

# Characteristics of Games and Online Purchase Decisions: An Analysis in the Italian Gambling Market

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## Abstract

This paper intends to offer a contribution, in the field of management studies, to the understanding of the reasons why the level of e-commerce use in a specific sector, that of gambling, is different for different categories of products offered. In particular, the aims of this work is to analyze how the nature and specific characteristics of the different types of games sold could influence the customers' decisions in terms of choice between digital and physical purchase channels. Thus, consequently, impacting the degree of development of online sales for the different types of gambling. This analysis is carried out in the context of one of the main national legal gambling markets in the world, the Italian one, in which Internet gambling is now a mature and consolidated industry. The results of the analysis have shown that for most of the traditional betting categories offered in Italy – Lotteries, Lotto, Totalisator numerical game, Bingo, Virtual bets – the nature and the distinctive characteristics of the game give little emphasis to the potential benefits usually associated with online gambling, and this has determined a reduced development of online sales. Only for Sports-based games (sports betting) the nature and characteristics of the game seem to have exploited a number of significant benefits that Internet gambling offers to players. This helps to understand why betting websites for Sports-based games have become the main channel of purchase in Italy. These results have interesting managerial implications for gambling operators, as discussed in this work.

**Keywords:** Internet gambling, characteristics of games, online purchase decisions, gambling types, e-commerce, Italy

## 1. Introduction

In the last two decades, the use of the Internet for access to gambling has had a very significant impact on gambling behaviour. This aspect has been analysed within the economic-managerial, juridical, sociological and, in particular, medical-psychiatric disciplines, concerning the relevant risk for the consumer to assume problematic or pathological gaming behaviour. A part of the research contributions on the subject – carried out in various national contexts – has focused attention on the study of the motivations and the socio-demographic characteristics of the players that favour the consumer's choice of using the Internet to purchase gambling products, in substitution or integration of the physical distribution network.

These studies have found strong differences in the level of use of online gambling in relation to the different categories of games. The reasons at the base of these differences, however, do not seem to have been adequately examined yet. It is useful to point out in this regard that the researchers that have analysed the factors that influence the purchasing behaviour of the players and the bet levels of play for the different categories of games have focused on land-based gambling. Some of this research, in particular, has shown that a significant factor that conditions gambling behavior is related to the nature and structural characteristics that distinguish the different forms of gambling. It was observed in this regard that only “by identifying and understanding how games are structured (i.e., game design and associated features)” it is possible to understand what makes a bet more playable and therefore more engaging and commercially successful, contributing to unravel what makes some games problematic (Parke & Griffith, 2007, pp. 213-214).

If we look, however, at Internet gambling, it is possible to note that only recently we have begun to examine the association between structural characteristics of games and consumer behaviour in an online gambling environment. So, there is very little research concerning this research topic, and this research is focused on the impact of the characteristics of games on problematic gambling behavior (Auer & Griffith, 2022). This appears quite surprising if one considers that – also as a result of the legalization processes of Internet gambling adopted since 2000 in numerous countries around the world (Williams, Wood, & Parke, 2012) – the volume of online gambling, as detailed in the second paragraph, has increased exponentially, especially for some betting categories.

In line with these considerations, it seemed useful to carry out a research work that could contribute to understanding how the nature and characteristics of the different types of games can influence a specific aspect of the consumer's purchasing process. We refer to the customer's choice, in regards to access to gambling products, between physical and digital purchase channels.

This work, therefore, contributes to the research in the field of management that has analysed how the characteristics of the 'technological environment' in which the transaction between the company and the final customer takes place, condition the consumer's choice between different types of purchasing channels. In particular, it provides a contribution of knowledge with reference to a specific research gap in the context of studies on consumer behavior in the gambling sector. To date, in fact, to the best of our knowledge, the association between the nature and the structural characteristics of games and the consumer's choice between different purchase channels, does not seem to have been analyzed yet in the literature. The analysis of this aspect is very significant because it helps us to examine the different degrees of development of online gambling for the different game categories, contributing to the understanding of the reasons why the level of e-commerce use in a specific sector, that of gambling, is different for different categories of products offered.

The analysis is carried out in the context of the Italian gambling market and this allows to study these issues in the context of one of the main national legal gambling markets in the world, in which Internet gambling is now a mature and consolidated industry. Elaborating on market data provided by the Customs and Monopoly Agency, the ministerial body that administers the gambling sector in Italy, it emerges that in 2019 the total amount wagered grew almost eightfold compared to 2003, exceeding 110 billion euros, while the Gross Gambling Revenue (GGR) – the total amount wagered minus the sums that return to players in the form of winnings – was around 19.5 billion euros, more than tripling the values relative to 2003. To the growth of the market has contributed significantly the development of online gambling and its complete legalization achieved in 2006. The total amount wagered through the Internet in Italy has grown from 1.48 billion euros in 2008, to 36.4 billion in 2019, and GGR has reached, in 2019, a value of 1.85 billion euros (Customs and Monopoly Agency, 2020).

By way of introduction, it should be noted that the study is based on the analysis and processing of gambling sales data in Italy until 2019. It was decided not to consider the data relating to 2020 and 2021, as they were strongly influenced by a contingent phenomenon, the Covid pandemic, which, having caused the closure of physical sales points for long periods, has favoured an anomalous development of online gambling. Furthermore, it is useful to specify for a correct reading of the work that the term 'game' used in this paper is related to types of gambling games, in line with the approach followed by the literature on the subject.

## **2. Online Gambling Behavior, and the Nature and Characteristics of Games: A Brief Literature Review**

As noted (Taylor & Strutton, 2010), understanding how, when and why consumers choose to conduct online transactions has become a central topic in management and marketing studies. The study of these issues has become significant even in the gambling industry, which, in recent years, has become widespread use of the Internet for the sale of games. This use, established in the mid-90s of the last century (Wood & Williams, 2007), has given rise to a new sector of betting, that of Internet gambling. This type of market has grown rapidly, reaching, in 2019 (covid pre-pandemic data), a Gross Gambling Revenue in the world of more than \$53 billion, expenditure that is estimated to reach a value of \$95 billion in 2025 (Research and Markets, 2021).

It is worth highlighting that many of the research contributions on the topic of the impact of the Internet on the purchasing behaviour of gamblers have dealt with the relevant aspect of the effect of online gaming on the development of pathological betting behaviour, mainly within the sociological and medical-psychiatric disciplines (e.g.: Effertz et al., 2018; Kairouz et al., 2012; Griffiths, 1999). These studies show that gamblers who use the Internet to purchase games are more likely to become problem gamblers than those who play through traditional betting shops and that younger people are particularly exposed to pathological use of digital technologies to access betting.

Another series of contributions (Mulkeen et al., 2017; Gainsbury et al., 2015; Humphreys & Perez, 2012; Gainsbury et al., 2012; Parke et al., 2012; Williams, Wood & Parke, 2012; Forrest, 2012; Pilling & Bartlett, 2012; Wardle et al., 2011; Wood & Williams, 2011, 2009, 2007; Cotte & Latour, 2009; Wood, Williams & Lawton, 2007; Woolley, 2003) has allowed us to examine, more generally, several aspects of the gambling behaviour of the typical consumer of online games who, in most cases, does not turn out to be a problem or pathological gambler. These studies have made it possible to identify the socio-demographic and behavioural characteristics that distinguish online players from non-players and customers who normally purchase games through physical betting shops. It emerged, in particular, that the players who bet via the Internet are in strong majority men, and that, compared to those who use the brick and mortar stores, they are usually younger and spend larger sums of money distributing them among a higher number of game variants. Some of these studies have also made it possible, through empirical investigations, to identify the main advantages that bettors perceive in using the Internet to purchase games, complementing or replacing the access channel represented by the physical betting shops (the results of these studies are examined in more detail in the methodology section of this work). The research in question has also revealed significant differences in the level of use of online gambling in relation to the different categories of games. It has emerged in this regard that, in terms of prevalence, the online gambling is widely used for access to casino games, in their variants (slot machines and games of skill, such as poker) and for sports betting, while for other types of games the betting websites cover a less relevant role compared to the physical betting shops. It does not result, however, yet investigated systematically the reasons at the base of these differences in the use of the Internet for the purchase of different types of bets. If, however, one considers the studies that have examined the factors that influence the levels of betting for the categories of games provided through the betting shops (in order, principally, to understand the risk of the development of gambling addiction), it emerges, along with the conditioning induced by psychological and behavioural factors of individuals, an important role played by the nature and characteristics of the game that distinguish the different forms of betting.

By game characteristics we mean the features of games (betting configurations, event frequency, bet size, type of prize definition, etc.), as well as mathematical aspects of a game, such as the probability of winning and the level of pay-out of bets – the percentage of amounts wagered that returns to players in the form of winnings – (Auer & Griffith, 2022; Leino et al., 2015; Goodie, 2015; Parke & Griffiths, 2007; 2006). Other distinctive characteristics of games related to the situational factors that influence their purchase, such as availability (also linked to the choices of legalization of games by state regulatory bodies), the degree of accessibility (linked to the level of development of the distribution network), the level of diversity of the games offered (a function of the features of game and the number of gambling operators present on the market) (Smith et al., 2007).

By nature of the game, instead, we refer to the distinction between games of skill and games of chance. The games of chance (or luck games) are those for which the probability of winning is correlated only to the aleatory element. For such games (like slot machines, lotto or lotteries) the outcome of the bet depends entirely on chance. The skill games, on the other hand, are those for which the chances of winning, despite being primarily conditioned by the element of luck, seem to increase with the level of information about the event on which one bet (as in the case of sports bets), or to the player's possession of knowledge of mathematical, probabilistic and betting-strategy-related concepts (as in the case of Poker games) (Hannum & Cabot, 2009; Gandolfo & De Bonis, 2011).

It should be noted that the study of the impact of structural characteristics of games on online gambling behaviour is still in an embryonic state. Only in a recent study (Auer & Griffith, 2022), for example, has it been found that for online casino games, online gaming volumes are influenced by certain distinctive characteristics of the games, contributing to the development of problem gambling patterns.

### **3. The Geographical Context of Analysis: The Italian Regulated Internet Gambling Market**

The Internet gambling in Italy was born, in an embryonic form, between the late '90s and early 2000 when two regulatory interventions gave way to an experimental collection of online gambling by some authorized dealers (Sbordoni, 2010). It is, however, in 2006, that the 'Bersani decree' gave way to a sort of 'controlled liberalisation' of online gambling. A series of private companies have been authorised to sell games through a website, upon the issuance of a special license for remote gambling and under the strict control of the Customs and Monopoly Agency (Mataluni, 2013).

The data relative to online gambling sales, reported in the introductory paragraph, indicate that there are now many Italian players that access betting through the Internet. This is even more evident if we compare over time the sales data of online gambling with the overall sales data (made both through physical distribution channels and through the Internet).

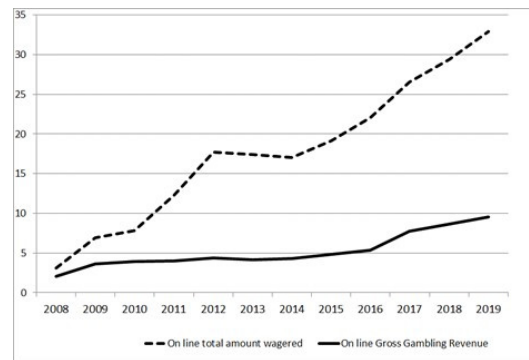


Figure 1. Percentage incidence of the online amount wagered and online Gross Gambling Revenue in respect to the total amount wagered and the total Gross Gambling Revenue (online and land-based). Years 2011-2019 (Italian regulated gambling market)

Source: our processing data from Customs and Monopoly Agency.

As shown in Figure 1, since 2008, there has been a steady increase in the weight of the digital channel for the sale of gambling products, which has meant that, in 2019, almost a third of total gambling revenues and about ten per cent of GGR will pass through State-authorized websites. If, however, one delves into the analysis of gambling volumes with the different categories of bets offered in Italy, significant differences emerge in terms of the weight of the digital distribution channel on gambling sales. As happened in other nations (Casmef, Deloitte, 2018), also in Italy it seems, therefore, to have occurred a differential impact of the Internet on the consumer's purchase choices, in relation to the different types of games sold. To study this aspect, however, it is necessary to clarify in an introductory way some regulatory peculiarities of the Italian gambling market that have determined a different structure from other nations. The gambling sector in Italy is divided into two distinct chains of gaming, characterized by players, volumes of bets and presence on the territory very different (Gandolfo & De Bonis, 2011).

The first chain is that of the so-called 'public gambling'. This chain includes the activities carried out (under the control of the Customs and Monopoly Agency) by some private entities to which the State, through a concession, recognizes the public powers related to the exercise of gambling (Mataluni, 2013). This supply chain provides the most popular and widespread forms of gambling through a commercial network widely distributed throughout the territory, consisting of betting agencies, 'shops' and 'corners'.

A second chain includes the activities carried out by licensed casinos. They are joint stock companies whose capital is held by some local administrations (Regions, Provinces or Municipalities). Specifically, in Italy there are only four active structures of this type: Venice Casino, San Remo Casino, Campione d'Italia Casino and Casino de la Vallè-Saint Vincent. These casinos, concentrated in northern Italy, have long offered exclusively casino games (card games and slot machines).

Starting in 2006, by virtue of the regulatory dictate of the Bersani Decree and the subsequent Abruzzo Decree of June 2009, the Customs and Monopoly Agency issued a series of rules for the regulation of online gaming, which allowed the operators of the 'public gambling' chain to sell through the Internet the traditional games that they already offered through the land-based distribution network (Sbordoni, 2010). The legalization of online gambling has also allowed the concessionaires of the public gambling chain – and also new gaming operators – to offer only via the Internet the casino games that until the beginning of the new millennium had been provided exclusively by the four authorized casinos present in Northern Italy. The regulatory provisions have therefore meant that all types of bets that were already sold through the physical distribution network and casino games are now also offered through the Internet.

Nonetheless, the many types of games offered via the Internet can still be divided into two macro-groups: a first that includes the categories of 'traditional' bets – Lotto, Lotteries, Totalisator Numerical games (Superenalotto), Bingo, Sports-based Games, Horse Betting, Virtual Betting – that even before the complete legalization of Internet gambling was provided through the land-based network; a second macro-group that includes the cd. Casino games (in particular card games, such as Poker, and online slot machines), that were previously offered exclusively in the four casinos authorized in Italy, and that until 2008 were sold on the Internet, but not at the land based distribution network (except in a different form, as far as slot machines are concerned). The impact that Internet distribution has had on gambling behavior is therefore strongly differentiated in that only for the first macro group of

'traditional games' the player can choose between the two different distribution channels, the physical and the digital, to access gambling; for the second macro group, instead, the consumer can access the games through the Net (or through the four authorized Casinos concentrated in northern Italy).

#### 4. Aims and Methodology

This work intends to contribute to the theme of the relationship between nature and characteristics of the games and online purchase decisions. In particular, the study focuses on some traditional types of bets – Lotto, Lotteries, Totalisator numerical games (Superenalotto), Bingo, Sports Based Games, Horse Betting, and Virtual Betting – that in Italy are offered both through land-based distribution network (betting agencies, 'shops', 'corners' and Bingo halls), and gambling web sites.

The aim of this work is, therefore, to examine how the nature and the specific structural characteristics of the different types of 'traditional' games legally sold in Italy have influenced the consumer's choice between two different purchase channels, the physical and the digital. Thus, consequently, also influencing the degree of development of online sales for the different types of games.

The decision to use the Italian market as a geographical survey unit appears consistent with the aim of this work, as it allows us to examine the consumer purchasing processes in a very mature market, in which access to Internet gambling is now consolidated. This market in 2020 ranks second in terms of GGR in Europe (Statista, 2022), and is characterized by online gambling sales that, as of 2019, now claims one-third of the overall Italian gambling market (Customs and Monopoly Agency, 2020).

From a methodological view, to examine the impact of the nature and structural characteristics of games on the consumer's choice between online and land based distribution channels, it has been examined how these characteristics have influenced the consumer's online gambling experience. In the specific, we proceeded: 1) to identify and analyse the nature and the main structural characteristics of the games under study; 2) to identify the main categories of differential advantage usually associated with the use of the Internet to purchase gambling products; 3) to examine how the nature and the specific structural characteristics of the games may have influenced the perception of the potential advantages associated with online gambling, determining different levels of consumer appreciation in the use of the digital purchase channel in respect to the physical one.

Consistent with this approach, the following key structural characteristics of the games sold in Italy were first identified and analysed:

- 1) Nature of the game (skill game or luck game);
- 2) Basic features of the game (betting configurations, event frequency, time between bet and outcome, ways of defining the potential win – totalisator betting vs. fixed-odds betting –);
- 3) Availability, in relation to the year of legalization of the game;
- 4) Accessibility, measured by the number of physical points of sale to access the game and their distribution throughout the territory;
- 5) Level of standardization/diversity of the game offerings, linked to the number of gambling concessionaires and the diversity of game offerings by gambling operators;
- 6) Level of pay-out, measured in terms of differences in pay-out between gambling operators and between online and offline gambling.

Next, the main categories of advantages potentially associated with the use of the Internet to purchase games were identified. Findings from empirical investigations conducted in different nations (Calvosa, 2015; Hing et al., 2014; Humphreys & Perez, 2012; Gainsbury et al., 2012; Parke et al., 2012; Wardle et al, 2011; Wood & Williams, 2007; Wood, Williams and Lawton, 2007) which allowed us to bring out the main reasons why bettors typically use the Internet to access games. Although some differences are found concerning the different national contexts under investigation, these studies show that the choice of the online gambling by consumers is guided, with varying intensity, by a series of differential benefits, which can be usefully traced to five macro-categories of advantage described below:

1. Time advantage: the reduced time required to place bets; access to games 24 hours a day; ability to place 'last minute' bets;
2. Convenience/quality in the consumer experience: convenience of buying from home; possibility of access to the games avoiding crowds and queues of customers; possibility of playing without frequenting an unpleasant

environment from a social point of view; privacy on gaming activities (possibility of betting without being seen by other players);

3. Variety and choice alternatives: greater variety of events on which to bet; possibility to switch in real-time from one gaming operator to another; possibility to play on the same website also other types of games;

4. More information to win: possibility to search for the best odds of the game through the comparison on the Net; more information to make the best bets and increase the chances of winning; possibility to have a detail of the bets made over time;

5. Economic convenience: higher pay-outs (winning percentages) compared to games purchased at physical betting shops; lower costs to access the game (e.g. monetary costs of moving to the physical distribution network).

To examine the nature and structural characteristics of the various game categories under investigation and study their relationship with the potential benefits of online gambling as just described, a series of information coming from the following indirect sources have been appropriately elaborated: academic journals, research companies, bodies and organizations for monitoring the gambling sector – Observatory on online games of the Polytechnic of Milan, Censis and Observatory on regulated sectors and infrastructures of Casmeff –, news agencies and magazines specialized in the gambling sector. In particular, to deepen the analysis of the level of development of Internet gambling in terms of sales for different types of games and examine in detail some structural factors that characterize the games, the information made available by the Italian Customs and Monopoly Agency was very relevant. Central, specifically, were the data and elaborations provided through the reports ('Blue Book') that the Agency prepares every year (Customs and Monopoly Agency, 2020; 2019; 2018; 2017; 2016), in which the economic revenues and the regulations relative to the various sectors it administers on behalf of the State, including the gambling sector, are reported and analyzed.

### 5. The Influence of the Nature and Structural Characteristics of Games on the Online Purchase Decisions: The Result of the Analysis in the Italian Gambling Market

In order to examine the influence of the nature and structural characteristics of the games on the online consumer experience and, thus, its impact on the volume of online sales, it is useful as an introduction to describe the main market data of the different types of traditional games offered in Italy. Table 1 shows the overall data (taking into account both the physical and the online sales channel), relative to 2019, of amount, wagered, pay-out, gross gambling revenues, and contribution to the Treasury, for each of the gambling categories under study.

Table 1. The traditional games under study: total amount wagered, gross gambling revenues, pay-out, contribution to the Treasury. Italian regulated gambling market. The year 2019 (millions of euros)

|  | Total amount<br>wagered | Pay-out | Gross Gambling<br>revenues | Contribution to the<br>Treasury |
|--|-------------------------|---------|----------------------------|---------------------------------|
| Lotto  | 8,149                   | 5,781   | 2,369                      | 1,120                           |
| Lotteries                                      | 9,228                   | 6,745   | 2,483                      | 1,370                           |
| Totalisator numerical games<br>(Superenalotto) | 1,809                   | 1,106   | 703                        | 513                             |
| Bingo  | 1,651                   | 1,158   | 485                        | 191                             |
| Virtual bets                                   | 1,982                   | 1,674   | 307                        | 68                              |
| Sports based games                             | 12,514                  | 10,917  | 1,598                      | 350                             |
| Horse betting                                  | 506                     | 381     | 125                        | 19                              |

Source: Customs and Monopoly Agency (2020).

From the table, it emerges that the main gambling categories in terms of sales are Sports-based games, Lotteries and the Lotto. If, however, we focus our attention on online sales, the situation changes radically. Lotteries and Lotto, in fact, are at the bottom of the list in terms of sales through gambling websites, while for Sports based games the volume of online bets has reached significant values – 7.7 billion in terms of the total amount wagered and 730 million euro in terms of Gross Gambling Revenues in 2019 – which have led this type of game to weigh for more than three-quarters of the total online collection of the gambling categories analyzed. This suggests that the use of the Internet to access games is very diverse. To better understand this, in Figure 2 it is graphically compared over time, for each category of bets examined, the sales data of online gambling with the overall sales data (made both through physical distribution channels and through the Internet).

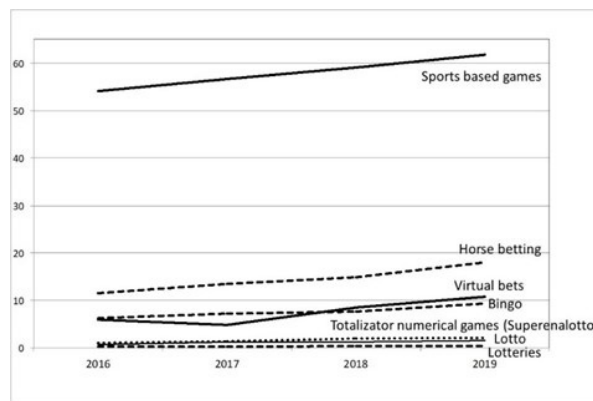


Figure 2. Percentage incidence of the online amount wagered in respect to the total amount wagered (online and land-based) for the ‘traditional’ game categories examined. Years 2016-2019 (Italian gambling market)

Source: our processing data from Customs and Monopoly Agency.

The data shown in Figure 2 indicate very different choices of the players in terms of the use of the purchase channel for the different gambling categories. In the following, we proceed for each of these gambling categories to examine, in line with the aims of this work, in which way the nature and the structural characteristics of the game could have influenced the degree of appreciation by the consumers of the game via Internet, contributing to determining such a diversified level of online sales.

#### 5.1 The ‘Classic games’: Lotteries, Lotto and Totalisator Numerical Games

The first series of games to be examined is that of the ‘classic games’, such as the Lotteries, the Lotto and the Totalisator numerical games (Superenalotto). These types of games are united, as described below, by a similar nature of play and structural characteristics. They are defined as classic because among the games analyzed, they are those that have been sold the longest on the Italian market. In box 1, some basic features of these games are described in an introductory way.

##### Box 1. Basic features of classic games

**Lotto.** The Lotto game is based on the random drawing of 5 numbers ranging from 1 to 90, on different ‘wheels’ linked to the cities where the draw takes place. The bettor can bet on the draw from 1 to 5 numbers. The number of winnings varies according to the combinations on which you bet and is determined at the time of the bet.

**Lotteries.** Two types of games fall into this category, traditional lotteries and instant lotteries. Lotteries, in general, involve the bettor purchasing a lottery ticket, identified with numbers and letters. The amount of the win is known already at the time of the bet. In the case of traditional lotteries, the drawing of the winning tickets takes place after the purchase of the ticket (on a predetermined day). For instant lotteries, better known as ‘scratch and win’, the player, once he has bought a ticket, can instantly find out the outcome of his bet by scratching a special paint underneath which are a series of numbers or symbols. This allows him to check, based on the rules of the game, whether he has won.

**Totalisator numerical game.**; Superenalotto falls into this category: it is a game of chance based on choosing a combination of 6 random numbers at the time of betting. For this game at the time of betting it is not possible to know the amount of any winnings. The prize pool, in fact, at the end of the event is divided, net of taxes due to the State and the proceeds of the gambling operators, among all those who have bet on the winning forecast. Other residual forms of this type of game (in terms of volume of bets) are the Super Stars number, the Eurojackpot and the Win For Life, all totaliser games based on the choice of the combination of random numbers.

Source: our elaboration from Customs and Monopoly Agency.

Consistent with the aims and methodology of the work, the nature and main structural features of these games were analyzed, briefly described in Table 2.

Table 2. The ‘classic’ games: Lotto, Lotteries and Totalisator numerical games. The nature and main structural characteristics of games (the data year 2019)

|   |   | <b>Lotto</b>                      | <b>Lotteries</b>                         | <b>Totalisator numerical games (Superenalotto)</b> |
|---|---|-----------------------------------|--|--|
| <b>Nature of the game</b>                                       |   | <i>Luck game (game of chance)</i> | <i>Luck game (game of chance)</i>        | <i>Luck game (game of chance)</i>                  |
| <b>Game structural characteristics</b>                          |   |                                   | <i>Long term</i>                         |  |
|   | Time between bet and outcome                      | <i>Medium term</i>                | <i>Short term, for instant lotteries</i> | <i>Medium term</i>                                 |
| <b>Basic features</b>   |   |                                   | <i>Limited</i>                           |  |
|   | Event frequency                                   | <i>Three times a week</i>         | <i>High, for instant lotteries</i>       | <i>Three times a week</i>                          |
|   | Type of prize definition                          | <i>Fixed odd betting</i>          | <i>Fixed odd betting</i>                 | <i>Totalisator betting</i>                         |
| <b>Availability</b>   | Year of legalization                              | <i>1863</i>                       | <i>1911</i>                              | <i>1950</i>  |
| <b>Accessibility</b>  | Number of physical points of sale                 | <i>34,538</i>                     | <i>58,790</i>                            | <i>31,829</i>                                      |
|   | Level of widespread distribution                  | <i>Very high</i>                  | <i>Very high</i>                         | <i>Very high</i>                                   |
| <b>Level of standardization vs. diversity of game offerings</b> | Number of gaming concessionaires                  | <i>1</i>                          | <i>1</i>                                 | <i>1</i>   |
|   | Diversity of game offerings by gambling operators | <i>Zero</i>                       | <i>Zero</i>                              | <i>Zero</i>  |
| <b>Pay-out difference</b>                                       | Between gambling operators                        | <i>Zero</i>                       | <i>Zero</i>                              | <i>Zero</i>  |
|   | Online vs. land-based distribution                | <i>Zero</i>                       | <i>Zero</i>                              | <i>Zero</i>  |

Source: our elaboration.

We then proceeded to examine how the nature and also the structural characteristics of these games may have influenced the perception of the potential advantages – described in the section dedicated to the methodology of this work – associated with online gambling. We refer to the advantages in terms of time and those linked to the quality of the customer experience; the benefits related to the alternatives of choice and the availability of more information to make the best bets, as well as the potential positive economic returns.

From the analysis, it has emerged, in the first place, that these classic games are characterised, as a rule, by a certain temporal distancing between the moment of the bet and the moment of the win (a distancing that becomes particularly large for the traditional Lotteries) and by an event frequency that tends not to be high. This makes the rapidity benefit of betting offered by the online game limitedly relevant. Only for instant lotteries, the temporal distancing between the moment of the bet and the moment of the win is minimal, but even in this case, there is not a significant time advantage of the recourse to the online game modality, since in most cases the decision to play comes from the moment in which one accesses the point of sale.

Relative to the potential benefits of quality/convenience of the gaming experience, it is important to note that the distribution of betting shops, (from which are included bars and tobacconists) is particularly extensive, with tens of thousands of points of purchase scattered throughout the national territory. This aspect, combined with the significant amount of time that, as a rule, the player has available to make bets, means that the advantage of convenience typical of online gambling is not particularly relevant. The consumer, between the start time of the bet and the time of the result of the bet, is often found to attend the physical points of sale, even to make other purchases (as in the case of bets made in bars or tobacconists), and often the decision to play comes when you access the point of sale.

As far as the advantage relative to the alternatives of choice is concerned, there appears to be nothing, In as much that the games offer for each of these categories of bets are standardized, This provides for unique types of bets and odds of winning, offered by the sole concessionarie authorized by the State to sell these games. This aspect renders the comparison between the game proposals offered by the online and physical points of sale irrelevant, and, therefore, cancels the typical advantage of the online game of the possibility of research and rapid comparison between differentiated offers (in terms of game modes and odds of winning) proposed on the market.

Again, the advantage associated with the possibility of having information available via the Net to increase the probability of winning is also null and void. The games in question fall, in fact, in the category of games of pure



luck, as the winning is linked to the extraction of numbers or random combinations. The probability of winning is therefore not conditioned by the greater availability of useful data to improve the effectiveness of the bets.

The standardization of the game offerings in terms of game forms, bets and winnings, also renders the potential advantage nullified in terms of economic convenience of online game offerings, while the capillary distribution of points of sale on the territory renders the advantage connected to the saving of travel costs at the physical distribution network for access to the game minimal.

In conclusion, from the analysis, it emerges that for the classic game categories just described, the nature and structural characteristics mean that the potential advantages normally associated with online gambling appear almost insignificant. This helps to understand why the level of Internet sales is very limited. In fact, from Figure 2, reported earlier, it emerges that, in 2019, the incidence of online amount wagered in respect to the total amount wagered (online and land-based) was 0.4 per cent for Lotteries, 1.4 per cent for Lotto and 2.2 per cent for Totalisator numerical games. Even the data on the number of consumers who play at least once a year online (between three and four hundred thousand), if compared with those of other types of games under analysis, indicate a very low level of diffusion of online gambling among players.

### 5.2 The Bingo Games

Bingo is a game of drawing lots for numbers or symbols on cards purchased from the betting machine, the object is to tick as many numbers or symbols as possible on your cards from those drawn. The game ends when a player ticks all the numbers on a card. Also for this category of game, the analysis was developed by first identifying and examining the nature and main structural characteristics of the game, briefly described in Table 3.

Table 3. Bingo: the nature and main structural characteristics of game (the data year 2019).

| <b>Nature of the game</b>                                | <i>Luck game (game of chance)</i>                 |                            |
|--|---|----------------------------|
| <b>Game structural characteristics</b>                   |   |                            |
|  | Time between bet and outcome                      | <i>Short term</i>          |
| Basic features   | Event frequency                                   | <i>High</i>                |
|  | Type of prize definition                          | <i>Totalisator betting</i> |
| Availability   | Year of legalization                              | <i>2000</i>                |
| Accessibility  | Number of physical points of sale                 | <i>198 (Bingo halls)</i>   |
|  | Level of widespread distribution                  | <i>Low</i>                 |
| Level of standardization vs. diversity of game offerings | Number of gaming concessionaires                  | <i>198</i>                 |
|  | Diversity of game offerings by gambling operators | <i>Significant</i>         |
| Pay-out difference                                       | Between gambling operators                        | <i>Limited</i>             |
|  | Online vs. land-based distribution                | <i>Significant</i>         |

Source: our elaboration.

In analogy with what has been done for the classic games, we then proceeded to analyse how the nature and specific structural characteristics of these games may have influenced the categories of potential advantages associated with the online gaming experience and, therefore, on the levels of online amounts wagered.

By way of introduction, it is useful to clarify that the game of Bingo is played over several rounds. The conclusion of the single game, which occurs when a player ticks off all the numbers on a card, starts a new round of play. Thus, the event frequency is high. The only difference in this respect between in-person and online bingo is that for the online version each game starts within a set number of minutes, to pace the game. However, this difference does not appear to give the online game any particular time advantage. Even the typical benefit of the digital distribution channel relative to the possibility of accessing games 24 hours a day, appears to be of little significance. This is because the opening hours of the bingo halls are very wide, extending from the morning to late at night. On the other hand, there appears to be a significant reduction of access time to gaming because of time required to reach the limited number of Bingo halls (less than 200) present in the territory.

Regarding the advantage in terms of quality/convenience of the gaming experience, a potential benefit emerges in the possibility to play in the comfort of home. This is also in relation to a network of Bingo halls not as developed as for other types of bet. It should be noted, however, that the Italian legislation has expressly given Bingo “the character of entertainment, socialization, and pleasant use of leisure time, differentiating it substantially from other games, based primarily on individual behaviour and distance, both physical and temporal, between the time of the

game and that of winning". Online gaming, therefore, reduces the possibilities of players to socialize and enjoy leisure time, which represents for most customers the main reason for choosing the game. Therefore, in this aspect online gaming seems to have a negative impact on the quality of the overall gaming experience.

The potential advantage of online gambling in terms of alternatives of choice appears to be significant, as the game offerings for this category of betting is diversified in some aspects of the gambling experience. In particular, there is a feature of the game that can influence the perception of customers. Bingo is a totalisator game. This means that bettors pay a fixed fee that flows into a prize pool that is then divided between the winners after taxation and the profit margins of gambling operators. For this type of bet, the quality of the gaming experience is also conditioned by the level of 'player liquidity', i.e. the number of players who participate in any tournament. Only if you involve a large number of players at all hours of the day is it possible to create attractive price pools, and this possibility can be increased through the connectivity potential of the Internet (Flepp et al., 2017). In addition, jackpot prizes may be defined by the different gambling operators, which can slightly differentiate the prizes. In summary, the characteristics just highlighted show the typical advantage of the online gaming, through the possibility of research and rapid comparison between differentiated offers (in terms of mode of play and attractive price pools) proposed on the market for the consumer.

With regard, again, to the potential advantage of online gaming associated with the availability of information to increase the probability of winning, it is noted that Bingo falls into the category of games of pure chance, as winning is linked to the drawing of random numbers. The odds of winning are not affected by the increased availability of online data to improve the efficiency of betting.

Finally, as regards to the potential advantage of an economic nature, it emerges that online Bingo offers average pay-outs generally 4-5 points higher in absolute terms than those offered by bingo halls (Customs and Monopoly Agency, 2020). This is also in relation to the effect of jackpot prizes. A certain benefit can be associated, furthermore, with the lower monetary costs to accessing the game (travel costs, entertainment costs in the room, etc.).

In conclusion, the analysis has shown that the nature and structural characteristics of Bingo make the potential benefits associated with online gambling rather controversial. In particular, some positive aspects of online gaming seem to be counterbalanced by the fact that, in most cases, the choice of Bingo is driven by objectives of socialization and use of free time, that are only satisfied by access to the game through bingo halls. In this regard, a research conducted in 2017 showed that more than 70 percent of those who play Bingo have the habit of going to the bingo halls with friends, signaling the perception of the Bingo room as a meeting place for entertainment activities (Eurispes, 2020). To confirm this, the analyzes of the Customs and Monopoly Agency also appear to indicate that more than half of the players who frequent the bingo halls in Italy do so in a systematic way, repeating the gaming experience over time, often in the same bingo hall. These considerations allow us to understand why for this game, despite some significant advantages associated with online gambling, the occasions in which customers use the Net as an alternative channel of purchase, compared to bingo halls, are still quite limited. From the calculations shown above in Figure 2, it emerges the fact that for bingo the weight of online gambling, despite being higher than that of the classic games and slightly growing, is still content, touching levels of incidence in 2019 close to 10 per cent in terms of sales.

### *5.3 Virtual bets*

This type of betting is based on computer-simulated events that reconstruct the salient moments of sporting events. One of the main differences between classic sports bets (subsequently examined) and virtual bets is the duration of the sporting event, a computer-simulated sporting event lasting a few minutes. This type of bet is of the fixed odds type. Odds are assigned by a certified computer system and are created so that competitors with a higher probability of being drawn have lower odds and vice versa (Cestari, 2013). In line with the analysis methodology adopted, the main structural characteristics of this game were first identified and examined, which are briefly described in Table 4.

Table 4. Virtual bets: the nature and main structural characteristics of game (the data year 2019)

| <b>Nature of the game</b>                                | <i>Luck game (game of chance)</i>                 |  |
|--|---|--|
| <b>Game structural characteristics</b>                   |   |  |
| Basic features   | Time between bet and outcome                      | <i>Short term</i>                                  |
|  | Event frequency                                   | <i>High</i>  |
|  | Type of prize definition                          | <i>Fixed odd betting</i>                           |
| Availability   | Year of legalization                              | <i>2006 (legalized)<br/>2013(sales start year)</i> |
|  | Number of physical points of sale                 | <i>9,263</i>                                       |
| Accessibility  | Level of widespread distribution                  | <i>High</i>  |
|  | Number of gaming concessionaires                  | <i>223</i>   |
| Level of standardization vs. diversity of game offerings | Diversity of game offerings by gambling operators | <i>Quite significant</i>                           |
|  | Between gambling operators                        | <i>Quite limited</i>                               |
| Pay-out difference                                       | Online vs. land-based distribution                | <i>Quite limited</i>                               |

Source: our elaboration.

In analogy to what has been done for other games, we then proceeded to analyse how the nature and specific structural features of such a game may have impacted the categories of potential advantages associated with the online gambling experience.

With regard to the potential benefits in terms of time, it has been pointed out that Virtual best involves the electronic simulation of a sporting event that is completed in a few minutes. The benefit of the rapidity of betting offered by the online game does not appear very relevant, since even in the betting shops one can bet every day, with matches available at intervals of a few minutes from each other. More significant may be the perceived time advantage in relation to the possibility of online gaming 24 hours a day, as well as the time saving required to access the betting through the betting shops.

Regarding the potential advantages of quality/convenience of the gaming experience, it is necessary to consider that Virtual bets simulate sports events that are streamed as real matches (showing however only the salient actions), in a very similar way to what already happens for real sports events. On the one hand, therefore, the player can perceive the benefit of convenience related to the possibility of betting without moving from home; on the other hand, the online gaming experience may reduce the possibility of sharing the vision on large screens of the event simulated in the betting shops, an aspect particularly relevant for customers for whom this game also has the purpose of socialization and the use of free time.

As far as the potential advantage of the online game relative to the alternatives of choice is concerned, virtual betting is characterized by the presence of a significant number of gaming concessionaires (223) that propose a games that are partially diversified in terms of sports, game modalities, betting odds and bonuses. The typical advantage of the online game represented by the possibility of research and rapid comparison between differentiated game offerings proposed on the market is, therefore, quite significant.

Regarding, instead, the potential advantage associated with the possibility of having information through the Internet to increase the odds of winning, it should be noted that Virtual bets also fall into the category of games of pure luck. The results of sporting events are determined randomly by a certified computer system, which also defines the odds. The odds of winning are not affected, therefore, by a greater availability online of useful data to improve the effectiveness of betting.

Finally, with regard to the potential advantage of an economic nature, it emerges that the gaming offer is limitedly diversified in terms of betting odds offered by the various gambling operators and between online and offline sales channels. The sales data for the period 2016-19, suitably processed, report in this regard quite similar pay-out quotas between these two sales channels. Aspects of affordability, therefore, are mostly confined to cost savings for shifting to betting shops. This benefit, moreover, is quite limited, considering the ease of reaching the approximately 9,000 betting shops distributed throughout the territory.

In conclusion, the analysis highlights how for Virtual Bets the nature and structural characteristics of the game partially valorize some potential benefits associated with online gambling, but, as happened with the game of bingo, these benefits are partially offset by a gaming experience that is often associated with objectives of socialization and use of free time, satisfied by gambling in betting shops. This helps to understand why for this category of the game the traditional betting agencies are still the principal channel of access to the game. In fact, gambling data elaborations show that in 2019 for Virtual bets, similarly to Bingo, the weight of online gambling touched incidence levels in terms of collection close to 10 per cent. In addition, the number of players who at least once in 2019 made a bet online, just under 600,000, appears rather contained, in relative terms, when compared to the number of online players of traditional sports betting.

#### 5.4 Sports-Based Games

This type of game includes bets based on the ability to predict the outcome of sporting events. Two different bet subtypes fall into this game category:

- Totalisator sports betting. These bets are those for which, at the time of betting on a sporting event, it is not possible to know the amount of any winnings. The prize pool, in fact, at the end of the event is divided, net of taxes due to the State and the proceeds of the gambling operators, among all those who have bet on the winning forecast. Specifically, the following types of games are part of this betting category: Totocalcio and '9', Totogol and Big Match;

- Fixed-odds sports betting. Such bets are those for which the players are aware of the amount of the win already at the time of the bet. It is predefined at the time of purchase by multiplying the amount wagered by the odds combined with the predicted sporting event decided by the gambling operator.

It should be noted that since 1998, with the legalization in Italy of fixed-odds sports betting, there has been a process of almost complete replacement between Totalisator sports betting and Fixed-odds sports betting. The latter represents, now to 2019, 99.7 percent of the total amount wagered of Sports-based games. Below, therefore, when analyzing the structural characteristics of the game, reference is made to fixed-odds sports betting, given the significance in terms of sales now almost zero of Totalisator sports betting. Thus, the nature and main structural characteristics of Sports-based games, briefly described in Table 5, were identified and examined.

Table 5. Sports-based games: the nature and main structural characteristics of game (the data year 2019)

| Nature of the game                                       | Skill game  |                   |
|--|---|-------------------|
| <b>Game structural characteristics</b>                   |   |                   |
| Basic features   | Time between bet and outcome                      | Short/Medium term |
|  | Event frequency                                   | High/medium       |
|  | Type of prize definition                          | Fixed odd betting |
| Availability   | Year of legalization                              | 1998              |
|  | Number of physical points of sale                 | 10,061            |
| Accessibility  | Level of widespread distribution                  | Very high         |
|  | Number of gaming concessionaires                  | 223               |
| Level of standardization vs. diversity of game offerings | Diversity of game offerings by gambling operators | Significant       |
|  | Between gambling operators                        | Significant       |
| Pay-out difference                                       | Online vs. land-based distribution                | Very significant  |

Source: our elaboration.

We then proceeded, also for this category of bet, to analyse how the nature and specific structural characteristics of the game may have influenced the categories of advantage potentially associated with the online gambling experience.

The analysis shows, firstly, that for this game the time distance between the moment of the bet and the moment of the win depends on the calendar of the sporting events on which one intends to bet. In proximity to the start of these events, therefore, the factor 'time of purchase' assumes a significant relevance. There are, therefore, a series of differential advantages in terms of time guaranteed by the online game, such as the reduction of betting times, the possibility of more easily making 'last minute' bets (in the proximity of sporting events), as well as playing beyond the traditional opening hours of the betting agencies present on the territory (betting on national and international sporting events that take place at all hours of the day). Even the recent introduction of the possibility

to play in live mode (Pandimiglio & Spallone, 2012), i.e. during the course of some of the sporting events, having potentially increased the event frequency, seems to have greatly accentuated the perception of temporal advantage guaranteed by the online game.

From the analysis also emerges a series of advantages guaranteed by the digital channel of purchase, in terms of convenience and quality of the consumer experience. If on the one hand, in fact, it is not difficult to access the points of sale distributed throughout the territory, as there are more than 10,000; on the other hand, for many players, given the high and continuous volumes of bets, can be positively perceived the possibility to play avoiding the queues of customers present in the physical points of sale (often very crowded in the moments immediately before the start of a series of sporting events), as well as being able to bet at a distance without being seen by other players (thus enjoying a benefit of privacy). To this is added the positive effect of being able to bet comfortably 'on the move', through smartphones and other mobile devices.

As far as the potential advantage of the game online relative to the alternatives of choice is concerned, it appears quite significant, in that the game offerings, proposed by 223 concessionaires, is partially diversified in terms of game modalities and events and is diversified in terms of the betting odds offered. The potential advantage of online gaming is linked to the possibility of a better knowledge of gambling operators and of the range of services offered, which facilitates the search and rapid comparison between differentiated offers (in terms of game modes and odds of winning) proposed on the market, is therefore quite significant.

There are, again, some advantages of the online game in terms of more information. An important aspect that, in fact, distinguishes the nature of this game compared to other types analyzed so far is that winning also plays a role in the player's level of knowledge of sporting events on which to bet. This game in fact falls into the category of skill games, as the probability of winning is conditioned not only by an element of luck, but also by the information available to players and their ability to process it to increase the ability to select the sporting events on which to bet and to predict the relative results. Access to the Internet, therefore, increases the availability of data – obtained through access to databases, online discussion forums and software tracking of bets placed – useful to improve the effectiveness of betting and thus increase the probability of winning.

Finally, the study also shows significant economic advantages related to online gaming. The direct sale to the consumer, without the intermediation of the physical network, allows gambling operators to benefit from cost savings that can be partly passed on to the customer in the form of better betting odds offered. Confirming this, if we elaborate on the data provided by Customs and Monopoly Agency relating to 2019, we find that the pay-out – the percentage of sums wagered that goes back to players in the form of winnings, which is a direct consequence of the level of odds offered to players – for bets placed via the Internet is 90.5 per cent, against a significantly lower value of 82 per cent for bets placed via physical betting agencies.

In conclusion, the analysis carried out has made it possible to highlight that the nature and structural characteristics of Sports-based games have a very positive influence on the online gaming experience. This helps to understand why, for such games, the incidence of online gambling on overall betting volumes exceeded 60 per cent in 2019 in terms of amount wagered, making betting websites the main channel of access to gaming in Italy. Consistent with these data, the number of online sports betting players in Italy also turns out to be the highest of all online gambling categories offered in Italy, exceeding 2.2 million customers in 2019. Sports betting also turns out to be the most popular type irrespective of age groups, maintaining a majority share of preferences in both the 18-34 (71.5 per cent) and 35-64 (61 per cent) groups (Osservatorio Gioco online, Politecnico di Milano, 2018).

### *5.5 Horse Betting*

Bets on horse racing events fall into this category. Specifically, the types of bets legal in Italy are called National horse racing and V7. This type of gambling includes both totalisator bets, which consist in identifying the order of arrival of the running horses to share a part of the prize pool; and fixed-odds bets, which also include the possibility of placing bets on multiple races in combination with each other. In this case, the potential payout is equal to the product of the odds offered for the individual events wagered for each race. By analogy with what has been done for the other betting categories, the nature and the main structural characteristics of this game have been identified and analysed, which are briefly described in Table 6.

Table 6. Horse betting: the nature and main structural characteristics of game (the data year 2019).

| Nature of the game                                       | Skill game  |  |
|--|---|--|
| <b>Game structural characteristics</b>                   |   |  |
| Basic features   | Time between bet and outcome                      | <i>Short/medium term</i>                                   |
|  | Event frequency                                   | <i>Medium</i>  |
|  | Type of prize definition                          | <i>Totalisator betting</i><br><i>Fixed odd betting</i>     |
| Availability   | Year of legalization                              | <i>1948</i>  |
| Accessibility  | Number of physical points of sale                 | <i>6,683</i>   |
|  | Level of widespread distribution                  | <i>High</i>  |
| Level of standardization vs. diversity of game offerings | Number of gaming concessionaires                  | <i>223</i>   |
|  | Diversity of game offerings by gambling operators | <i>Limited</i>   |
| Pay-out difference                                       | Between gambling operators                        | <i>Quite significant</i><br><i>(for fixed odd betting)</i> |
|  | Online vs. land-based distribution                | <i>Significant</i><br><i>(for fixed odd betting)</i>       |

Source: our elaboration.

We then proceeded, also for this type of bet, to analyse how the nature and specific structural characteristics of the game may have influenced the categories of advantage potentially associated with the online gambling experience. From the analysis it emerges, in the first place, that this game is characterised, in the majority of cases, by a contained temporal distance between the moment of the bet and the moment of the winnings (time expended by the calendar of horse racing events on which it is possible to bet), therefore attributing a certain relevance to the 'purchase time' factor. It is highlighted, therefore, differential advantages in terms of time guaranteed by the online game, such as the reduction of betting time and the possibility to make bets more easily at the last minute. These advantages appear, however, partly offset by fairly simple access to the distribution network of physical type, considering the 6,683 betting shops that provide this type of game throughout the national territory. Less significant, instead, appears the advantage of the possibility to play beyond the traditional opening hours of the betting shops, as the bets are mainly placed on national sporting events that usually take place from morning to evening. It is therefore possible to attend such events and to play directly during the opening hours of racecourses and betting shops.

As regards the effects of purchasing via the Internet on the convenience and quality of the consumer experience, on the one hand, there are some potential advantages related to the possibility of playing without moving from home, while avoiding the possible queues of customers present at physical points of sale (especially near horse racing events) and being able to bet without seen by other players; on the other hand, the online gaming experience may reduce the possibility of sharing the vision of the horse racing event in racecourses or on large screens in betting agencies, an aspect that is particularly relevant for historical customers for whom this type of gaming is also linked to socialization and leisure time purposes. It is not by chance, in fact, that it is within what was once called 'horse racing agencies' that gaming is prevalently developed.

As far as the potential advantage of online gambling relative to the alternatives of choice is concerned, it appears to be not very significant, in that the offer of gambling is not very diversified, given that the authorised Horse Racing Events on which it is possible to bet are defined by the Customs and Monopoly Agency, and are not differentiated in relation to the purchase channel (physical or online).

They emerge, however, some advantages of online gaming in terms of more information available. These games, similarly to what happens for other sports betting, are classifiable as skill games, as to win, next to the element of luck, plays a role in the ability of the player to know thoroughly the horse racing events on which to bet. Through the Internet, you can get useful data to improve the effectiveness of the bets and increase, therefore, the chances of winning.

Finally, there are also economic advantages associated with online gambling. In fact, it is convenient in terms of odds offered by authorized dealers, taking into account the lower costs that they incur with the sale via the Internet. In confirmation of this, the data provided by the Customs and Monopoly Agency relating to 2019, opportunely processed, shows that the pay-out for fixed odds horse racing bets made via the Internet is equal to 80.2 per cent, compared to a lower value, equal to 74 per cent, for those made through the land-based distribution network.

In conclusion, the analysis shows that the nature and structural characteristics of Horse betting value some of the typical benefits of online gaming, and this has allowed a certain level of shift in purchases from the offline channel to the online channel, although much more contained if you compare with what happened with other sports bets. Data provided by the Customs and Monopoly Agency show in this regard that, in 2019, around one-fifth of purchases are made via gambling websites. The still rather contained development of online sales, in particular, appears to be linked to the needs for socialization and free time that often drive horse racing bets to physical sales points, especially for players who want to attend races at racetracks.

## 6. Conclusions and Managerial Implications

The analysis carried out made it possible to examine the impact of the nature and the structural characteristics of games on the consumer's choice between different purchase channels, contributing to the understanding of the reasons why the level of e-commerce use in a specific sector, that of gambling, is different for different categories of products offered. This work, therefore, contributes to the knowledge of a specific research topic in the field of gambling studies, that has not yet been analyzed in the literature. This research topic is relevant, especially if you consider the increasing number of countries – especially in Europe – that in the last years have introduced and legalized online gambling and the resulting continued growth of online gambling volumes. The findings of the research, then, provide important insights for gambling firms, as discussed below, and they provide a general cognitive framework on the dynamics of the development of the Internet gambling industry to the public policy makers involved in regulating and administering this sector.

More specifically, the results of the research allowed us to show, in line with the aims of this work, that the nature and the specific characteristics of the different types of games sold in Italy seem to have influenced the customers' decisions in terms of choice between digital and physical purchase channels in different ways. In this regards, table 7 summarizes the advantages of online gambling perceived by consumers for each of the gambling categories examined, as it emerged from the analysis carried out in this work.

Table 7. Nature and structural characteristics of games and online purchase decisions: the perceived advantages of on line gambling for the gambling categories examined: A summary of the research results (Italian regulated gambling market)

|   | <b>Time</b>              | <b>Convenience/<br/>quality in the consumer<br/>experience</b>                                | <b>Variety and<br/>choice<br/>alternatives</b> | <b>More<br/>information to<br/>win</b> | <b>Economic<br/>convenience</b> |
|---|--------------------------|---|--|--|---------------------------------|
| Lotto                                       | <i>Limited</i>           | <i>Quite limited</i>  | <i>Null</i>                                    | <i>Null</i>                            | <i>Null</i>                     |
| Lotteries                                   | <i>Very limited</i>      | <i>Limited</i>  | <i>Null</i>                                    | <i>Null</i>                            | <i>Null</i>                     |
| Totalisator numerical games (Superenalotto) | <i>Limited</i>           | <i>Quite limited</i>  | <i>Null</i>                                    | <i>Null</i>                            | <i>Null</i>                     |
| Bingo                                       | <i>Quite significant</i> | <i>Very negative for socialization and leisure time.<br/>Significant for high convenience</i> | <i>Significant</i>                             | <i>Null</i>                            | <i>Significant</i>              |
| Virtual bets                                | <i>Quite limited</i>     | <i>Negative for socialization and leisure time.<br/>Significant for convenience</i>           | <i>Quite significant</i>                       | <i>Null</i>                            | <i>Limited</i>                  |
| Sports based games                          | <i>Very significant</i>  | <i>Significant</i>  | <i>Significant</i>                             | <i>Significant</i>                     | <i>High</i>                     |
| Horse betting                               | <i>Significant</i>       | <i>Negative for socialization and leisure time.<br/>Significant for convenience</i>           | <i>Quite limited</i>                           | <i>Significant</i>                     | <i>Significant</i>              |

Source: our elaboration.

The analysis first showed that for the classic betting categories examined – Lotteries, Lotto, Totalisator numerical games – the nature and the distinctive characteristics of the games give very little emphasis to the potential benefits

usually associated with online gaming. The consumer, therefore, to access to these games uses authorized betting websites sparingly, and this has determined a very reduced development of online gambling.

For Bingo, Virtual bets and Horse betting, instead, some positive benefits of online gaming emerged, but these benefits seem to be counterbalanced by the fact that, in most cases, the choice of play is driven by objectives of socialization and use of free time, that are satisfied by access to the games through bingo halls, betting agencies and racecourses. These considerations allow us to understand why for these games the weight of online gambling, albeit slightly growing, is still contained, touching levels of incidence, in terms of sales, close to 10 per cent (for Bingo and Virtual bets) and to 20 per cent (for Horse betting). Only for Sports-based games the nature and characteristics of the game seem to have fully exploited a number of significant benefits that Internet gambling offers to players. This helps to understand why betting websites for Sports-based games have become the main channel of purchase in Italy.

These findings have some interesting managerial implications. If it is understood that the mechanisms that link the nature and characteristics of the game and the level of use of the Internet for access to betting are structurally linked to different grades of appreciation of the benefit-types offered by e-commerce, it is possible to say that further significant margins of development of online sales of the most of the traditional games analyzed appear to be very unlikely. For Lotteries, Lotto, Totalisator numerical games, Bingo, Virtual bets and Horse Betting, therefore, the physical network will continue to represent the key distribution channel. Thus, the gambling operators should look at e-commerce only as a complementary tool through which they can allow customers: to access the games on particular occasions of use, especially for Lotteries, Lotto, Totalisator numerical games; or to sell gambling products to specific client segments – young people who routinely use e-commerce for shopping, often interested in playing more games via gambling websites –, especially for Bingo, Virtual betting and Horse Betting. Therefore, for these categories of games the so-called ‘multi-channel operators’ (Calvosa, 2013) (the dealers that have been offering the gambling products for many years through the physical distribution network and that have only recently activated the electronic channel for the sale of gaming products) will probably continue to maintain the market leadership, as they can enjoy the advantage of the control of an extensive and widespread physical sales network.

Only for Sports-based games, given that the online gaming experience is particularly appreciated by the consumer, it is possible to imagine a future in which international companies that provide betting services exclusively via the Internet (“Internet pure players”) will increasingly play a leading role. They can indeed enjoy a significant cost/price competitive advantage over multi-channel gambling operators. On the one hand, they can ‘pass on’ to the consumer the lower management costs of the online transaction, in the form of higher winning odds offered to the players (as shown indirectly by the data relative to the higher pay-out distributed by the online channel with respect to the betting shops); and, on the other hand, operating in more national markets, they can enjoy significant economies of scale, as a consequence of the high overall volumes of bets collected at an international level via the Internet.

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