

## Determinants of the development of shooting sports in Poland

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### Abstract

In Poland, there is an increasing number of issued permits for sport firearms. Moreover, what also increases is the demand for weapon for sporting purposes. In 2014, there were 14 894 such permits issued and five years later; that is, in 2019, as many as 35 045 of them. This shift made the researchers pose the question of what are the determinants of the development of shooting sports in Poland. One posed a research hypothesis to the effect that it is not only the willingness for physical activity in a sport that might be recognized as extreme but also other causes that determined the growing interest in permits for sport firearms. The authors assumed that such determinants are: legal regulations; the willingness to possess weapon for self-defense (with the weapon being officially dedicated to sporting purposes); the interest in amateur shooting sports treated as recreational. It was also hypothesized that it is the change in an attitude to weapon from which the general interest therein stems. In USA, there is an increasingly influential movement contesting an easy access to weapon. In Poland, due to relative restrictive regulations, a part of Poles believe that it is too difficult to access firearms and so they must look for solutions to obtain them. While searching for an answer to thus defined research questions, the authors resorted to triangulation of several research methods. The purpose of the paper is to answer the question of which determinants most heavily influenced the quantitative development of shooting sports in Poland. A similar approach to the subject of an access to firearms has not been scientifically studied thus far. The authors established that the main determinant that may point to an increasing interest in permits for sport firearms are definitely legal regulations, which quite possibly testifies to the fact that a part of people boasting shooting licenses might under a different legal regime apply for permits for, say, weapon for the purpose of self-defense.

**Key Words:** shooting sports, firearms

### Introduction

It is obvious that practising shooting sports requires the contestant to possess firearm and to be able to use it. In the majority of states in the world, possessing weapon is tightly regulated by relevant provisions of the law (Braga & Hureau, 2015; Price & Norris, 2010). Also Poland has a rather restrictive system for licensing firearms within several types of permits issued by regulatory bodies. In Poland, the number of items of firearms and of permits for weapon in comparison to other European countries is relatively small, which points to a relatively more restrictive system in the former.

The largest number of permits for weapon per 1000 residents are issued in Finland (almost 110) and in Norway (almost 92). In this ranking, Poland occupies the last position with the number of issued permits being less than 6, which makes Poland surpassed not only by the leaders but also by the countries at the bottom of the ranking; namely, by Hungary and Belgium.

Similar remarks apply to the number of items of weapon per 1000 residents. On the other hand, the question of the number of items of weapon per 1 permit looks different. Granted, in this rating, Poland does not occupy the last position but it surpasses several other countries (Italy, Latvia, Spain and Ireland) (Lewandowski & Zdzitowiecki, 2020).

Despite a relatively low level of the saturation of society with firearms, over the last few years, the number of issued permits for sport firearms in Poland significantly increased (*Gun Ownership on the Rise in Poland*, n.d.). Between 2014 and 2019, the overall number of issued permits for firearms grew by less than 14%, whereas the number of items of weapon possessed within the said permits grew by 44,5%. At the same time, the number of permits for sport firearms grew by as much as 135% and the number of items of sport firearm increased by as much as 190%.

This situation obtains despite quite strict regulations pertinent to an access to firearms. Moreover, the current government coalition is in principle against the liberalization of regulations in this respect (Wantuch, 2017) despite social grassroots initiatives taken towards the change of the prevailing *status quo*.

Table. 1. Division of the resources of weapon in Poland with respect to the purpose for which the permit was issued

The purpose for which the permit for weapon was issued	The number of people who were issued a permit for weapon for a given purpose			The number of items of weapon registered by people holding firearms license			The number of items of weapon per person (2019)
	2014	2019	Change in %	2014	2019	Change in %	
personal security	62 693	33 528	-47	66 782	37 860	-43	1,1
protecting persons or property	67	9	-87	68	10	-85	1,1
hunting	116 293	129 347	11	272 313	339 320	25	2,6
sport	14 894	35 045	135	30 551	88 777	191	2,5
historical reenactments	33	68	106	126	281	123	4,1
collecting	1 520	24 031	1481	8 357	78 006	833	3,3
commemorative	1 755	1 727	-2	2 483	2 508	1	1,5
instructional	149	723	385	741	4 474	504	6,9
Other purposes	191	173	-9	167	174	4	1,0
<b>in total</b>	<b>197 595</b>	<b>224 651</b>	<b>14</b>	<b>381 588</b>	<b>551 410</b>	<b>45</b>	<b>2,5</b>

Source: own work on the basis of: *(Broń - pozwolenia* [Weapon - permits], n.d.).

The above data clearly indicates that shooting sports develop dynamically in Poland. In the light of this fact, the following research problems were posed:

- P.1: What caused the growing interest in shooting sports in Poland?
- P.2: What is the present attitude of Poles towards firearms?

In order to solve the above research problems, the following hypotheses were stated:

- H.1: The growing interest in shooting sports is connected with amendments in legal regulations.
- H.2: The growing number of issued permits for sport firearms might result from a sense of personal insecurity.
- H.3: Poles do not fear the access to firearms, which contributed to the growing interest in shooting sports.

The purpose of the present paper is an attempt to point to the factors contributing to the dynamic development of shooting sports in Poland, the tangible manifestation of which is the growing interest in sport firearms. The authors in their research try to identify the major determinants of the growing interest in sport firearms in Poland, while pointing to economic factors (income), legal ones (the implementation of new legal solutions and formal restrictions stemming from relevant regulations) as well as sociological ones (a sense of insecurity or a certain culture of possessing firearms), with the analysis of economic factors being a subject matter of a separate study.

### The analysis of literature

Shooting as a sport discipline is not a very popular field of study, especially in social science (Lis & Tomanek, 2020). The majority of social studies conducted in the state boasting the best access to firearms; viz., in USA, relate to the research connected with criminology, especially with the issues pertaining to the relations between an access to firearms and suicides and the use thereof for criminal purposes. Accessibility of weapon implies the higher risk of suicide committed at home (Kellermann et al., 1992), mass murders, the problem of school shooting as a source of apprehension and fear at schools (Muschert & Peguero, 2010) or homicides. Instead of providing security, weapon kept at home implies the increase in the risk of killing a family member or a close acquaintance (Kellermann et al., 1993). The research demonstrated that poverty and income are powerful predictors of homicides and brutal crimes (Kennedy et al., 1998).

Restrictively licensing handgun contributed to a rapid decrease in the number of homicides and suicides by firearms in the District of Columbia. A similar decrease was not recorded in the case of homicides and suicides in which weapon was not used. Neither was there any decrease in neighboring metropolitan areas in which restrictive licenses were not legally effectuated (Loftin et al., 1991). In 1991, 1994 and 2001, Canada implemented a series of legal provisions regulating the issue of firearms, including the verification of applicants' criminal record, psychological tests, licensing and training. It was established that legal regulations pertinent to firearms did not exert any favorable impact on the overall index of suicides and homicides. The commonness of possessing firearms was not connected with indices of suicides (Langmann, 2020). Other investigations proved that in developed countries, in which weapon is more readily accessible, there are more homicides (Hemenway & Miller, 2000).

The debate over an access to weapon – and mainly over licensing it – unfolds in Poland; however, despite cultural differences, both proponents and opponents of an access to weapon take heed of solutions implemented in USA. In present-day America, there are from 250 to 300 million items of firearms in private hands, which yields one item of weapon per one American citizen. Researchers warn us against the belief that there is indeed a solution with respect to controlling weapon, with the solution – providing there is political will to adopt it – being able to limit violent crimes (Jacobs, 2012).

What is interesting are the research results that indicate what heavily influences women's attitude to weapon is their upbringing. The majority of female subjects owning weapon grew up with firearms in their respective houses. It seems that possessing weapon at home in their childhood makes them to a certain degree tolerant to weapon, which tolerance can be reinforced in adulthood via the fear of or contact with a man who is a proponent of weapon himself (Blair & Hyatt, 1995). On the other hand, relatively little attention is paid – even in the state as peculiar as USA, wherein weapon is rather easily accessible – to such issues as gun culture (Yamane, 2017). What is also of interest is the research which has it that the significant majority of people in USA possessing weapon perceives shooting as a form of entertainment (Martin et al., 2014; Murray et al., 2016). Similar research was not extensively conducted in Europe. Interesting conclusions are presented by the researchers analyzing an access to weapon in post-Soviet Georgia. Although Georgian owners of weapon want weapon for self-defense, sport and the affirmation of their masculinity, they do not struggle to oppose the state or to replace its role played in providing collective security (Light & Slonimerov, 2019).

In the context of a special purpose of possessing weapon – that is for shooting sports – a significant part of scholarly research pertains to a method of training sport shooters, the selection of weapon and shooting training (Mon-López & Tejero-González, 2019; Wolfe et al., 2018). There was also the research conducted on psychological predispositions of contestants participating in shooting contests. Moreover, there were studies over the aspects of injuries occurring in shooting sports as well as over the ways of feeding shooting contestants (Kopeć et al., 2013). There are also highly specialist papers regarding, say, the pollution of shooting ranges with heavy metals (Lewińska & Karczevska, 2019).

Scholars reached the consensus that science involved in competitive sports is rather informal and yields itself to self-regulation. The greater diversity of research problems and of methodology coupled with more works transcending borderlines between disciplines will help gain new knowledge (Ellmer et al., 2020).

An important role in making sport – including shooting sports – flourish is played by the state. If the state is more engaged in funding facilities in which one can do sport and recreation activities, then people have a less restrained and easier access to sports activities. Given that, they will do the said sport activities more willingly (Osińska, 2020; Szczepaniak, 2020). The aim is to search for effective tools of influencing both central authorities and – first and foremost – local self-governments in order to direct the whole system of public administration towards stimulating local communities to make an efficient use of common resources such as, say, shooting ranges (Hurynak & Kordonska, 2018).

What may exert a significant influence on the development of shooting sports are also the observed changes in consumers' behavior, especially in the states which underwent a political transformation (Pinteric, 2017; Redo, 2015). The said changes are caused by societies getting affluent and by more and more common access to modern technology (Cherniavska, 2015).

## Methods

In order to verify H.1, the analysis of legal acts, statistics and subject-matter literature pertaining to permits for firearms was conducted. The texts of the legal acts were obtained from the online archive of the legislative body - the Parliament of the Republic of Poland. The statistical data was obtained from online database of the EUROSTAT and from the annual reports of the Polish police, available on the official websites of this formation.

In case of verifying H.2, one also made use of standard statistical methods. Among statistical methods, one should distinguish correlation analysis with the use of Pearson's correlation coefficient as well as regression analysis. For the calculations, a standard Excel spreadsheet was used, in which, based on the numerical data summarized in the tables, appropriate charts were developed, with the appropriate trend line marked.

In order to verify the stated H.3, questionnaire survey was conducted with the use of technique CAWI: Computer Assisted Web Interview. The survey was conducted on a randomly selected study group, with N=1305. The research was conducted from June to December of 2020. The survey was sent at residents' forum of 314 poviats [powiaty] in Poland. The tool employed was a questionnaire survey in which the questions were prepared with the application of a Likert scale (Jezior, 2013; Matell & Jacoby, 1972).

It should be mentioned that the Likert scale belongs to the complex scales of attitude measurement, but one-dimensional. It is an estimated scale, or more precisely - a set of certain items, each of which (the assessment of the statement) can be said to be a scale in itself. It is also a dependency scale because qualifying items to the set is based on their relation to the scale as a whole. Additionally, expert opinion surveys H.2, H.3 (they were adopted due to too small a size of a sample) were conducted in order to verify and further specify the results of the investigations. The said surveys assumed the form of non-standardized interview, which in market research are labelled as in-depth interviews, whereas in academic sociology – as free-form interview. These interviews were conducted with three shooting (including sport shooting) instructors with years of experience who on a daily basis worked in other cities: Cracow, Warsaw and Toruń. The results of previous research which were published by the authors in the monograph from 2020 (Siemiątkowski, & Tomaszewski 2020) and in the paper from 2019 were also used (Siemiątkowski et al., 2019).

**Results**

The legal problematic of an access to firearms in Poland touches on administrative law, forensics, criminal law as well as criminological psychology (Kulicki, 1982, p. 5; Rejmانيuk, 2017). Legal regulations arouse common interest of numerous social groups, including the one of weapon collectors, members of reenactment groups, sport shooters and hunters. A legal definition of firearms is included in the Act of 21 May 1999 on Weapon and Ammunition (Ustawa [Act], 1999). Pursuant to this act, firearm “is any portable barrel weapon that fires, is designed to fire or may be converted to fire one or more bullets or substances as a result of the propellant action” (Ustawa [Act], 1999, art. 7.1).

Additionally, the Legislator subsequently specified which objects can be designed to become firearms. Pursuant to the above Act, this implies any object that – due to its structure or material it is made of – is easily convertible for the purpose of firing (Maj, 2010, p. 86). The representatives of the doctrine criticize the Legislator for the fact that the definition of firearms focuses on the fact of firing “bullets as a result of the propellant action”, and hence on the structure of firearms instead of on their functions (Babiński & Kupiński, 2007, p. 9). The access to firearms in Poland is administratively and legally regulated. The restrictions involve the duty to obtain a permit which is issued on the basis of an administrative decision (Kurzępa, 2010, p. 129). It is also on the basis of an administrative decision that a withdrawal of a permit is effectuated (Kurzępa, 2010, p. 210). In accordance with the operative law, it is a relevant body of the Police that issues a permit for firearms (Kurzępa, 2010, p. 95).

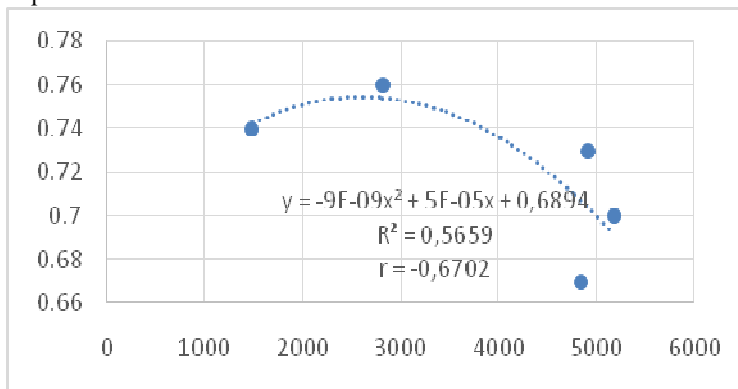
The Legislator pointed to specific circumstances which may justify claims for possessing weapon. These include, in particular:

- 1) permanent, real an extraordinary threat to life, health or property – for a permit for weapon for the purpose of self-defense as well as for defending persons and property;
- 2) having a hunting license, regulated on the basis of separate provisions – for a permit for weapon for hunting purposes;
- 3) documented membership in a shooting association, having sport qualifications and a license of a relevant Polish sport association - for a permit for weapon for sport purposes;
- 4) documented membership in an association a statutory purpose of which is to organize historical reenactments and a certified participation in statutory activities – for a permit for weapon for the purpose of historical reenactments;
- 5) documented membership in a collecting association – for a permit for weapon for collecting purposes;
- 6) documented acquisition of weapon by way of inheritance, gift by will or by being awarded a distinction – for a permit for weapon for commemorative purposes;
- 7) having a license – specified by separate regulations – to conduct shooting trainings and a registered legal business dedicated to shooting trainings – for the permit for weapon for instructional purposes (Ustawa, 1999, art. 10). The regulations pertaining to both a definition of firearms and the access thereto vary across the states.

In Poland, it is relatively difficult to acquire a permit for firearms for self-defense; whereas it is much easier as far the collecting, hunting and sport purposes are concerned. In case of sport purposes, membership in shooting associations, having sport qualifications and a license issued by a relevant sport association suffice for an acquisition of a permit. The regulations pertinent to issuing a permit for sport firearms are unambiguous and non-arbitrary.

Indubitably, there are several determinants contributing to the fact that people apply for a permit for weapon. One of them is the information that their place of residence is threatened with criminality (Poznaniak, 2003). They acquire this information from their loved ones, from acquaintances, mass media as well as on the basis of their respective experience stemming from their daily activities in the inhabited area.

Fig.1. The relations between the number of premeditated homicides per 100 thousand residents and the number of issued permits for sport firearms in Poland



Source: own work on the basis of Eurostat’s data and police statistics.

The authors conducted an analysis of the relations between the number of premeditated homicides per 100 thousand residents and the number of issued permits for sport firearms in Poland. This was guided by the desire to verify the adopted hypothesis to the effect that the number of issued permits for sport firearms is a function of – among other things – the sense of personal insecurity. Generally speaking, the calculations done point to the fact that there obtains a strong negative statistical correlation between the number of issued permits for sport firearms and the number of major sorts of crimes. This implies that the more permits issued, the less crimes. Pearson's correlation coefficient assumes the highest value in case of a pair of factors represented in figure 5. The above dependence is also confirmed by the determined line of polynomial trend, with the coefficient  $R^2$  being at the level of 0,5659. The number of issued permits for sport firearms is also strongly negatively correlated with the number of assaults (-0,6052) and – slightly more weakly correlated – with the number of thefts (-0,5099).

### Discussion

The above data corresponds with the research results. The authors of the present paper have been conducting comprehensive research pertaining to the sense of security in local environment (Siemiątkowski et al., 2019; Siemiątkowski & Tomaszewski, 2020). The said research demonstrated that in Poland we deal with a high sense of personal security. The inhabitants of local communities do not feel a high sense of danger; nay, they estimate that a sense of security is going to be augmented. The most important determinant of the level of local security is the quality of life of the residents of local communities. The higher the quality of life, the higher the sense of security (Jankowska, 2014). On the other hand, the differences in the quality of life give rise to migrations and to the relocation of people, which at the same time increases the sense of danger (Jankowska, 2013). It also followed from the conducted interviews that sport shooters rather do not acquire a permit for sport firearms due to their sense of insecurity although in some isolated cases, as experts believe, they may be indeed driven by such motives.

Without a doubt, one of the key determinants of the increase in the demand for weapon for sport purposes, which is simultaneously conducive to the development of shooting sports, is society's attitude to firearms as such. An average member of local community does not distinguish between all the intricacies of a legal system pertinent to various sorts of permits; in other words, weapon is weapon. As Centrum Badań Opinii Społecznej [Center for Public Opinion Research] has it, in 1996, only as little as 11% of Poles were in favor of free access to weapon; whereas in 2001, there were 20% of them (Poznaniak, 2003).

Nowadays, the situation is gradually changing. As mentioned above, the authors of the present paper conducted their own research in the above-delineated field of study. The vast majority of respondents who were asked the question of whether in Poland there is too easy an access to weapon answered that they *rather* do not agree (38%) and that they *definitely* do not agree (29,11%). The percentage share of people who held *rather* and *definitely* opposite view (viz., that in Poland the access to weapon is too easy) amounted to only 7,96%. A large group probably did not take any interest in the issue of an access to firearms and hence it held no opinion on the subject (24,9%). The respondents – quite like the majority of specialists in firearms in Poland – contended that there is not too easy an access to firearms. What follows from the questionnaire surveys conducted by the authors is that the number of people who maintain that in Poland there should be an easier access to firearms is slightly larger than the number of people who believe that an access to weapon ought to be limited. These answers correlate with the answers to the question pertaining to an access to firearms whereby the respondents expressed the opinion that in Poland there is no easy access to weapon (*rather* and *definitely* do not agree) – 67,11% (see: fig. 2.). However, the difference between the people being in favor of and against an easier access to firearms is relatively small; there are 17.34% who unambiguously favor an access to weapon and 16.19% who are unambiguously against it (see: fig. 7). Considering the opinions expressed by the respondents in the survey, one may clearly see that a percentage shares of the number of proponents and opponents of an easier access to firearms are quite similar: the proponents – 41.82%, whereas the opponents – 43.97%. The research demonstrates that there is a large group of persons who do not fear weapon and who favor an easier access thereto by adults. These people might be potentially interested in various forms of permits for weapon in Poland for sport purposes. The results of the research conducted by the authors significantly differ from the results obtained by Center for Public Opinion Research dating back to 2001. The difference in question might have resulted from a broader debate over an access to firearms in Poland (Musiakiewicz & Tomaszewski, 2020).

Fig. 2. The distribution of answers to the question: is there too easy an access to firearms in Poland?

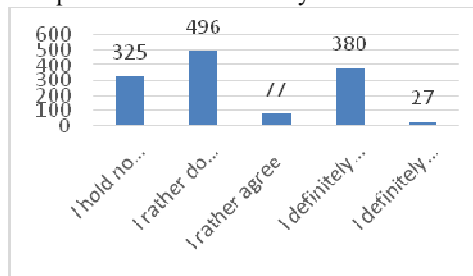
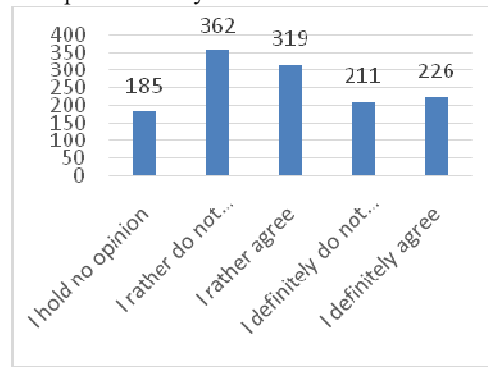


Fig. 3. The distribution of answers to the question: are you in favor of an easier access to weapon for adults?



## Conclusions

Shooting sport is not an exclusive sport when compared to such disciplines as golf, horse-riding or sailing. Still, shooting sport is still subsumable under the category of relatively expensive sports and possessing weapon, all the necessary equipment, membership in various sport clubs as well as in Polish Sport Shooting Federation generate substantial cost. However, the number of permits for sport firearms is still growing.

H.1. has been partly verified because there indeed obtained some liberalization of the regulations pertinent to firearms for sport and collecting purposes (the manner of keeping and carrying weapon). However, first and foremost, the rules of acquiring weapon for sport purposes are clearly set and in principle an authoritative body making a relevant decision has no discretion over interpreting the pertinent regulations and the same applies to weapon serving the purpose of self-defense. This is confirmed by interviewed experts who noted (all three of them) that, while meeting the legislated criteria, it is easier to obtain a permit for weapon for sport purposes rather than for self-defense. Still, the former is used not only for recreational purposes but also – as might be reasonably presumed – for self-defense since the regulations allow for carrying it.

H.2. was falsified. Neither statistical data nor prior research conducted by the authors or expert opinion surveys confirm that the growing number of issued permits for weapon stems from a sense of personal insecurity. Poles, who do not hold a very negative attitude towards firearms (as the questionnaire surveys seem to imply), rather believe that an access thereto is too difficult. The respondents' attitude towards an access to firearms may translate into searching for a possibility of accessing them more easily (for recreational purposes rather than for self-defense). Such an opportunity can be provided by a membership in PZSS [Polish Sport Shooting Federation], which partly corroborated H.3.

Considering the determinants of the development – at least in the quantitative sense – of shooting sports, we cannot help stating that what counts as an indubitably important factor are legal regulations, which enable the people interested in possessing weapon to obtain a license for sport firearms. Furthermore, a growing interest in weapon results from the “democratization” of the market and from the opportunity of possessing weapon provided to a larger group of recipients also due to the weapon's price.

In Poland, the development of pro-defense organizations and the interest taken in uniformed service also have a bearing on interest in having a relatively easy access to sport firearms (this determinant was pointed to by interviewed experts). The authors did not get an access to the data verifying or falsifying the question of whether the still-growing number of people boasting professional licenses issued by PZSS influenced the higher level of shooting contests. Without a doubt, and as the interviewed experts mentioned, some part of contestants participate in contests merely due to the precepts of shooting sports which obligate a contestant to participate at least once a year. Furthermore, there are more and more smaller-scale contests organized by sport clubs associated within PSZZ and the range and status of these contests have a local character.

Undoubtedly, what must be regarded as main determinants of the development of shooting sports is ease of the acquisition of a permit for sport firearms relative to other types of permits (except for permits for weapon for collecting purposes) as well as the shift in some Poles' attitude towards weapon into a more positive one.

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