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UNIVERSITÀ
DEGLI STUDI
DI URBINO
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PRODUCTION OF FIREARMS AND AMMUNITION FOR CIVIL USE IN ITALY
MANUFACTURING COMPANIES, CONSUMPTION FOR HUNTING AND SPORT SHOOTING, ECONOMIC AND EMPLOYMENT IMPACT

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On behalf of **ANPAM (Associazione Nazionale Produttori Armi e Munizioni)**

SUMMARY REPORT FOR PRESS USE

1. INTRODUCTION: OBJECTIVES

AIM OF THE STUDY

The purpose of the study was to update the analysis carried out in 2010 on the firearms and ammunition industry for civil use in Italy, with reference to the production for sports (various shooting specialties), hunting and personal defense.

Four research objectives were identified:

1. Analyze the sector from the point of view of the production and distribution system.
2. Measure the economic and employment weight of the industry analyzed in terms of turnover, added value and employees.
3. Estimate the value of the sectors linked to sporting and hunting activities, both in terms of products used in these activities (i.e., clothing, accessories, etc.) and services (i.e., shooting ranges, veterinary services, etc.).
4. Calculate the ripple effect, that is, the economic and employment effect generated by consumption fed by the employees in the sectors analyzed, that affect the entire economy by creating a multiplier effect.

This means that in addition to all the **economic and employment values related to the firearms industry**, the analysis focused on the **supply chain** (specialized and generic suppliers) and the **sectors related to the civil use of firearms**, i.e. sport shooting and hunting, for which the use of arms and ammunition is an essential element.

Furthermore, the **ripple effects**, i.e. the **impact of the sector on the whole economy**, has been measured, following the principle according to which the value generated by a sector spreads also in other sectors, creating a multiplier effect.

2. SIZE OF THE SECTOR: NUMBER OF COMPANIES

For calculating the number of companies operating in the sector, **all the operators that contribute to the value chain (supplying, production and distribution) of the sector analyzed** have been taken into account.

Four typologies of companies were outlined:

A) MANUFACTURERS OF FIREARMS AND AMMUNITION

According to data provided by the Banco Nazionale di Prova (BNP), there are **107 companies producing firearms for civil use in Italy**, most of which have their headquarter and production facilities in Val Trompia (BS). **The producers of ammunition are 124, including producers of components**. Total companies producing arms, ammunition and components: **231**.

B) SPECIALIZED SUPPLIERS

Manufacturers of **components for firearms** (grips, loaders, recoil pads, springs, chokes, barrels, optical systems, etc.) and **third party operators** (particularly engravers). A total of **156** companies producing components have been identified, and also in this case most of them are located in Val Trompia (BS).

C) SUPPLIERS OF NON SECTOR-SPECIFIC MATERIALS AND COMPONENTS, AND OTHER PRODUCTS AND SERVICES

Other **suppliers of generic components and other products and services** (carving, filing, stock sanding, cleaning, heat treatment, technical services, accounting, administrative and legal services). As providers of generic components/services, they work also for other sectors. These suppliers have been conservatively estimated in **431** companies.

D) COMPANIES OPERATING WITHIN AUXILIARY SECTORS, INCLUDING MACHINERY MANUFACTURERS, THE BANCO NAZIONALE DI PROVA (BNP) AND TRADE INTERMEDIARIES

Are part of this group: **machinery manufacturers, the BNP and downstream service providers** (importers, logistic and transport providers, sales agents, retailers, and repair/maintenance firms). The total number of companies belonging to this group have been estimated at **1,516**, of which the largest share is given by the armories, i.e. **retail stores, which in Italy are 1,200**.

In summary, there are:

- **231** final producers of arms, ammunition and ammunition components.
- **156** specialized suppliers of components and specialized services (working only for the firearms sector).
- **431** suppliers of non-sector-specific components and services (working not only for the sector).
- **1,516** companies in auxiliary sectors (e.g., BNP and retailers).

FOR A TOTAL OF 2,334 COMPANIES (+ 3.09% compared to 2010)

3. EMPLOYMENT WITHIN THE SECTOR

- **3,322** employees in the production of firearms and ammunition.
- **1,523** employees in companies producing specific components and third party manufacturers.
- **1,327** employees in non-sector-specific suppliers of components and services.
- **5,261** employees in companies of auxiliary sectors.

FOR A TOTAL OF 11.433 EMPLOYEES (+ 0.66% compared to 2010)

4. LA PRODUZIONE: VOLUMI, VALORE, EXPORT DELLA PRODUZIONE

4.1 PRODUCTION: QUANTITIES

- **658,958** firearms produced per year (largest producer in Europe) of which 365,872 long barrel firearms and 240,062 short barrel.
- **965,591,540 (+ 0.7% compared to 2010)** ammunition produced per year, of which 695,500,000 smooth bore rifle ammunition, and 270.091540 metal jacket ammunition.

4.2 PRODUCTION: VALUES (TOTAL TURNOVER OF MANUFACTURERS)

- **Firearms: € 345,222,719** (+ 29.24% compared to 2010), of which long barrel firearms: € 271,886,827, short barrel firearms: € 64,115,245, and replicas: € 9,220,647.
- **Ammunition: € 235,800,221** (+0.7 compared to 2010), of which smooth bore rifle ammunition: € 115,473,558, components for smooth bore rifle ammunition: € 75,140,993, and metal jacket ammunition and components: € 45,185,670.

TOTAL PRODUCTION VALUE OF ARMS AND AMMUNITION: € 581,022,940 (ANNUAL TOTAL TURNOVER OF MANUFACTURERS) (+ 19% compared to 2010)

4.3 PRODUCTION: DETAILS ON THE EXPORT SHARE OF FIREARMS PRODUCTION

- The industrial value of firearms production is, as above, € 345,222,719, of which **90.2% is addressed to foreign markets (+ 6.3% compared to 2010)**.
- The import-export balance on the total sector turnover is **84.7%**
- Other details on the export share on the total production by type of arms:
 - Long barrel firearms** with a total export value of € 246,715,288 (90.7% of total turnover).
 - Short barrel firearms** with a total export value of € 55,883,163 (91.4% of total turnover).
 - Replicas** with a total export value of € 8,753,761 (95% of total turnover).

4.4 PRODUCTION: DETAILS ON THE EXPORT SHARE OF AMMUNITION PRODUCTION

- The industrial value of ammunition production amounts to € 235,800,221, of which 68.9% exported (+ 9.1% compared to 2010).
- **Total exports amount to € 162,447,733** (+ 23.9% compared to 2010).
- The import-export balance is very positive, with a surplus of € 70,348,780.

5. THE OVERALL VALUE OF THE SECTOR

For the evaluation of the total value of the sector, it is necessary to count all the activities whose development originates from the firearms industry, included the export value of specific machinery for the sector and the work carried out in Italy for foreign producers (as for the engravers). As a result, the overall value of the sector is as follows:

Production of firearms	€ 345,222,719
Ammunition + components	€ 235,800,221
Export of firearms components	€ 87,705,330
Engraving	€ 600,000
Production of sector-specific machinery	€ 7,200,000
Production of other machinery	€ 83,667,303
Importers' profit	€ 19,590,136
Retailers' profit	€ 54,316,074
Repair and maintenance	€ 4,000,000
VAT	€ 60,627,682
Total	€ 898,729,466

6. THE VALUE OF THE SECTORS LINKED TO SPORT SHOOTING AND HUNTING

The value of the sectors linked to the use of firearms has been calculated. These sectors are related to the activities that are carried out with the use of firearms, namely sport shooting and hunting. Indeed, during sport shooting and hunting a wide variety of products and services are used, providing business opportunities for a series of companies.

HUNTERS' EXPENDITURE

The total expenditure incurred each year by hunters amounts to € 2,783,885,807, including the cost of firearms and ammunition. However considering that the value of both firearms and ammunition has already been calculated, the total expenditure excluding arms and ammunition should be considered for the purpose of calculating the value of the sectors linked to the final demand.

The value therefore becomes **€ 2,603,940,540**.

Specifically, the following items of expenditure were considered: firearms (annual depreciation charge), ammunition, clothing, dogs (purchase, maintenance, vets, etc.), accessories (e.g.: decoys, accoutrements, knives, GPS), firearm cleaning kit, taxes and concessions, transfers in Italy, overnight stays and trips abroad, small consumption (lunches, coffee, etc.).

SHOOTERS' EXPENDITURE

In total the cost sustained by shooters (excluding the cost of the firearm) is **€ 704,440,141**.

Summing up the total expenditure incurred by hunters (€ 2,603,940,540) and shooters (€ 704,440,141) the total amount of expenses is € 3,308,380,681 (-16% compared to 2010).

7. TOTAL EMPLOYMENT OF THE SECTORS LINKED TO SPORT SHOOTING AND HUNTING

In total, the employees involved in the sectors linked to sport shooting and hunting are 6,205 for products and 32,651 for services.

Considering this, the total employment activated by hunting and sport shooting, both for products and services, is **38,856**.

8. THE RIPPLE EFFECT ON ECONOMIC VALUE AND EMPLOYMENT

In calculating the value of the sectors analyzed, the impact of the economic ripple effect has been taken into account in terms of value of the demand for consumer goods arising from employees engaged in the sectors considered. This demand generates a corresponding production in other sectors of the economy. The incremental value has been calculated according to the tables of sectoral interdependence (input – output matrices). This approach considers that the value generated in one sector spreads through other sectors creating a multiplier effect in both value and employment in all sectors that make up the national economy.

8.1 ECONOMIC RIPPLE EFFECT

As seen before, the economic value of the sector (production of firearms and ammunition, including the supply and distribution system) amounts to **€ 909,523,260**. **The economic ripple effect related to the sector according to the tables of sectoral interdependence has been estimated at € 759,451,922.**

As regards the value of the sectors linked to the final demand for products and services by hunters and sport shooters, it amounts to **€ 3,308,380,681**. **The ripple effect related to the sectors linked to the final demand has been estimated at € 2,315,866,477.**

Adding up the values above, the total value of the sector reaches € 7,293,222,339,728.

By comparing the overall value of the sector with the national GDP, it can be noticed that the total value of the sector contributes for **0.44%** to the overall Italian GDP.

8.2 RIPPLE EFFECT ON EMPLOYMENT

Following the same method used for calculating the economic value of the sector, **total employment** was calculated.

The number of employees in the sector (production of arms and ammunition, including the supply system and trade intermediaries) amounts to **11,433**. The ripple effect on employment is estimated at **10,061** employees, which added to the previous value leads to a total of **21,494 employees**.

The employment stimulated by the sectors linked to the final demand (hunters and sport shooters) is **38,856** employees. The ripple effect on employment generated by the related sectors is **27,199** employees.

Adding up the values above, we reach a total of 87,549 employees, corresponding to **0.56%** of the total employment in Italy (+ 0.02% compared to 2010) and **0.69%** of the employment in the manufacturing and tertiary industries (+ 0.04% compared to 2010).