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SERVICES FOR SCIENCE AND EDUCATION

Review on the Dispute Board Members' Activity in Construction Business in Brazil

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ABSTRACT

This article presents a comprehensive literature review on the current epistemology of Dispute Board (DB) Member activity in Brazil. The study identified in recent research key factors influencing DB activity, one of the Adequate Dispute Resolution (ADR) Methods, such as Negotiation, Mediation, Conciliation, Adjudication, and, Arbitration, as option to Litigation. This research provides valuable insights for improving Dispute Boards and advocating for regulatory changes, ultimately supporting best practices in value creation across various business scenarios and laying the groundwork for future research.

Keywords: Dispute Board, DB Members Competences, ADR, Brazil, Project Management.

INTRODUCTION

Disputes and conflicts have always existed, are part of human nature, and have existed since prehistory. Disputes and conflicts also frequently occur during the execution of industrial or infrastructure construction projects (1), have been identified as epidemics, and can interfere with project success, leading to prolonged time, increased costs, scope failure, poor performance or even project failure (2; 3). Disputes are also frequently resolved in the courthouse through lawsuits. Nonetheless, there is a handful of strategies to prevent conflicts, such as Adequate Dispute Resolution (ADR) methods, including negotiation (1; 4), mediation (5; 6), conciliation (1; 7; 8), adjudication (1), and arbitration (1; 5; 9), emerged as a faster and cheaper solution option than official courts to resolve construction disputes (3).

However, despite the initiatives mentioned earlier, there is little knowledge of the Dispute Board (DB), which is one of the most recent methods of the ADR, having progress initially with the International Federation of Consulting Engineers (FIDIC, originally *Fédération Internationale des Ingénieurs Conseils* (10) in 1913, Chartered Institute of Arbitrators (CIArb) on 1915, International Chamber of Commerce (ICC) on 1919 and DRBF in 1996, a shortcoming this study addresses.

The evolution of the DB worldwide and in Brazil was studied. It was found across several studies' different areas of research, like the effectiveness of the prevention and resolution of disputes (11), effectiveness in engineering contracts (52), the improvement of parts

cooperation (12), the quantification of the cost of ADR methods (13), the positive impact on project cost and schedule, the prevention and resolution of disputes (3), different types of DB (14), the application of DBs on other construction project areas, and also from different locations.

The importance of this study for DB in Brazil is even more critical for public administration because even today, in Brazil, the public sector is the main contractor for infrastructure works. Only for reference, the General Attorney's Office of the Union presented their statistical performance of last year's acting in Arbitration (one of ADR methods), and the total value involved was around R$218 billion (15) The public works budget with federal resources supervised by the Audit Court (TCU) for 2023 amounts to R$113.7 billion (around US$22.5 billion). However, 41% of the work is suspended (16). This scenario is the same in the whole country. The State of São Paulo, for the first three months of 2023, had a total of 507 works halted and 277 delayed, a total of 784 works representing an investment budget of R$19.67 billion (around US$3.9 billion) (16).

The Dispute Board is the most suitable method for construction with Public Administration because it assumes the role of an essential contractual governance mechanism and is the faster and cheaper solution than official courts to resolve construction disputes (3, 38). Unlike other ADRs, the DB was developed to act primarily and permanently during the contract period to prevent and resolve disputes between the parties, focusing on completing the project without stopping the work. The other ADR methods act after the dispute arises, eventually stopping the work. For the public administration, the delay or work stopped implies a social cost as a road infrastructure or basic sanitation project has a direct and daily impact on the lives of the population, or even lives lost during the stoppage of a construction project or expansion of a hospital (17).

METHODOLOGY

Research Design

This study followed an inductive reasoning, interpretive approach, including qualitative methods, such as literature review on Dispute Board (DB) and Adequate Dispute Resolution (ADR).

THEORETICAL BACKGROUND

As mentioned in the introduction, disputes and conflicts have existed, are part of human nature, and have been present since prehistory times (18). Until Ancient Rome, disagreements were resolved by "fighting" for rights with hands, clubs, and swords. During Rome, they began to innovate, solving problems through negotiation, without violence, and with the help of justice, defining an unofficial arbiter to settle disputes. Later, Rome became a dictatorship, and this practice was lost. Negotiation comes from Latin, returning to the Roman period, and *nego* means denying. *Otium* means leisure, so the composition of the Latin meaning for negotiation is leisure denial (19).

However, the desire to avoid legal disputes in construction contracts has been around for a long time. According to FIDIC reports (10), in common law countries, from the end of the 18th century to the beginning of the 20th century, the prevention of disputes was carried out by

the engineer responsible for the work, who could act by arbitrating solutions for the problems that may occur during the execution of the project. Even with the initial success, at the beginning of the 20th century, this solution became controversial, as the relationship of economic subordination between the engineer and the contractor began to be questioned, despite the independence and ethical values of the professional, due to the risk of having a conflict of interests that impact the neutrality of their decisions. Then came the need for a new decision-making stage, for example, arbitration. As a result, disputes and conflicts can occur during the execution of construction projects. When they occur - because they are a reality (20) and quite frequently, as stated by El-Sayegh et al., (1) they interfere with impacting the success of the project, having a devastating effect, which can lead to an extension of time, cost overruns, lost productivity, non-compliance with scope, or poor performance (1); (3).

As mentioned above, the construction project's success can be its completion within cost and time (2), but cost and time cannot measure the success correctly. The project is a success when it fulfills the role that originated it, meeting the specifications of technical performance and mission to be executed, and if, in the end, there is a high level of satisfaction with the result obtained among stakeholders (21). A project is defined as unique, and its objectives are also impressive. The Olympic Games, for example, are unique and are the primary sports event on the planet, and the 2016 Olympic Games developed a project management model for mega sports events. Based on the previous events, the most critical factors in determining the success of such events are the sponsors, sporting authorities, and the media. The Olympic Games from 1960-2012 faced a cost overrun of 179 percent (22) and required the balance of three conflicting factors: time, price, and scope or quality. For the committee organizers of the 2016 Olympics, the success was the delivery of the projects specified within the scope, time, and budget and with qualities, knowing the risk of cost overrun and extreme time constraints. The model considered main premises like long-term strategy, integrated approach, partnerships for sustainability, and others, to ensure positive leverage shifts, performing with sustainable development goals (23).

Since the 1970s, different solutions have been developed and tested in the United States to avoid, minimize, and control disputes, developing and employing several alternative dispute resolution mechanisms. These mechanisms have been implemented at almost every stage of a construction project and can be simple negotiations or even binding arbitration (20). Nonetheless, when resolution occurs sooner and without confrontation, there is a much greater chance that litigation can be avoided. However, when seeking to resolve a dispute later or at the end of a project, the solution will inevitably be more complex and expensive (20; 24).

The Alternative, Appropriate, or Adequate Dispute Resolution (ADR) methods (from now on referred to as Adequate, even with some articles naming Alternative, as the Brazilian Process Civil Code (25) replaces the term Alternative with Adequate), such as arbitration, mediation, negotiation, and conciliation (8), emerged as an option from the official courts (6), initially pushed by academics and attorneys as a faster and cheaper solution (26) option than official courts to resolve construction disputes (3). In the middle '80s, with growing dissatisfaction with delays due to judicial congestion and its costs, as well as its inefficiencies and injustices, a larger audience of people interested in joining the ADR movement was attracted. Thus, ADR

moved from being an academic and fashionable idea to a topic that merited serious discussion and development among academics and practitioners from various professional fields. Then, dispute resolution mechanisms began to be developed throughout the United States, as dispute mediation centers in several states and arbitration chambers attached to state and federal courts also emerged.

The ADR started with the basic model of arbitration and mediation and has been a timely and inexpensive solution to legal disputes, aiming to produce fair and equitable outcomes that are more satisfying to participants than ordinary courts (5). These proposed ADR templates are recommended for experienced technical professionals to assist in resolving disputes between parties, with the most excellent flexibility in developing ADR procedures best suited to the needs of the projects and conflicts involved, and with the possible indirect benefit of retaining control over the outcome and maintain a good working business relationship (24). The cost of construction litigation was studied (5; 26) and included legal expenses and the actual impact on the project due to the total period demanded by the litigation process. With the development of ADR, the construction industry has shown that it prefers this mechanism over Litigation for five main reasons: (20) Faster, cheaper, specialized in construction issues, privacy for parties, and practicality. Below is a brief review of these ADR methods used for conflict management.

Negotiation

Negotiation is a voluntary process that combines different conflicting positions of the parties, two or more players, in a joint final place defined by unanimous decision rules determined by method (27; 28). In this process, the parties communicate and exchange proposals to reach an agreement, ending the conflict and maintaining the future relationship.

Negotiation is considered the first and most efficient conflict management mechanism, as it is faster and cheaper than the others, in addition to being confidential, preserving relationships - very welcome in construction disputes; and still offering a range of possible solutions with the parties having complete autonomy over the process and the result. Different techniques can be used during this process, as there are other definitions for negotiation (4), from concession and compromise to coercion and confrontation.

Avoidance and Resolution are the most common ways to mitigate disputes. Negotiation methods can be used to reduce dispute prevention and for early and late resolution (1). Negotiation gives litigants a high level of control. A survey indicated that negotiation was the most common dispute resolution method for the construction industry, resolving over 70% of disputes. In addition, during negotiation, the parties do not need to be bound by any legal process, being free to negotiate as they wish (29). Another dispute resolution method or method may be considered when no agreement is reached through negotiation. Negotiating with the help of a third party is called mediation (7).

Mediation

Mediation is a late resolution method used in the later stages of the dispute in the event of avoidance, and an early resolution method fails (1). Mediation is a non-binding and consensual process of conflict resolution through resolution facilitated and assisted by an

impartial third party that expedites negotiations to obtain an agreement between the parties, which can be concluded voluntarily or by court order. Its result does not bind the parties to not be by mutual understanding (5). The mediator assists the parties in reaching a mutually satisfactory solution by exerting some control over the mediation process but not controlling the outcome. Thus, the mediator manages the process over the discussions, but only the parties hold whether they will reach an agreement, thus maintaining control over the outcome.

Conciliation

Conciliation is an early resolution method the parties use to settle their issues in the early stages of the dispute. This stems from a clause in a construction contract where the parties agree to try to resolve their conflicts through pacification and appeasement, requiring the appointment of a conciliator (a third party) by agreement between the parties or by a specific institution (1). After negotiation, conciliation is the second method most effective for early resolution because the conciliator, with a neutral opinion on the matter, restores relationships between the parties lost because of the dispute, bringing them back together for negotiation, clarifying different perceptions, positions, and points of view, and pointing out misunderstandings. Thus, the conciliator works to reduce the tension between the parties, opening lost communication channels and facilitating the continuity of negotiations, after which other ADR techniques can be applied (1; 7). The difference between mediation, negotiation, and conciliation is that the conciliator, unlike these methods, can propose a solution, causing the parties to lose control over the process and the result (7).

Adjudication

Adjudication is a common practice in the construction industry, another voluntary, non-binding process, where the decision is taken by a single mediator or judge helping the parties to reach a negotiated agreement, acting similarly to litigation and arbitration, analyzing evidence of past events, before deciding on a shorter period (13). A common point between these three practices: Adjudication, litigation, and arbitration, is that they are triggered only after the crystallization or emergence of a dispute, never in a preventive way, because adjudication is a late resolution method used in later stages of the dispute (1).

Arbitration

Arbitration is a faster and cheaper method than judicial, it can be official or private, and as an option, it can take place before or after the beginning of the dispute. The procedure may occur with one or more arbitrators to determine what to do with the dispute, which may be chosen by the parties based on their experience and training or appointed by an authorized entity or person (1).

Arbitration clauses in construction contracts have been used in standard agreements since 1871 and have remained the only alternative to litigation (5). The arbitration award is issued after the hearing has ended, is binding on the parties, and must be recorded as a court award to be enforced. In both methods, litigation, and arbitration, the parties will present evidence of the events that occurred in the past.

Arbitration in Brazil followed the general rule that disputes involving available property rights could be submitted to arbitration, starting with enacting the Arbitration Law 1996. The Brazilian legislature in 2015 passed a Law amending some of the rules of the Arbitration Law of 1996 without changing the general approach but introducing provisions expanding the application of arbitration in disputes relating to consumer law, labor law, corporate issues, and regulating the participation of the State or state-owned companies in arbitration, primarily responsible for the development of works of infrastructure in Brazil (9).

Until the enactment of the 2015 Law, there was no specific reason, at least not statutory, to oblige the government to arbitrate their disputes, it was optional, and it was up to them to freely decide. Furthermore, the Arbitration Act 1996 did not expressly exclude its application to public entities. The Public-Private Partnerships Law allowed these entities to submit disputes to arbitration, establishing that the bidding should have an arbitration clause and the requirement that the headquarters be in Brazil and the language be Portuguese.

The 2015 Law decided to clarify this scenario by inserting two paragraphs into Article 1 of the 1996 Law, which 'expressly' allowed the direct or indirect public administration to resort to arbitration to settle disputes relating to available property rights, and that the authority or body of the immediate public administration competent to enter into an arbitration agreement is the same for carrying out agreements or transactions. Thus, it was expressly declared at the federal level. There would no longer be any need for other Brazilian states to follow the example adopted by the State of Minas Gerais, which in 2011 enacted a Law in anticipation of this federal enactment in 2015, determining that it and its entities could adopt arbitration as a way of settling disputes over available property rights (9).

Litigation

Litigation is an official dispute resolution method, with a judge or magistrate, specialized in law and probably without experience in construction matters, to settle the dispute with a binding decision (5). Usually, the final cost is higher, and the time until the final decision is longer, affecting all participants - and for construction works, this long time can be a disaster. Parties have minimal or no control over the forum, phases, and timing of the process, and the outcome may still not satisfy both parties (7).

Dispute Board

The Dispute Board (DB) is one of the most recent methods of the ADR, such as arbitration, conciliation, and mediation, as one option for litigation. Still, there is no consensus in the academy. Most argue that DBs are part of ADRs as a subset (7; 30), and others (5) did not consider DBs part of ADRs because the early constitution and the preventive nature of DBs differ from traditional ADRs. However, this is the main contribution of DBs and the reason for their success, as the other ADRs wait until the end of a project to resolve differences. The dispute is inevitable, time-consuming, and intense to resolve. However, the sooner disputes are resolved, the easier it is to fix them and the greater the likelihood that litigation will be avoided (24).

The DB was initially developed by the International Federation of Consulting Engineers (FIDIC, originally *Fédération Internationale des Ingénieurs Conseils*) in 1913, followed by the

Chartered Institute of Arbitrators (31) in 1915, International Chamber of Commerce (ICC) in 1919 and DRBF in 1996. From the initial idea of the DB, several DB definitions and procedures were developed and found in the literature. The DB is normally constituted at the beginning of a contract through an explicit clause to that effect and remains in operation throughout its term to assist the parties, if they so wish, in resolving differences and disputes arising, issuing recommendations that are non-binding opinions – the parties are free to accept or reject them; or decisions that are binding opinions, concerning disputes submitted to it by either party (7), such as (i) Dispute Board (13) unusually Standing DB is appointed at the commencement of a project, and before any events occur that may lead to disputes. The DB is typically composed of one or three members. They undertake regular site visits following the project execution – acting in "real-time," dealing with disputes as and when they occur (52). The Ad-Hoc DB is appointed only when an issue or disagreement turns into a dispute – similarly to other cited ADRs (32). In both cases, as defined in international contract forms, the parties can agree that a DB decision can be binding and final. If one party is not satisfied with the DB decision, they can refer the matter to either arbitration or sometimes litigation. (ii) Dispute Board (DB) and Dispute Adjudication Board (DAB) can issue binding recommendations or non-binding (30; 33; 34) based on the forms of contractual arrangements. The reference and opinion of the DB/DAB can be made orally or in writing. DB/DAB's opinion is not binding on the parties. However, when submitting a dispute in writing to DB/DAB, a reasoned decision will be issued, and the decision will be binding unless and until it is reviewed in an amicable settlement or arbitration award (34). (iii) Dispute Adjudication Board (DAB), as defined by the FIDIC 1999, and Dispute Avoidance and Adjudication Board (DAAB), as defined by the FIDIC 2017 contracts, typically only issue non-binding opinions, and acts to prevent disputes before they escalate into major disagreements. (iv) The Dispute Adjudication Board (DAB) adjudicates disputes and makes binding determinations, and the Dispute Review Board (DRB) analyses disputes and makes non-binding recommendations (35). (v) Dispute Resolution or Dispute Review Boards typically issue non-binding opinions (3; 7; 12; 13; 26; 36). (vi) Dispute Adjudication Board (DAB), defined by Sao Paulo 2021, issues binding decisions subject to a court appeal. (vii) Dispute Avoidance and Resolution (DAR) issues binding opinions through binding Arbitration (24).

Summary of ADR Methods

As described in the introduction, this work is limited to interpersonal conflicts in Brazil's industrial construction and infrastructure projects. The analysis of ADR methods is focused on their application to avoid or resolve disputes in this proposed scenario in contracts and projects (projects will be focused on to simplify the analysis) of construction and infrastructure. Some ADR methods are present in Brazilian legislation, while others are not, requiring foreign doctrines and best practices to guide their use.

Following the development of the previous section, the ADR methods can be classified and differentiated by some characteristics, such as the period of the project where it applies. Figure 4 highlights the project execution period, and some methods act in the administrative phase – during its execution. Conciliation and the Dispute Board are proactive methods, acting during the execution phase, seeking to avoid and resolve disputes without impacting and/or reducing the impact on its execution, and may even resolve all conflicts, avoiding subsequent disputes. International good practices recommend that the Dispute Board be

defined at the beginning of the project for more effective performance. Conciliation is like an Ad-Hoc Dispute Board and can be set when a dispute arises at any time during project execution.

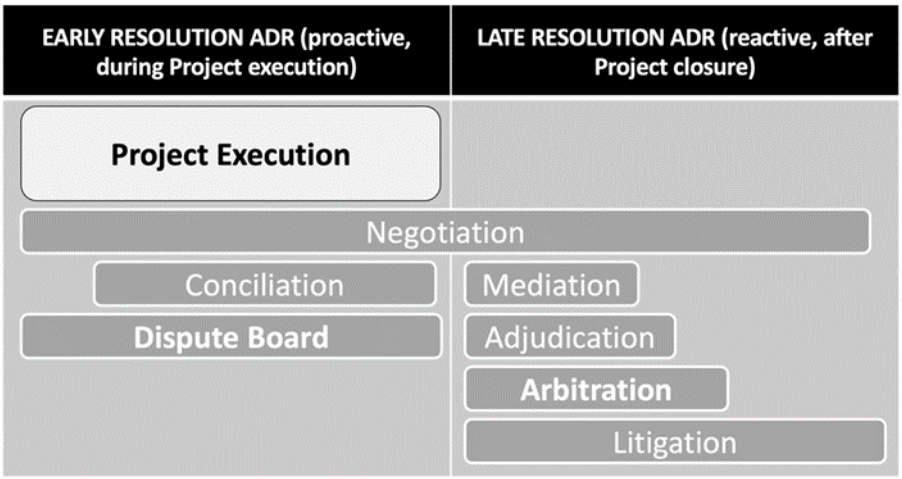

Figure 1: ADR Methods with Early and Late Resolution

The Negotiation method is highlighted in Figure 1 and can occur throughout the project's execution, in the administrative phase, as well as after its closure. Negotiation is the most used method, as reported, the resolution can start with negotiation and later end with another method, or even any of the analyzed methods can be started and in one of its execution phases, negotiation can be used.

After the closure of the project, the methods of Mediation, Adjudication, Arbitration, or Litigation can be used. The mediation between these four methods is the fastest and lowest cost. Litigation is the most time-consuming and involves the highest cost, causing major problems for construction and infrastructure projects, with Arbitration having less impact on cost and time than Litigation.

Figure 5 presents other characteristics of the ADR Methods: (i) There are voluntary and non-voluntary methods, and in this analysis, only Litigation is non-voluntary. (ii) Another characteristic concerns the power of the recommendation or decision, which can be Non-Binding, or Binding – Mandatory. As a method with a binding and obligatory decision, there is the Litigation, the official justice, which everyone understands regarding the obligation of the parties after the rendered decision. Arbitration also has binding decisions; according to Art. 31 of Law No 9,307/1996, the arbitral award affects the parties and their successors in the same way as the sentence handed down by the judiciary bodies, and if this sentence is condemnatory, it will be enforceable.

The Dispute Board, not yet adequately regulated in Brazil, but concerning existing legislation, can be of three types: (i) non-binding – the board issues recommendations; (ii) binding – the board issues decisions that must be followed; and (ii) mixed, in which the parties choose whether they will be recommendations or decisions.

Figure 2 also presents other non-binding ADR Methods, such as Negotiation, Conciliation, and Mediation. According to the Brazilian Mediation Law, Law No 13.140/2015, sole paragraph of art. 20, when agreeing, the final term of the Mediation constitutes an extrajudicial enforceable title – not yet binding, but which, when ratified in court (outside the scope of the Mediation), becomes a judicially enforceable title – therefore, it is considered non-binding, as is your initial product.

In cases of self-composition, such as Negotiation, and hetero composition, in the case of Conciliation, they issue non-binding recommendations; however, the §11 of art. 334 of Brazilian Process Civil Code CPC/2015 determines that the self-composition be reduced to a term and ratified by sentence, becoming an enforceable judicial title. For other ADRs, according to item III of art. 784 of CPC/2015, with the final decision signed by both parties and two witnesses, it becomes an extrajudicial enforceable title and, approved by the court, a judicially enforceable title.

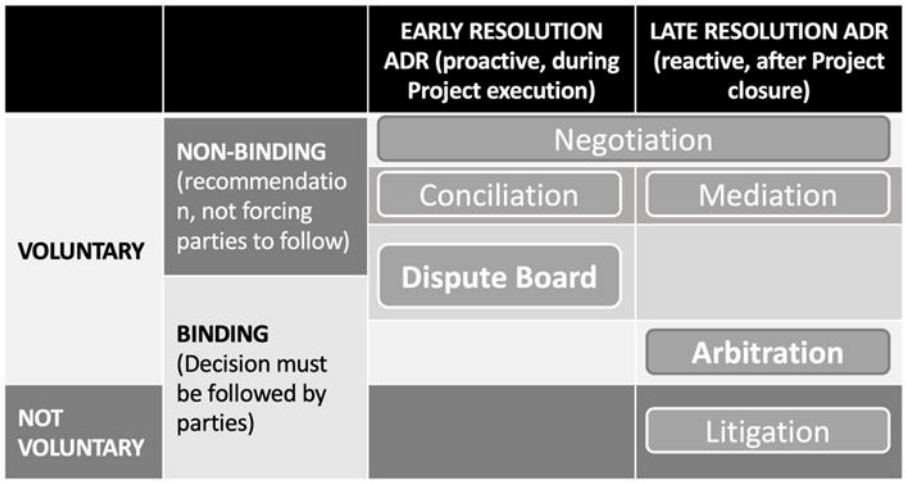

Figure 2: Binding and Voluntary Adequate Dispute Resolution Methods

Thus, for construction and infrastructure projects, good practices have recommended the Dispute Board in the administrative phase as a prevention and resolution method and Arbitration to resolve subsequent disputes after project closure. This understanding has been followed since 1995 by the World Bank, which requires this contractual provision for projects financed by international banks with a value above $ 50 million. The implementation of the Dispute Board must be foreseen from the announcement of the bidding process in the public administration. When signing the contract, it must be constituted - and according to international references, its cost is much lower and its effectiveness far superior to other methods, in addition to guaranteeing that the project is not interrupted and that it continues its execution with the least possible impact on the deadline, as shown in Table 1:

Table 1: ADR Methods Summary

ADR Method	The phase of the Dispute where they apply	Comments
Negotiation	Dispute Avoidance, Early Resolution and Late Resolution	Most effective, cheaper, and faster, could be used alone or with other methods
Mediation	Late Resolution	Requires a third party to mediate and support the solution development, voluntarily or by court order
Conciliation	Early Resolution	Second most effective, requires a third part to mediate and propose the solution.
Dispute Board	Dispute Avoidance, Early Resolution and Late Resolution of Dispute during contract execution	Cheaper and Faster than Arbitration. DB Members selected based on the experience and knowledge. DB should start in the beginning of the project before disputes arise.
Adjudication	Late Resolution	
Arbitration	Late Resolution	Higher cost and longer time from the ADR. Arbitrators are selected based on the experience and knowledge.
Litigation	Late Resolution	Higher cost and longer Time, Court of Law. Decision taken by Law Judge, without knowledge of construction area

The Evolution of the Adequate Dispute Resolution (ADR) Methods in Brazil

The use of Appropriate Dispute Resolution methods (ADR) is recent in Brazil, as the Arbitration Law was issued in 1996, the Mediation Law in 1998, and all were revised in 2015 with the new Civil Code. The Dispute Board (DB) presence in Brazil is also recent, initiated through international banks that financed projects in Brazil (32). 2stated that the absence of laws for its regulation and the lack of experience made the initial implementation difficult.

The practice of negotiating with an unofficial arbitrator to settle disputes appeared and disappeared throughout history. In Brazil, after independence from Portugal in 1822, ADR was part of the first Brazilian constitution. As stated by Ferreira and Oliveira (37), the use of arbitration in Brazil comes from Portugal. The Portuguese medieval legal system recognized arbitration as an alternative form of conflict resolution, provided for in the Alfonsine Ordinances, the Manueline Ordinances, and, finally, the Philippine Ordinances, which was the leading legal diploma of commercial law in Brazil until the enactment of the Commercial Code of 1850 (37).

The Brazilian Constitution 1824 included express authorization for adopting arbitration in its art. 160, which defined that parties may appoint Arbitrator Judges in civil cases and civil penalties and that their sentences will be executed without appeal if they agree. However, this institute was not provided for in the following Constitution of 1891, returning only in the Constitution of 1934, which gave the Union the competence to legislate on commercial arbitration. The Constitutions of 1937, 1946, and 1967 were silent on the subject, with this institute having a constitutional provision only in the 1988 Constitution, which expressly brought in its preamble the peaceful settlement of disputes, making the peaceful settlement of disputes a Principle of the Federative Republic of Brazil (32; 37).

The Arbitration Law of 1996 gave new impetus to arbitration in Brazil, including the emergence of the leading arbitration chambers (37). This legislation was amended with the Reform of the Arbitration Law in 2015, expanding the scope of arbitration application with the express provision of its use by direct and indirect public administration. Figure 3 presents the advances in the regulation of ADRs and the Dispute Board in Brazil.

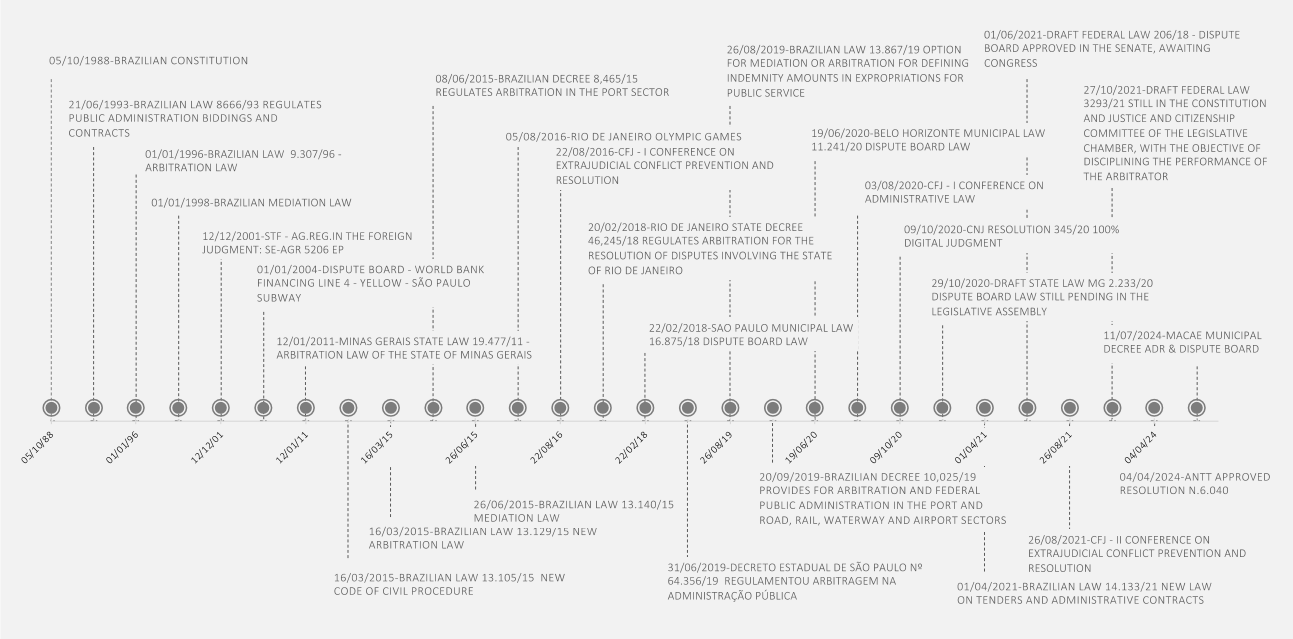

Figure 3: Advances in the Regulation of ADRs and the Dispute Board in Brazil

It is essential to point out that public administration in Brazil is controlled by law - all acts must be provided for by law. This reform established that the direct and indirect public administration could use arbitration to resolve disputes related to available property rights (32). It should also be noted that in Brazil, the immediate public administration is formed by the entities of the Federation, such as the Union, the states, the Federal District, and the municipalities. The indirect public administration includes autarchies and public and mixed companies. Economy companies. Moreover, to improve the understanding, the rights of economic value are patrimonial, and rights can be subject to alienation, waiver, or transaction (37, 38).

In addition to these normative diplomas, it is worth mentioning more recent ones, such as the State Decree of São Paulo nº 64.356/2019, which provides for the use of arbitration to resolve conflicts in which the direct public administration and its municipalities are parties; Federal Law No. 13,867/2019, which allowed the option of mediation or arbitration for the definition of indemnity values in expropriations for the public utility; and Federal Decree No. 10,025/2019, which revoked Federal Decree No. 8,465/2015, which provides for arbitration for the settlement of disputes involving the federal public administration in the port and road, rail, waterway and airport sectors. In 2018, the legal progress of the conflict resolution committees reached the municipalities, Law No 16.875 from the city of São Paulo, which expresses the provisions of regulations of specialized institutions, such as mediation and arbitration centers (37, 38). The Brazilian Civil Procedure Code of 2015 also provides an express provision for arbitration, which ratifies the constitutionality of arbitration jurisdiction by clarifying that arbitration is a kind of jurisdiction. It should be noted that although the Arbitration Law was initially effective in 1996, it was only in 2001, after the ratification of a foreign judgment, that the Federal Supreme Court considered this law to be constitutional and, therefore, the choice of arbitration no longer violated the monopoly of state jurisdiction defined in art. 5, item XXXV, of the Brazilian Federal Constitution of 1988 (Brazil, 1988), thus authorizing the arbitration procedure on available property rights (37;38; 51; 52).

The Brazilian Federal Justice Council (CJF) 2015 approved three statements that were a milestone for the institute in Brazil, such as (i) CJF Statement No. 49 deals with the Dispute Resolution Committees (Dispute Boards), a consensual method of conflict resolution. (ii) CJF Statement No. 76 defined those decisions issued by a Dispute Board for cases in which the contracting parties have previously agreed to their mandatory adoption, bind the parties to comply with them until the Judiciary or the court competent arbitrator issues a new decision or confirm it, in case they are dissatisfied (iii) CJF Statement No. 80 defined that the use of Dispute Boards, with the insertion of the respective contractual clause, is recommended for construction or infrastructure works contracts, as a mechanism aimed at preventing disputes and reduction of related costs, allowing the immediate resolution of conflicts that arise during the execution of the contracts (32). In recent years, there have been important advances in the use of ADRs by public administration in Brazil, with the new Bidding Law No. 14,133/2021 providing legal certainty for the use of ADR (51, 52), followed by the National Land Transport Agency (ANTT) that approved the resolution No. 6,040, of April 4, 2024, which in addition to provide rules and procedures for self-composition and arbitration, also included the provisions of the Disputes Boards, now applicable, for example, to the concessions of roads and railways (49; 50).

Therefore, Brazil's regulation of dispute boards is in continuous maturation and development, as was presented in Figure 3; its timeline, always with news of new initiatives at municipal and state levels, minimally regulating their use in public contracts.

DISCUSSION AND IMPLICATIONS

The study of the development of ADRs in Brazil, with a focus on the development of Dispute Boards, has attracted significant attention from researchers, legislators, stakeholders, and business professionals. However, the factors that impact the activity of Dispute Board

members need to be further studied, as proposed by these researchers in previous work. This research began with the investigation of the development of ADRs in Brazil, also supporting the research of the factors that impact the activities of DB members and begins to present a new perspective on their relevance. This research also broadens the DB members' activity scope and provide implications for other fields. Our findings may be transferable to other business areas, making our research cross-disciplinary. The role of the DB member can contribute to understanding the new concerns and challenges a Dispute Board faces daily by allowing many interest groups to influence the activity. This research has implications in other fields and subfields of Human Resources research once all the nine factors revealed by the sector experts may be used to recruit DB members and establish standards for hiring and training workers.

This study also has applications for Project Management. These factors may help establish PM standards for creating internal Dispute Boards associated with or independent of a Project Management Office (PMO). Such a practice could help to prevent conflicts in virtually all management areas, an implication pointed out by the findings of this research. The incentive for creating Dispute Boards in all types of construction contracts, infrastructure, and other further applications is an offshoot of this research because the factors can be used to define selection and development rules, contributing to the rules and regulations of the DB. This research also has implications for the future of DB activity in Brazil and other countries once the factors may serve as legislation boundaries, destined to regulate the activity in the Country by setting new standards uncovered in this investigation. Finally, this article has implications in other fields and subfields of research, such as: (a) Return to Work [39; 40]; (b) trust [41]; (c) business lobby [42]; (d) healthcare [43]; (e) socialization process [44]; (f) business negotiations [45]; (g) psychological contract [46]; (h) virtual business negotiations [47; 48], amongst others.

FUTURE RESEARCH

Further and future researchers are encouraged to do statistical studies on a scale to assess candidates and describe job positions. Further studies are recommended to improve the Brazilian discourse on the roles and duties of Dispute Board members in different companies. Comparative studies of DB's performance in reducing costs and controlling delays and disputes are routinely carried out in several countries, including continents such as the Americas, Europe, and Asia. For example, a statistical study on the creation of indices comparing the performance of DB in the Brazilian market, private projects, and public projects, comparing KPI's such as cost savings, schedule control, the number of informal assistances compared to informal assistance formal, the recommendations and decisions implemented, the number of decisions not subsequently questioned versus those taken to arbitration or public court resolution.

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