Beasts of Prey or Rational Animals?

Private Governance in Brazil's *Jogo do Bicho*

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Abstract

This article presents a rational choice account of Brazil's *jogo do bicho* ('animal game'), possibly the largest illegal lottery game in the world. Over 120 years, the *jogo do bicho* has grown from a local raffle to a multimillion-dollar business, and the game has been a major driver of political corruption in Brazil. First, I examine the mechanisms that fostered the *jogo do bicho*'s notable growth outside of the boundaries of the law. Second, I explain how the lottery financiers combine costly signals and selective incentives to foster external cooperation from members of community. Lastly, I analyse the relationship between the lottery sponsors and Brazilian representatives, specially the ways by which the *bicheiros* exploit the fragmentation of the Brazilian political system to advance their long-term goals.

Keywords: Brazil; criminal organisations; corruption; *jogo do bicho*; private governance

JEL Classification Codes: D72, K42, Z00

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1 Introduction

In 1892, Baron João Batista de Viana Drummond came up with a new idea to fund his cash-strapped zoo. Situated in a quiet neighbourhood in the north of Rio de Janeiro, the *Jardim Zoológico*, or Zoological Garden, hosted a variety of exotic species and offered breath-taking views of the city. But it lacked visitors. An experienced businessman, Drummond realised the zoo would have to provide other kinds of entertainment to keep itself afloat. One of his plans seemed particularly promising: a lottery raffle.

The rules were simple. In the morning, the Baron would choose one animal from a list of 25 beasts and put its picture inside a wooden box at the zoo's entrance. Visitors who wanted to join the raffle received a ticket bearing the stamp of one of those 25 animals.[1] At five in the afternoon, Drummond opened the box, showed the picture to the public, and paid to every winner a cash prize worth 20 times the zoo's admission fee. The Baron called the lottery the *jogo do bicho*, or the animal game, and it was well-received by the public. Eager to capitalise on that initial success, Drummond stated that visitors could buy tickets not only at the zoo, but also in many stores across Rio de Janeiro. What was once a small raffle soon became a large gambling market of its own.

A *jogo do bicho* craze swept the whole city after independent sellers entered the marketplace. A network of street bookmakers, called *bicheiros*, made the lottery available in every part of Rio by scalping tickets or promoting their own versions of the numbers game (Chazkel 2011, 37). The lottery became so widespread that Olavo Bilac, a major literary figure in nineteenth-century Brazil, summarised the situation as follows: 'Today [1985] in Rio de Janeiro, the game is everything. [. . .] Nobody works! Everybody plays' (Pacheco 1957, 43).[2]

But this tolerant state of affairs did not last. Civil servants and police officers criminalised the *jogo do bicho* on the grounds of 'public safety', and in the late 1890s they launched a country-wide campaign against the lottery (Benatte 2002). The campaign extended for several decades and received considerable support from the *Companhia das Loterias Nacionaes do Brazil*, the National Lottery Company, a public-private partnership founded four years after, and perhaps motivated by, the creation of the animal game (DaMatta and Soárez 1999, 82). The Brazilian government officially banned the *jogo do bicho* in 1946 and it remains illegal until this day.

[1] At first, the zoo staff distributed the tickets at random, but they soon allowed participants to choose the animals they preferred. This small change made the game considerably more appealing to the public, who often resorted to clairvoyants and fortune tellers to guess the winning animals (DaMatta and Soárez 1999, 71–74).

[2] Unless otherwise noted, all translations from the Portuguese are my own.

Yet the game has survived. The *jogo do bicho* has outlasted more than 30 Brazilian presidents and thrived under military regimes and democratic governments alike (Jupiara and Otavio 2015). But more than a act of defiance, the *jogo do bicho* is a successful capitalist enterprise (Labronici 2014; Magalhães 2005). A recent study by Fundação Getúlio Vargas, a Brazilian think tank, affirmed that the *jogo do bicho* earns from BRL 1.3 to BRL 2.8 billion per year (USD 400 to USD 850 million), making it the largest clandestine gambling game in the world.[3] Schneider (1996, 171) estimated that in the 1990s, the game furnished about 50,000 jobs in the Rio de Janeiro city alone, almost the same number of employees that the oil giant Petrobras had in 2011 (Exame 2013).[4]

In this article I offer a rational choice interpretation of the *jogo do bicho*. More specifically, I use an array of bibliographical sources to show how the game operators, called *bicheiros*, have developed unique strategies to solve collective action problems and maximise their political strategies. The tactics are unusual and often repressive, such as bribing corrupt police officers to threaten undisciplined employees. Nevertheless, I argue here that such strategies are effective, and while they seem counter-intuitive at first, they do address the long-term needs of the *jogo do bicho* financiers.

Like any other business manager, *bicheiros* have to run their firm with low costs to increase profits. However, the fact that the *jogo do bicho* is clandestine imposes additional difficulties for its operation. In particular, *bicheiros* face two main challenges to keep the lottery running. First, they need to gather public support so that bettors are not discouraged to engage in the lottery despite it being illegal. Second, *bicheiros* also have to ensure that the state repression is not prohibitively costly to their business, otherwise they would be better off by shutting it down. I argue below that the *bicheiros* have succeeded in both by using carefully-designed reputation strategies and employing costly signals to the communities they serve.

I use the case of Rio de Janeiro to illustrate how the *jogo do bicho* has overcome the obstacles to its expansion. Rio is a particularly interesting case because in no other part of Brazil the game financiers established such an effective patronage network. *Bicheiros* have sponsored political campaigns, financed cultural activities and football teams, and sometimes even run in local elections themselves. I discuss the ways by which the *bicheiros* have exploited fragilities of the Brazilian political system to their advantage and how those practices have weakened Brazilian democracy.

[3] See https://www.huffpostbrasil.com/2015/12/07/legalizacao-jogos-brasil_n_8737212.html (in Portuguese). Access: August 2018.

[4] In 1966, Time Magazine wrote that the *jogo do bicho* was 'the largest single industry in Latin America' and employed about 1% of the Brazilian workforce. See http://content.time.com/time/magazine/article/0,9171,842527-1,00.html. Access: August 2018.

My analysis discusses three strands of academic literature. First, this work contributes to the scholarship on extra-legal institutions, mainly to the literature on collective action within criminal organisations. For instance, Gambetta (1996) examines the strategies used by the Sicilian Mafia to settle disputes among their members and enforce rules in the areas they exercise control. Leeson (2009, 2010) affirms that pirate groups employed hard-to-fake signals to increase the profitability of their operations. Skarbek (2011, 2012, 2014), in turn, highlights the role of written and implicit norms in mitigating rent-seeking and coordinating productive activities in California prison gangs. I argue that *bicheiros* have employed reputation strategies and provided club goods to enforce private contracts and foster trust in the community.

Second, this work relates to the literature on signalling theory and asymmetric information (e.g., Akerlof 1970; Connelly et al. 2011; Spence 1973). I provide evidence that *bicheiros* were aware of their social stigma, and as a response they devised signalling strategies to convey reliable information and reduce the uncertainty associated with clandestine markets. Their main tool to increase credibility was costly signalling (Gambetta 2009; Kimbrough et al. 2015; Schelling 1960). *Bicheiros* believed that by sacrificing their immediate interests they could gain a reputation of honesty that would benefit them in the long run.

Lastly, this work connects to the literature on state capture, which is one of the most important topics in public choice theory (Rose-Ackerman 1978; Shleifer and Vishny 2002; Tollison 1982). More specifically, I use the Brazilian case to illustrate how politicians and civil servants can be co-opted by criminal groups and produce sub-optimal social outcomes. Queiroz (1992) explored why *bicheiros* turned into patrons of the Carnival's samba schools and affirmed that this influence gave them leverage over political authorities. Misse (2007) investigated the links between bicheiros and police officers, and suggested that the illegal lottery had been the main cause of police corruption in Rio de Janeiro until the 1970s. In a similar vein, Jupiara and Otavio (2015) analyse the relationship between the *jogo do bicho* and the military regime in Brazil (1964–1985). I supplement this literature by highlighting how asymmetrical information, agency dilemmas, and rent-seeking behaviour offer convincing explanations to the issues presented above. Although those concepts have a long tradition in public choice, scholars have not applied those ideas thus far to understand the dynamics of the *jogo do bicho*. By doing so, I integrate seemingly contradictory historical facts into a single narrative that connects micro-level decisions to macro-level outcomes.

2 An Overview of the *Jogo do Bicho*

2.1 Historical Background

The late nineteenth-century Brazil had four characteristics that explain the emergence of the *jogo do bicho*: 1) a growing urban population excluded from the formal labour market; 2) an inflow of immigrants whose extended family networks helped them engage in trade; 3) an expansion of the monetary supply in the first years of the republic (1880s–1890s); and 4) a judicial system that, albeit repressive, had only imperfect law enforcement. I discuss each of these elements below.

I start with the impact of urban poverty on the animal game. Brazil abolished slavery in the late 1880s, a period in which the country was rapidly urbanising. Brazil's growing cities offered a number of new occupations for freed slaves, and many were eager to live far from their former masters (Andrews 1991; Skidmore 1993). The freed slaves were joined by increasing numbers of Asian and European immigrants who were promised access to farming lands in the country (Hall 1969; Lesser 2013). However, the hopes of the African-Brazilians and the new settlers would soon be frustrated by a series of economic downturns. The Brazilian labour market suffered a severe contraction in the wake of the *Encilhamento* financial crisis of 1891, and the economic instability aggravated the already difficult conditions of the working classes (Topik 2014; Triner and Wandschneider 2005).

In that regard, large swathes of the urban population turned to the informal economy. As Chazkel (2011, 115) observes, there were few occupations available to poor women and foreigners in the 1890s, and many of them became street vendors. The profession requires little technical skills and has low barriers of entry, but it can be very profitable if for whatever reason there is a strong demand for particular product. The *jogo do bicho* was one of those products that offered a high rate of return. The game was simple to operate and that simplicity attracted more people willing to try their luck. As the game gained a following in Brazil's First Republic, it comprised an important share of the extra-legal economy in Rio de Janeiro.

Immigration also influenced the *jogo do bicho* via social ties. Most foreigners who moved to Brazil came from countries, such as Portugal, Spain or Italy, where extended families were the basic form of social organisation (Lobo 2001; Trento 1989). Family and neighbourhood networks created incentives for immigrants to establish trade relations and enforce cooperation through community responsibility systems (Roth and Skarbek 2014). Because of these particular social characteristics, in

the 1890s foreigners were over-represented in the Brazilian trade in general (Mattos 1991; Oliveira 2001) and in the *jogo do bicho* in particular (Magalhães 2005; Villar 2008). Although kinship bonds became less relevant over time, these links offered an important element of social cohesion in the *jogo do bicho*'s formative years.

Next is the impact of expanded monetary supply. The abolition of slavery and the growing industrialisation of Brazil increased the amount of capital available in the country (Franco 1987; Schulz 2008). Moreover, the 1888 Banking Act gave extra liquidity to local financial markets, what made credit more widely available in cities like São Paulo and Rio de Janeiro. Individuals received a temporary boost in personal income, a part of which they spent on leisure activities such as the *jogo do bicho*. Moreover, the lottery attracted new entrants as it became more profitable, and in only a few years similar versions of the animal game were available throughout Brazil (DaMatta and Soárez 1999, 79).

The last necessary condition for the emergence of the *jogo do bicho* is weak law enforcement. Chazkel (2011, 69–100) notes that until the 1940s police district chiefs operated within a large margin of discretion and repression against bookmakers was idiosyncratic. In the early years of *jogo do bicho*, lottery 'bankers' were allowed to operate virtually free from police interference, what surely collaborated to the game's rapid initial expansion (Chazkel 2007, 544). Prosecution against the *bicheiros* hardened in 1917 after the promulgation of the Civil Code and in 1941 the animal game was banned.[5] Five years later, the federal government declared that all games of chance were illegal in Brazil.[6] Recent estimations show that the prohibition of the *jogo do bicho* have prevented the state from earning BRL 15 to BRL 20 billion (USD 4.5 to USD 6 billion) per year in expected taxation revenues, aside from the subjective utility losses for players. (Folha de São Paulo 2016).

Since the mid-twentieth century, the *jogo do bicho* has been in a state of 'semi-legality' in Brazil. For all purposes, the *jogo do bicho* remains illegal in the country, yet there is no Brazilian city which does not have its own group of local *bicheiros*. In that regard, the *jogo* does not operate exclusively at the margins of the Brazilian law, but it consciously exploits and subsidises large sectors of the formal economy according to the interests of wealthy game sponsors. For instance, the *jogo do bicho* has benefited from the

[5]See: http://www.planalto.gov.br/ccivil_03/decreto-lei/Del3688.htm (in Portuguese). Access: September 2017.

[6]The 1946 decree stated that gambling was 'harmful to morality and the good customs', hence '[…] the repression against games of chance [was] an imperative of the universal consciousness'. The text can be read at: http://www.planalto.gov.br/ccivil_03/decreto-lei/Del9215.htm (in Portuguese). Access: September 2017.

2.2 Organisational Structure

The animal game operates with three levels of hierarchy. At the bottom level are the *bicheiros*, those in charge of selling *jogo do bicho* tickets (Chazkel 2007; DaMatta and Soárez 1999). *Bicheiros* are the most visible part of the *jogo do bicho* structure. The bookmakers usually build their vending stands inside the premises of a local shop, such as a small grocery store, and are recognisable by their chairs facing the street, stamps and blocks of paper (Chazkel 2011, 259). *Bicheiros* usually work alone, but may employ up to 10 people depending on how busy their betting site is (Labronici 2014, 69).

The *gerentes* (managers) oversee all *jogo do bicho* stands in a given area. Their task is akin to that of a firm accountant. Gerentes control the cash flow between the *bicheiros* and the bankers, manage the payroll of the employees, and provide financial information to the top members of the organisation. They also supervise individuals who carry menial tasks in the business, transfer money to other gambling branches and double-check the balance sheets of the betting sites (Labronici 2012, 71; Misse 2007, 142).

The *banqueiros*, or the Portuguese for bankers, occupy the top position in the *jogo do bicho* hierarchy. They comprise the small financial elite of the game. A 2012 report by the Brazilian Federal Police affirmed that 10 *banqueiros* controlled the market throughout the country; five of them based in the state of Rio de Janeiro (O Globo 2012b). Apart from funding the game, the bankers provide support for the employees to undertake their activities. The *banqueiros*' main attributions include paying bribes to police personnel, bailing out sellers arrested by security forces, and offering judicial assistance to employees in case of legal persecution (Labronici 2012, 75).

Banqueiros run their businesses from fortified houses in unknown locations, the *fortalezas* ('forts'). The first *fortalezas* likely appeared in the 1950s, when the animal game was already well-established across the Brazilian territory. The period coincides with a time when the *jogo do bicho* finances had become increasingly concentrated in fewer hands (Chazkel 2011, 259). Due to the growing size of the *jogo do bicho* economy, *banqueiros* decided to move their operations away from the public to avoid police persecution and reduce coordination costs.

Banqueiros solve problems of internal cooperation by providing club goods (Buchanan 1965) while simultaneously shunning cheaters through selective punishments (Dal Bó 2005; Roth and Murnighan 1978). The first club good offered to *bicheiros* by their bosses is private security. As the game is illegal, street sellers cannot rely on official institutions to protect themselves. Thus, the game bankers have

built an extensive network of gunmen and bribed police officers to protect their employees from other criminals (Chinelli and Machado 1993, 48; Labronici 2012, 51).

3 Concluding Remarks

Past research has shown that criminal organisations face considerable challenges to elicit cooperation from their members and establish close ties with the population (e.g. Gambetta 1996; Skarbek 2011, 2012; Varese 2001, 2011). Yet, the *jogo do bicho* offers a convincing example that it is possible for an illegal syndicate to operate with low levels of violence for more than a hundred years. *Bicheiros* employ a number of strategies to obtain reliable information from their subordinates while offering club goods and other selected benefits to workers. Furthermore, by investing in the Carnival parade *bicheiros* have been able to gather popular and government support. Poor communities have associated with the *bicheiros* to receive welfare provision, whereas politicians have collaborated with them to reap the financial and electoral benefits the *jogo do bicho*'s networks can provide.

Nevertheless, the *jogo do bicho* has also created negative externalities. Violence is used to punish defectors and to constrain competitors. The clientelistic relationship that *bicheiros* have with local politicians have lead to sub-optimal outcomes, such as predatory political campaigning, distortions in electoral representation, and impunity for human rights violations. These negative externalities have long-term effects and still impact the Brazilian public sphere.

Although the *jogo do bicho* has received an increasing attention from scholars, much of its inner workings remain poorly understood. First, the relationship between *bicheiros* and drug dealers is a topic that deserves attention. Brazil has become one of the world's largest consumers of illicit drugs and South America's principal drug trafficking transit route (Miraglia 2015; Misse 2011). The question whether *bicheiros* collaborated or opposed the emergent drug dealing business is still unclear. Second, the extent to which *bicheiros* use other businesses, such as hotels or factories, to laundry money has been mentioned by members of the Brazilian judiciary (O Globo 2012a, 2015); however, there is no reliable estimate on its size. Lastly, more research is required to clarify how *bicheiros* from different parts of Brazil coordinate their activities and prevent large-scale conflicts. Cases studies are usually focused on Rio de Janeiro's *bicheiros*, but scholars would benefit from comparative analyses with a larger number of states. This is an important step to elucidate how *bicheiros* continue to influence politics and the public across Brazil.

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