of obligations, as well as prevent and /or react to their breach: namely, penalty clauses; the "*contratto autonomo di garanzia*" (performance bond); and, under certain aspects, smart contracts.

2. The three pillars of every international contract

As a preliminary remark, in order to properly understand the role of contractual tools, it is important to look at the three pillars of every international contract[3], namely:

(i) the content of the contract, its clauses and their wording;
(ii) the governing law; and
(iii) who is entitled to resolve a dispute.

All the three pillars above deal – either directly or indirectly – with the primary role granted to party autonomy in international business contracts. The first two pillars refer to the substantial law of the contract, which is primarily set forth by the terms and conditions of the contract itself, as agreed upon by the parties.[4] The

---

have long understood that reputation and the discipline of repeated interactions are efficient means of self-enforcement, nevertheless reputations are difficult to establish in large economies in which particular contracting parties are often anonymous to most market); A. Schwartz & R.E. Scott, *Contract theory and the limits of contract law*, in *Yale Law Journal*, 113, 2003, 541 (arguing that legal enforcement is necessary on social welfare grounds in at least two paradigmatic cases: in volatile markets where a party's failure to perform could threaten its partner's survival; and where the contractual surplus would be maximized if one or both of the parties made relation-specific investments); W.A. Landes & R. Posner, *The Private Enforcement of Law*, Working Paper n. 62, 1974, Center for Economic Analysis of Human Behavior and Social Institutions, Stanford, CA, available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=259376.

[3] About the three pillars of international business contracts, see in particular: F. Bortolotti, *Diritto dei contratti internazionali I*, Padova, 2009[3]; A. Frignani – M. Torsello, *Il contratto internazionale - Diritto comparato e prassi commerciale*, Padova, 2010[2]; F. Galgano – F. Marrella, *Diritto del commercio internazionale*, Padova, 2011; J. Cordero-Moss, *International commercial contracts*, Cambridge, 2014.

[4] Both the contractual clauses and the governing law can be limited, under certain conditions, by the so called "*overriding mandatory provisions*" of a different legal system signifi-

governing law of the contract is the legal framework specifically chosen by the parties or pointed out as applicable law through the relevant no-choice mechanisms.[5]

As generally known, the governing law can be a national legal system (i.e. that of party A; that of party B; or a third legal system); an international treaty, for example, the 1980 United Nation Convention for the International Sale of Goods ("CISG"), which is significantly relevant because its provisions are mandatory unless parties exercise, pursuant to its Art. 6, the right to opt-out from the Convention; or expression of the so-called "soft law": for example, the model clauses of the Paris International Chamber of Commerce ("ICC")[6]; the Unidroit Principles of International Commercial Contracts ("UPICC")[7], and/or the new *Lex Mercatoria*.[8]

---

cantly connected to the international contract. Namely, overriding mandatory provisions are those rules of a legal system that must be applied even when the international contract is governed by a different law. Their legal rationale lies in the will of a country to ensure that every international contract, with a particular connection with its own legal system, conform with those specific rules. Generally, their overriding mandatory nature can be expressly or impliedly affirmed by the legal system. However, absent an explicit statement, it will be up to the judge to consider their legal force, and whether they have overriding mandatory effect. The concept and an attempted definition of such rules can be found in art 9 of the Regulation (EC) No 593/2008 of the European Parliament and of the Council of 17 June 2008 on the law applicable to contractual obligations ("Rome I Regulation"): "*Overriding mandatory provisions are provisions the respect for which is regarded as crucial by a country for safeguarding its public interests, such as its political, social or economic organization, to such an extent that they are applicable to any situation falling within their scope, irrespective of the law otherwise applicable to the contract under this Regulation*". A further definition can be found in Art. 7 of the Convention on the law applicable to contractual obligations, opened for signature in Rome on 19 June 1980 ("1980 Rome Convention"): "*When applying under this Convention the law of a country, effect may be given to the mandatory rules of the law of another country with which the situation has a close connection, if and in so far as, under the law of the latter country, those rules must be applied whatever the law applicable to the contract. In considering whether to give effect to these mandatory rules, regard shall be had to their nature and purpose and to the consequences of their application or non-application*".

[5] See *infra* the text of the current Section.

[6] For further information, see: About us - ICC - International Chamber of Commerce (iccwbo.org).

[7] The English text of the UPICC is available at https://www.unidroit.org/wp-content/uploads/2021/06/Unidroit-Principles-2016-English-bl.pdf.

[8] The new *Lex mercatoria* – otherwise named "new Merchant Law" in common law – is made out of rules spontaneously generated by the international community in the shadow of national legal orders. It is composed of unwritten commercial customs, and practices but also includes a variety of other international provisions that are regularly complied with by the actors of the international commerce: see in particular R. Goode, H. Kronke & E. Mc Kendrick, *Transnational Commercial Law – Text, Cases and Materials*, Oxford, 2015[2], 34-47. There is not general consensus about the characteristics and sources of the new Lex Mercatoria: for critical remarks see, for example, G. Cuniberti, *Three Theories of Lex Mercatoria*, in *Columbia Journal of Transnational Law*, 52, 2014, 369 (arguing that, although national

Indeed, the ICC model for sale contracts suggests a choice-of-law clause setting forth a hierarchical order of sources of law for the contract. According to it, the first source shall be the terms and clauses of the contract. Then, reference shall be made to the provisions of the CISG, and finally, as a subsidiary law, to those of the UPICC. The reference to a subsidiary law is important because the CISG does not cover all the aspects of a sale contract.

Of course, contract terms and clauses set forth by the parties must comply – and shall be interpreted in accordance – with the applicable governing law. Consequently, it is important to verify the consistency of contractual clauses with the governing law.

With reference to international business contracts, identifying who will be entitled to resolve a dispute (i.e. whether a national judge or an arbitral tribunal) matters, *inter alia*, because it might be helpful in order to determine the law applicable to the international contract, in the event of no choice by the parties. Indeed, should the dispute be solved through arbitration, the arbitral tribunal is entitled pursuant to art 28(2) of the UNCITRAL Model Law on International Commercial Arbitration[9] and art 21(1) of the ICC Arbitration Rules 2017,[10] to set the governing law. In the first case, it will be through a two-step mechanism: firstly, the arbitral tribunal shall identify the conflict of law rules better fitting for the purposes of that contract and then, through their application, it will point out the governing law. In the second case, the arbitral tribunal will have the power to immediately determine the governing law for that international contract, which may even be the new *Lex Mercatoria* combined with the UPICC on their own. In case of litigation, absent a choice of law clause, the national judge will have to apply the rules of its *lex fori* (i.e. its conflict of law rules) in order to determine the governing law of the international contract. Consequently, the analysis in question might be determinant for the outcome of the dispute in the case both of arbitration and litigation.[11]

---

legislators and arbitral institutions have empowered international arbitrators to resort to *Lex Mercatoria* in cases where the parties have remained silent on the law governing their contract, nevertheless the norms of *Lex Mercatoria* are too vague and incomplete for that purpose); L.E. Trakman, *Law Merchant: The Evolution of Commercial Law*, Littleton, 1983, 42.

[9] UNCITRAL *Model Law on International Commercial Arbitration 1985, With amendments as adopted in 2006* (UN Doc A/40/17 annex I and A/61/17 annex II, 7 July 2006) [UNCITRAL Model Law], art 28(2): "[f]ailing any designation by the parties, the arbitral tribunal shall apply the law determined by the conflict of laws rules which it considers applicable".

[10] Article 21(1): "[t]he parties shall be free to agree upon the rules of law to be applied by the arbitral tribunal to the merits of the dispute. In the absence of any such agreement, the arbitral tribunal shall apply the rules of law which it determines to be appropriate".

[11] See for example L.G. Meira Moser, *Parties' preferences in international sales contracts: an empirical analysis of the choice of law*, in *Uniform Law Review*, 19, 2015, 20.

3. Penalty clauses

A contractual provision widely adopted in international business contracts is the penalty clause. Such clause can be referred to adopting various terminology reflecting the different purpose of the clause: penalty clauses, indeed, can be inserted with a clear compensatory function (i.e. liquidated damage clause) or with a deterrent function (i.e. penalty clause), or with the intent to combine both functions.[12]

Generally, penalty clauses operate in the event of non-performance of certain obligations and/or in the event of a delay, or of a partial failure to perform; their usual purpose is to stipulate the payment of a certain amount of money, and their enforcement may be in addition to the obligation's performance or to supplement damages.[13]

However, penalty clauses are one of the most debated issues due to their wide adoption in international business contracts, on one side, and the differences still enduring among national legal systems as well as their economic, and even religious, implications, on the other.

Indeed, from a comparative point of view, penalty clauses are significantly interesting because:

– civil law systems generally recognize them;

– common law systems draw a distinction between "penalty clauses", which are not enforceable, on one side, and "liquidated damage clauses", which are legally binding and enforceable, on the other;

– under Islamic legal systems penalty clauses are not allowed due to the prohibition of *ribà* (accretion), *gharar* (uncertainty) and *maysir* (speculation);

In civil law Countries penalty clauses are generally recognized as valid and enforceable; the national judges, however, are entitled to intervene on the amount of the penalty (usually reducing it) if unreasonable or excessively disproportionate. However, while in Italy, according to Art. 1384 of the Italian civil code ("It.c.c."), the judge can only reduce the amount set forth as a penalty regardless of the parties' intent,[14] in France the judge can either reduce or increase the agreed-upon

[12] About the function of the penalty clause see, for example, A. Frignani, M. Torsello, *Il Contratto Internazionale*, 389-390.

[13] See in particular: B. Pasa, *The European Law of "Contractual Penalties"*, in *European Review of Private Law*, 3, 2014, 355.

[14] In addition, the Italian Consumer Code (Art. 33 §2 letter f) provides for that a term imposing to any consumer – who fails to fulfil her obligation or is in delay in performing it – to pay a manifestly excessive sum of money through compensation, penalty or other similar ways, is presumed to be unfair and thus void, while the rest of the contract shall remain valid (Art. 36).

sum.[15] After the 2016 reform of the French law of obligations, the judicial power of intervention has been maintained when the amount of the penalty is disproportionately low or excessive.[16] Pursuant to Art. 1.154 of the Spanish civil code, the Spanish judge can reduce the penalty on the ground of equitable reasons if the obligation has been partially or not properly performed.[17] The German legal system distinguishes between "penalty clause", on one side, and "liquidated damage clause", on the other, and the two clauses are subject to different legal regimes. Both clauses mainly serve two functions: to prevent the debtor from breaching a contractual obligation, and to provide compensation to the creditor in case of a breach. The judicial review of penalty clauses is more extensive; on the contrary, when the clause is drafted as a provision granting a lump-sum for damages, the judicial power of control is limited.[18] In addition, §343 of the BGB allows the judicial review of a penalty clause on the ground of equitable reasons at the debtor's request and with the exception of B2B contracts, which are dealt with by § 348 of the German commercial code. However, even in this case the obligor is entitled to invoke the general good faith clause in order to reduce the excessive penalty.[19] The Dutch civil code does not distinguish between the two kinds of clauses[20] and essentially observes the principle of freedom of contract. The unfairness of the penalty is not an obstacle to its enforcement, but the amount set forth can be modified by the judge in light of equitable reasons; however, the court is not entitled to amend *ex officio* the agreed sum, but only if expressly required by the debtor.[21]

---

[15] See in particular M. Cannarsa, *Contractual Penalties in French Law*, in *European Review of Private Law*, 3, 2015, 297 (arguing that the unclear distinction between contractual penalties and liquidated damage clauses in French law raises further questions, because of the wide use of such clauses in contractual relationships and the judge's moderation power in the event of a penalty clause).

[16] *Id.*, *French Case Note on the Penalty Clause Decisions of the UK Supreme Court*, in *European Review of Private Law*, 1, 2017, 219. About the effects on penalty clauses of the 2016 French Reform, see also A. Las Casas, *Funzione e Struttura della Penale Contrattuale. Riflessioni a Margine della Riformulazione della Penalty Rule da Parte della UK Supreme Court*, in *Europa e Diritto Privato*, 1, 2019, 141, 146-162.

[17] See in particular: G. de Castro Vítores, *Cláusulas Contractuales de Carácter Indemnizatorio y Penal, en el Contexto de las Recientes Propuestas de Renovación del Derecho Contractual en España,* in *Europa e Diritto Privato*, 1, 2017, 49.

[18] See specifically: F. Faust, *Contractual Penalties in German Law*, in *European Review of Private Law*, 3, 2015, 285.

[19] *Ibidem.*

[20] Penalty clause are provided for in Art. 6:91-6:94 of the Dutch civil code.

[21] For an analysis of the Dutch legal system on penalty clause, see in particular H.N. Schelhaas, *The UK Supreme Court Cases on Penalty Clauses from a Dutch Perspective*, in *European Review of Private Law*, 1, 2017, 209.

In common law countries "penalty clauses" are not enforceable, while "liquidated damage clauses" are enforceable: the distinctive criterion is whether the amount agreed to be payable is "*extravagant and unconscionable in comparison to a genuine pre-estimate of the loss*".[22] Generally, the common law system rejects penalties as being repugnant to the compensatory nature of contract damages. The main rationale, pursuant to the "rule against penalties", is that penalty clauses are punitive in nature and violate the principle of just compensation that lies behind the compensatory nature of common law damages. Originating in the development of equitable relief against penal bonds, traditional common law denies enforceability to clauses that are found to act *in terrorem* and are thus classified as penalties; liquidated damages on the other hand are enforceable since, as above recalled, they provide for a "genuine pre-estimate of the loss".[23] In 2015, the UK Supreme Court held jointly two cases involving penalty clauses: *Cavendish Square Holdings BV v. Makdessi*, on one side, and *ParkingEye Ltd. v. Beavis*[24], on the other. The first case involved a sophisticated B2B negotiation, while the second one dealt with a client of a car park service, thus a B2C relationship. Despite of the differences among them, both cases are relevant in order to better understand the development of English Law, and the attitude of the judicial formant about such topic. While refusing to abolish the rule against penalties, the Supreme Court, in adopting a very restrictive approach to judicial intervention, highlights the continuing importance of the freedom of contract principle.[25]

Under US law, "penalty clause" is defined as "*a contractual provision that assesses against a defaulting party an excessive monetary charge unrelated to actual harm*",[26] while "liquidated damage clause" is defined as "*a contractual provision that determines in advance the measure of damage if a party breaches the agreement*".[27] Traditionally, courts have upheld liquidated damage clauses unless the agreed-on sum is deemed a penalty for the following reasons: (1) the sum grossly exceeds the probable damages on breach; (2) the same sum is made payable for any varieties of different breaches (some major, some minor), or (3)

---

[22] *Dunlop Pneumatic Tyre Co. Ltd. v. New Garage and Motor Co. Ltd.,* [1915] AC 79, 86-88. For a description of penalty clauses under English Law, see for example: H. Beale, *Penalty Clauses under English Law,* in *European Review of Private Law*, 3-4, 2016, 353.

[23] *Ibidem*.

[24] [2015] UKSC 67.

[25] For a comment about the two joint holdings and their effects on English law, see in particular: P. Giliker, *Case Note England and Wales, UKSC 4 November 2015, Cavendish Square Holdings BV v. Makdessi; ParkingEye Ltd. v. Beavis*, in *European Review of Private Law*, 1, 2017, 173.

[26] Bryan A. Garner (Ed. by), *Black's law dictionary*, St. Paul, 2007[3], *ad vocem*.

[27] *Ibidem*, *ad vocem*. At this regard, see also UCC § 2-718 providing for "*Liquidation or Limitation of Damages; Deposits*"; and Restatement 2[nd] of Contracts §356(1).

a mere delay in payment has been listed among the events of default.[28] Within the US legal system, the penalty clause has attracted the attention of the Law and Economics ("LAE") studies: the topic and its economic implications have been deeply debated.[29]

LAE scholars deem positive the non-enforcement of penalty clauses because of the alleged efficiency of compensatory damage and the importance of not deterring the "efficient breach" of the contract, namely a breach of contract in which the breaching party finds it cheaper to pay damages than to perform under the contract. In other words, a type of contractual breach that is economically efficient, at least for the breaching party. According to such doctrine, parties should feel free to breach a contract and pay damages, so long as this result is more economically efficient than performing under the contract.[30] Despite such an approach, some LAE scholars have nevertheless argued in favour of the recognition and enforcement of penalty clauses.[31] In contrast, the supporters of Behavioural Law and Economics ("BLAE") maintain that penalty rules are more efficient in ensuring the proper performance of the contract, that they serve numerous functions other than punishing a party for non-performance, and that they shall therefore be recognized end enforced.[32]

Under Islamic law, penalty clauses are null and void. Islam considers lending with interest payments as an exploitative practice that favours the lender at the expense of the borrower. According to Sharia law, interest is a form of unjustified accretion (*ribà*) which is strictly prohibited as well as any forms of usury.

---

[28] See the comments and explanations of both the UCC and the Restatement's provisions quoted in the previous footnote.

[29] For interesting remarks, see L.A. Di Matteo, *Enforcement of penalty clauses: a civil-common law comparison*, in *Internationales Handelsrecht* 5, 2010, 193 and Id., *A theory of efficient penalty: eliminating the law of liquidated damages*, in *American Business Law Journal*, 38, 2001, 633.

[30] For an overview of the EAL approach and the relevant bibliographical references, see generally: M. Pressman, *The Two-Contract Approach to Liquidated Damages: A New Framework for Exploring the Penalty Clause Debate*, in *Virginia Law & Business Review*, 7, 2013, 651.

[31] See for example C. Goetz & R. Scott, *Liquidated Damages, Penalties and The Just Compensation Principle: Some notes on The Enforcement Model and a Theory of Efficient Breach*, in *Columbia Law Review*, 77, 1977, 554 (arguing that the penalties serve to transfer the risk of loss to the "most efficient insurer").

[32] See specifically L.A. Di Matteo, *Behavioural Case for Contractual Penalties under the Common Law* in *European Review of Private Law*, 3, 2015, 327. The Author published several articles dealing with penalty clauses: among them, one of particular interest for international business contracts is *Id.*, *Strategic Contracting: Contract Law as a Source of Competitive Advantage*, in *American Business Law Journal,* 47, 2010, 727 (providing with strategic drafting techniques).

Ribà can be intended in two meanings: as deferring an already existing and due debt to a new maturity, provided the amount of debt is increased, or giving a loan that is due for repayment in a future date with an increment. In other words, *ribà* refers to an increase in the amount a debtor owes his creditor due to the passage of time. Consequently, once a debt is created, any payment above the principal of the debt is interest and is prohibited *ribà* according to the terminology of the Qur'an.[33]

In addition, Sharia law strictly prohibits any form of speculation or gambling, which is called *maysir*. Thus, Islamic financial institutions cannot be involved in contracts where the ownership of goods depends on an uncertain event in the future. The rules of Islamic finance ban participation in contracts with excessive risk and/or uncertainty, thus aleatory contract in general, including the insurance contract as well: this is the reason why many Islamic countries adopt "*takaful*" in lieu of the traditional insurance contract.[34] The term *gharar* measures the legitimacy of risk or uncertainty in investments. *Gharar* is observed with derivative contracts and short-selling, which are forbidden in Islamic finance.[35] Due to their functions and characteristics, penalty clauses therefore fall within the above-mentioned kind of not allowed tools, in particular in light of the main prohibition of *ribà*.

As a result of the differences among national legal systems, the drafters of the CISG purposely decided not to include in the text of the Convention any provisions dealing with penalty clauses: however, the CISG recognizes the effects of contractual clauses setting forth "agreed sums" for failure to perform, that shall be interpreted in light of the principles of the Convention.[36] Such issue is consequently not covered by the CISG itself,[37] and it is left to the rules of the subsidiary

[33] About Islamic finance, see for example: K. Jouaber-Snoussi, *La finance islamique,* La Découverte, Paris, 2012. About the features of Islamic law: W.B. Hallaq, *An introduction to Islamic Law*, Cambridge, 2009.

[34] See for example E. Giustiniani, *Elementi di finanza islamica*, Turin, 2006.

[35] See generally: S. Alvaro, *La finanza islamica nel contesto giuridico ed economico italiano*, in *CONSOB, Quaderni di finanza*, 6, 2014, available at https://www.consob.it.

[36] See in particular: CISG-AC Opinion No. 10, Agreed Sums Payable upon Breach of an Obligation in CISG Contracts, Rapporteur: Dr. Pascal Hachem, Bär & Karrer AG, Zurich, Switzerland. Adopted by the CISG-AC following its 16th meeting in Wellington, New Zealand on 3 August 2012, available at: Opinion No10 Agreed Sums Payable upon Breach of an Obligation in CISG Contracts (cisgac.com).

[37] See for example: J. Graves, *Penalty clauses and the CISG*, in *Journal of law and commerce*, 2012, 30, 153.

law.[38] This is the reason why, as above mentioned,[39] contract clauses and the governing law of the contract shall match: for example, a contract including a penalty clause subject as governing law (both primary and/or subsidiary like in the event of sale-of-goods contract ruled by the CISG) to the provisions of a common law Country and/or those of an Islamic Country, would not be enforceable, at least with reference to the penalty clause.

A further issue arises with regard to the recognition and enforcement of international arbitral awards: pursuant to the 1958 New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards, the Tribunals of the State Members are obliged to recognize and enforce a foreign arbitral award unless it clashes with the provisions of the Convention itself (in particular, Art. 5). Among the exceptions preventing the recognition and execution of an international arbitral award, there is the conflict between the award with the concept of "public policy". Such concept of public policy shall be narrowly construed in terms of "international public order",[40] however, it is highly predictable – if not certain – that a national tribunal of a common law Country or, moreover, that of an Islamic Country would refuse the recognition and enforcement of an arbitral award enforcing a penalty clause, in light of the above-highlighted stringent rules of such legal systems.

4. "*Contratto autonomo di garanzia*" (performance bond)

An interesting example of interaction among legal systems, and their different formants,[41] that has eventually resulted in a set of uniform rules aimed at answer-

[38] According to the CISG-AC-Opinion No. 10, legal systems have developed different mechanisms to offer protection for the creditor through the tool of "agreed sums". From the perspective of the CISG, all of these protection mechanisms concern the validity of agreed sums. Where domestic laws establish fixed amounts for agreed sums, these provisions determine to what extent an agreed sum is valid. Where a legal system denies enforceability to agreed sums classified as penalties, the function of the clause determines the validity of the entire clause. Where a legal system provides for the reduction of excessive sums, such provisions determine the extent to which an agreed sum is valid. As the CISG is not concerned with questions of validity – Article 4 sentence 2(a) CISG – domestic protection mechanisms generally remain applicable to agreed sums in CISG contracts.

[39] See Section II above.

[40] F. Bortolotti, *Il Contratto Internazionale*, Padova, 2017[2], 132-133.

[41] See in particular R. Sacco, *Legal Formants: A Dynamic Approach to Comparative Law*, I and II, in *American Journal of Comparative Law*, 39, 1991, 1ff. and 343 ff. (highlighting that the primary purpose of comparative law is the acquisition of knowledge and that, in order to gain a proper knowledge of a legal system, the connected "legal formants" must be considered. In particular, legal formants are those elements concurring to characterise a particular legal sys-

ing to the needs and practices of the international business community, is represented by the United Nations Convention on Independent Guarantees and Stand-by Letters of Credit, signed in New York on December 1995, but entered into force on January 1st, 2000.[42] The Convention provides for a comprehensive legal framework to deal with international guarantees and stand-by letters of credit.[43] The purpose of the Convention, as declared in its *Explanatory Notes*, is to provide greater legal certainty in the use of such undertakings for day-to-day commercial transactions, as well as marshal credit for public borrowers. Also, by making a single legal regime available to both independent guarantees and stand-by letters of credit, the Convention gives legislative support to the autonomy of the parties to apply agreed rules of practice such as the Uniform Customs and Practice for Documentary Credits (UCP), formulated by the International Chamber of Commerce (ICC), or other rules that may evolve to deal specifically with standby letters of credit, and the Uniform Rules for Demand Guarantees (URDG, also formulated by ICC).[44] In addition to being essentially consistent with the solutions found in rules of practice, the Convention supplements their operation by dealing with issues beyond the scope of such rules.[45]

Consequently, the Convention is the outcome of a dialogue carried out among different legal formants both at national and transnational level, and it grants peculiar attention to the soft law rules developed by renowned organizations, like the ICC or the UNIDROIT Institute, in order to fulfil the needs of business parties involved in international contracts.

Within the Italian legal system, the autonomy of contracting parties, specifically recognized by Art. 1322 It.c.c., led to the widespread adoption of the "*con-*

---

tem. Paradigmatic examples are, in addition to legislative provisions, court rulings, academic writing, professional and administrative practice developed in a particular context).

[42] The text of the Convention and all the related documents are available at: United Nations Convention on Independent Guarantees and Stand-by Letters of Credit (New York, 1995) | United Nations Commission On International Trade Law; https://uncitral.un.org/en/texts/payments/conventions/independent_guarantees.

[43] In order to emphasize the common umbrella of rules provided for both independent guarantees and stand-by letters of credit and to overcome divergences that may exist in terminology, the Convention uses the neutral term "undertaking" to refer to both types of instruments: see *Explanatory Notes*, available at the above-quoted link.

[44] The URDG have then been revised on 2010 and this edition was officially endorsed by the UN Commission on International Trade Law (UNCITRAL) in 2011. See in particular G. Affaki – R. Goode, *Guide to ICC Uniform Rules for Demand Guarantees URDG 758*, ICC Paris, 2011.

[45] *Explanatory Notes*, available at: United Nations Convention on Independent Guarantees and Stand-by Letters of Credit (New York, 1995) | United Nations Commission On International Trade Law; https://uncitral.un.org/en/texts/payments/conventions/independent_guarantees.

tratto autonomo di garanzia"[46] (i.e. *Garantievertrag*, performance bond) an atypical form of contractual guarantee developed in other legal systems[47] whereby the collateral provider (i) is not entitled to raise any exceptions dealing with the main contract between the debtor and the creditor; and (ii) shall pay at first demand. Consequently, the contractual relationship between the creditor and the guarantor is autonomous from the main contract: such elements mark the difference between this kind of guarantee and the typical personal guarantee ("*fideiussione*") set forth in Art. 1936 and ff. It.c.c. Absent a legislative intervention in order to provide for such a new guarantee,[48] the Italian judges have then recognized its validity and enforceability,[49] although some judicial inconsistencies about the distinctive features of this atypical contract still endure.[50] This phenomenon seems mainly due to the crypto-typical attitude[51] of a part of the Italian judges to refer to "*fideiussione*" as a paradigmatic model of personal guarantee, thus applying its provisions to

[46] See for example: G.B. Portale, *Le Garanzie Bancarie Internazionali*, Milano, 1989; F. Benatti, *Garanzia (Contratto Autonomo di)*, in *Novissimo Digesto Italiano*, Appendice, Turin, III, 1982, 920.

[47] The "performance bond" in common law systems, as well as the "contratto autonomo di garanzia" within the Italian one, is a *genus* including different *species* of atypical guarantees: see generally G. Stella, *Garanzie Autonome e Uniform Rules for Demand Guarantees*, in *Responsabilità civile e previdenza*, 2, 2015, 370, 372, fn. 2.

[48] A legislative attempt to provide for such contract has been unsuccessfully carried out on 2010 with the submission of a law's draft specifically dealing with this issue. The text of the draft is available at: Ministero giustizia (https://www.giustizia.it/giustizia/it/mg_1_2_1.wp?facetNode_2=1_8(201005)&contentId=SAN168221; last access on December 8th, 2021). On the contrary, this atypical contract has been legislatively recognized and provided for in France (Art. 2321 Fr.c.c.: enacted with the "*Ordonnance n. 2006-346 du 23 mars 2006 relative aux sûretés*"), and in Hungary (§§ 6:431-6:438 Hungarian civil code).

[49] Italian Supreme Court, Joint sections, 1 October 1987 n. 7341, and 18 February 2010 n. 3947.

[50] See for example: A. Montanari, *Garanzia Autonoma e Autonomia Privata*, in *BBTC*, vol. 3, 347, 2017, at 356-359; G. Barillà, *Clausola "A Prima Richiesta", Prova della Frode e Condictio Indebiti nelle Garanzie Autonome tra Commercio Interno e Internazionale,* in *Banca, borsa, titoli di credito*, 4, 2016, 449.

[51] See specifically Sacco, *Crittotipo*, in *Digesto discipline privatistiche – Sezione Civile*, Turin, 1989, *ad vocem*, and Id., *Legal Formants: A Dynamic Approach to Comparative Law*, in *American Journal of Comparative Law*, 39, 343, 1991, 384-387 (highlighting that among the legal formants "*some are born explicitly formulated such as the formulas of scholars, whereas others are not. As we have seen, those which are not can be immensely important. We shall describe them as 'cryptotypes'. Man continually follows rules of which he is not aware or which he would not be able to formulate well. … Normally, a jurist who belongs to a given system finds greater difficulty in freeing himself from the cryptotypes of his system than in abandoning the rules of which he is fully aware. This subjection to cryptotypes constitutes the "mentality" of the jurist of a given country …Cryptotypes may be identified and explored only through the use of comparison at a systematic and institutional level*").

different forms of guarantee, regardless of both the parties' intent and the international trade's practices.

5. Smart contracts

Smart contracts and the relevant intertwined-to blockchain technology,[52] appear as the extreme form of "self-enforcement" in light of the concept analysed in the present Article. Though an agreed definition for smart contracts has yet to be reached, the common feature stressed in the various attempted definitions is actually their self-enforcing and automated nature, since they operate on the basis of the "*if X…then Y*" code (where X and Y are predetermined conditions set forth by the author of the code) regardless of the parties' will and without any external intervention.[53] For example, smart contracts have been defined as "*self-executing contracts containing the terms of the agreement between the parties*";[54] "*self-executing electronic instructions drafted in computer code*" [55] or as "*a piece of computer code that is capable of monitoring, executing and enforcing an agreement*".[56]

The importance of blockchain technologies has been underlined also by the International Monetary Fund which has highlighted the possible benefits of virtual currencies (i.e. increasing speed and efficiency in making payments and transfers). Therefore, by applying blockchain technology to smart contracts, they would be not only self-executing and self-enforcing, without any need for intermediaries but, in addition, every transaction would be automatically recorded in the distributed database.

---

[52] According to a recently approved Arizona Act, a blockchain is a "*distributed ledger technology that uses a distributed, decentralized, shared and replicated ledger, which may be public or private, permissioned or permissionless, or driven by tokenized crypto economics or tokenless. The data on the ledger is protected with cryptography, is immutable and auditable and provides an uncensored truth*". The State of Vermont has defined blockchain as "*a mathematically secured, chronological, and decentralized consensus ledger or database, whether maintained via Internet interaction, peer-to-peer network, or otherwise*". See in particular: R. De Caria, *The Legal Meaning of Smart Contracts*, in *European Review of Private Law*, . 6, 2019, 731 ff.

[53] See for example M. Raskin, *The Law and Legality of Smart Contracts*, in *Georgetown Law Technology Review*, 1, 2017,305 ff.

[54] A. Vacca, A. Di Sorbo, A. Visaggio, G. Canfora, *A systematic literature review of blockchain and smart contract development: techniques, tools, and open challenges*, in *The Journal of system & software*, 2021, 174.

[55] R. O'Shields, *Smart Contracts: Legal Agreements for the Blockchain*, North Carolina Banking Institute, 21, 177, 2017, 179.

[56] T. Hingley, *A smart new world: blockchain and smart contracts*, www.freshfields.com/en-gb/our-thinking/campaigns/digital/fintech/block chain-and-smart-contracts/.

Although smart contracts undoubtedly ensure certain efficient results and offer positive aspects, nevertheless I do agree with those who argue that it seems rather likely that international business practice will be entirely managed by blockchain technologies and smart contracts. Smart contracts and blockchain technology can be useful to provide for certain specific issues of an international business contract (for example delivery; traceability of goods; logistic issues; methods of payment) but they do not seem suitable to govern the whole international contract.[57] They lack flexibility[58] and do not allow forms of renegotiation and/or contract adjustment, especially when required by supervening events amounting to hardship or force majeure, as the recent COVID-19 pandemic has taught.

In addition, it has been debated whether smart contracts are legally binding contracts or mere computer code, thus not juridically relevant.[59] The majority of commentators deem that smart contracts, in spite of their peculiarities, fall anyway – if not necessarily within the domain of the law of contracts – at least in the category of juridical relationships.[60] The arguments on behalf of such an approach

[57] Smart contracts, due to their nature, cannot contain provisions not executable by software (such as the one regarding the applicable law), nor are they built with the intention to depend on third-party judicial enforcement, and, therefore, it is still hard to imagine how they could include provisions on jurisdiction and applicable law. At this regard, a new kind of contract, called "Ricardian contract", has been developed in order to encompass legal provisions on one side, and being able to interact with the smart contract, on the other. The fundamental idea is to write a document that is understandable and acceptable by both a court of law and computer software. However, the recourse to "Ricardian contracts" implies drafting two different contracts (i.e. the Ricardian one and the real smart contract) and managing the interaction between them. See in particular. I. Bashir, *Mastering blockchain*, Birmingham-Mumbay, 2018[2] 265-269.

[58] See for example: J.M. Sklaroff, *Smart contracts and the costs of inflexibility*, in *University of Pennsylvania Law Review*, 166, 2017, 263.

[59] For example, the issue has been particularly debated within England: see in particular, M. Durovic & F. Lech, *The Enforceability of smart contracts*, in *The Italian Law Journal,* 5, 2019, 493. See also: M.N. Temte, *Blockchain challenges the traditional contract law: just how smart are smart contracts*, in *Wyoming Law Review*, 2019, 2017, 87. Italy has enacted a legislative provision – art. 8ter of the law decree 135/2018, which has then been converted in Law 12/2019 – dealing with the definition of smart contracts and distributed ledger technologies, recognizing the legal effects of adopting such technologies.

[60] In addition to authors quoted in the footnotes of the current Section, see also: M. Maugeri, *Smart contracts e disciplina dei contratti*, Bologna, 2021; B. Cappiello, *Dallo "smart contract" computer code allo "smart (legal) contract. I nuovi strumenti (para) giuridici alla luce della normativa nazionale e del diritto internazionale privato europeo: prospettive de jure condendo,* in *Diritto del commercio Internazionale*, 1, 2020, 477; M. Cannarsa, *Interpretation of contracts and smart contracts: Smart interpretation or Interpretation of smart contracts?*, in *European Review of Private Law*, 6, 2019, 773; G. Finocchiaro, *Il contratto nell'era dell'intelligenza artificiale*, in *Rivista Trimestrale di Diritto e Procedura Civile*, 2,

are persuasive.[61] Notably, the concept that smart contracts would not be subject to any legal provisions and/or litigation issues does not seem convincing.[62] Indeed, though the specific operation dealt with by the smart contract can be automated and self-executed, nevertheless it is encompassed in a legally relevant transaction, subject firstly to the applicable legal framework (whether chosen by the parties or pointed out through the no-choice mechanisms), and then to the possible judicial assessment of a court or an arbitral tribunal.[63] Rather, I do agree with the opinion of those who argue for the enactment of normative provisions tailored on the specific characteristics and peculiarities of smart contracts.[64] In particular, because an international legal framework specifically designed for blockchain technologies and smart contracts does not exist yet.[65]

2018, 441; R. De Caria, *The legal meaning of smart contracts*, in *European Review of Private Law*, 6, 2019, 731.

[61] For an interesting analysis, see in particular: L.A. Di Matteo & C. Poncibò, *Quandary of smart contracts and remedies: the role of contract law and self-help remedies*, in *European Review of Private Law*, 6, 2019, 805.

[62] As recalled in the text, the majority of commentators argue that smart contracts should be considered as legally binding agreements. *Ex plurimis*, see also: R. Kalantarova, *The ongoing speculation about smart contracts: smart enough to replace third party arbitrators, or is 'smart' just a misnomer?*, in *Cardozo Journal of Conflict Resolution,* 21, 2020, 551; M. L. Perugini & P. Dal Checco, *Smart Contracts: A Preliminary Evaluation*, (December 2015), available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2729548; P. Catchlove, *Smart Contracts: A New Era of Contract Use*, available at https://papers.ssrn. com/sol3/papers.cfm?abstract_id=3090226.

[63] See generally: A.J. Schmitz & C. Rule, *Online dispute resolutions for smart contracts,* in *J. disp. resol*., 2, 103, 2019; J. Jiang, *The normative role of smart contracts,* in *US-China Law Review*, 15, 5, 2018, 139-149; A. Savelyev, *"Smart" contracts as the beginning of the end of classic contract law*, in *Information & Communications Technology Law*, 26, 2, 2017, 116.

[64] See for examples the Authors quoted in footnotes 60-62 above.

[65] See for example: A. Mukherjee, *Smart Contracts – Another Feather in UNCITRAL's Cap*, in *Cornell International Law Journal Online*, 8 February 2018, available at: Smart Contracts – Another Feather in UNCITRAL's Cap – Cornell International Law Journal (cornellilj.org; https://cornellilj.org/2018/02/08/smart-contracts-another-feather-in-uncitrals-cap/). In the field of e-commerce, UNCITRAL has released four set of rules: the first legislative text was the Model Law on Electronic Commerce (1996). Subsequently, UNCITRAL released the Model Law on Electronic Signatures (2001), the Electronic Communications Convention (2005), and, more recently, the Model Law on Electronic Transferable Records (2017). These texts intend to facilitate e-commerce transactions by establishing rules to allow the electronic equivalent of paper-based documents to be legally recognised, thereby removing obstacles encountered by the use of electronic means. See in particular: uncitral_240621.pdf (wto.org; https://www.wto.org/english/tratop_e/msmes_e/uncitral_240621.pdf) .